

Food & Water Watch

These comments are submitted by Food & Water Watch, on behalf of Food & Water Watch, Center for Food Safety, Columbia Riverkeeper, and Snake River Waterkeeper.



June 11, 2025

Llyn Doremus
Washington State Department of Ecology
Eastern Regional Office
4601 N. Monroe Street
Spokane, Washington 99205

Re: Draft State Waste Discharge Permit ST0501324 for Simplot Feeders LLC

Dear Ms. Doremus and Department of Ecology Staff:

On behalf of the Center for Food Safety, Columbia Riverkeeper, Food & Water Watch, and Snake River Waterkeeper (collectively, “Commenters”) we submit the following comments on the draft State Waste Discharge Permit ST0501324 for Simplot Feeders LLC (the “Draft Permit”). Commenters are non-profit, public interest organizations dedicated to protecting water quality, public health, wildlife, and the environment from pollution. Robust and enforceable permitting of large feedlots like this one is critical. Operating like a sewerless city, Simplot Feeders LLC (“Simplot”) generates approximately 292,000 tons of manure every year and tens of millions of gallons of wastewater.¹ Putting that into context, Simplot generates approximately twice as much manure as human waste from the entire population of Tacoma, every year.²

As an initial matter, Ecology has not presented a coherent Permit for us to comment on because nearly all of the Draft Permit’s critical details are yet to be determined or undisclosed. The Draft Permit lacks a plethora of provisions necessary for protecting ground and surface

¹ Fact Sheet at 11–12.

² U.S. Gov. Accountability Off., GAO-08-944, Concentrated Animal Feeding Operations: EPA Needs More Information and a Clearly Defined Strategy to Protect Air and Water Quality from Pollutants of Concern at 58 (Sept. 2008), <https://www.gao.gov/products/gao-08-944> (providing conversion rates); U.S. Census Bureau, *Quick Facts*, <https://www.census.gov/quickfacts/fact/table/tacomacitywashington,US/PST045224> (population of Tacoma used).

water quality because the majority of what the Permit contains are requirements that Simplot conduct studies and analysis to submit to Ecology for approval and incorporation into the Permit at some later date. It is unclear whether the public will have any opportunity to participate in the ongoing development of this Permit, a particularly concerning aspect of this proposal given Ecology's long history of failing to adequately regulate Simplot's site and operations.

For the reasons explained below, we ask Ecology to adopt the following in the final Permit:

- Ensure public engagement when the studies and plans required by the Draft Permit are submitted to Ecology so that Commenters are able to provide meaningful input on critical details;
- Make the enforceable limits responsive to actual background groundwater quality once that data is available;
- Require Simplot to install double synthetic liners with leak detection systems in their lagoons; and
- Require Simplot to obtain NPDES permit coverage in addition to this State Waste Discharge Permit coverage.

DISCUSSION

A. History of the Simplot Feedlot

Owned and operated by Simplot since 1992, one of the first notable things to happen at the site was a catastrophic wastewater spill in 1993 that released 15 to 30 million gallons of pollution into the nearby Columbia River.³ Three years after this event, Ecology issued a National Pollutant Discharge Elimination System ("NPDES") permit that required Simplot to develop and submit an Irrigation Plan, Manure Management Plan, and Hydrogeology Study Report.⁴ In 2000, Ecology reissued that NPDES permit. The 2000 NPDES permit prohibited all discharges to the Columbia River and called for another Hydrogeology Study.⁵

But by 2005, Simplot had not complied with the 2000 permit and Ecology remained without the information necessary "to issue another permit."⁶ A sticking point for Ecology in 2005 was the fact that Simplot's "Hydrogeologic Report (10/2003) does not include groundwater monitoring upgradient of the wastewater land application areas and therefore, does not provide water quality data from background monitoring wells that have not been affected by activities at the facility. It is difficult to determine if manure and waste water applications are degrading the ground water quality without background monitoring wells."⁷ At the time, Ecology sent a request

³ Fact Sheet at 6.

⁴ *Id.*

⁵ *Id.* at 7.

⁶ *Id.* (entering into a different arrangement, Agreed Order No. 3132, apparently with "[in]sufficient information to issue another permit.").

⁷ Letter from John Stormon, Ecology, to Ron Parks, Simplot Feeders Limited Partnership at 1 (Sept. 6, 2005) (included here as Attachment A).

to Simplot to remedy this problem by “install[ing] additional background wells to monitor ground water quality that has not been affected by the land treatment of wastewater.”⁸

Instead of enforcing this request and the by-then 12-year-old requirement to develop and submit a complete Hydrogeology Study, in 2006 Ecology allowed Simplot to abandon its NPDES permit and transition Agreed Order No. 3132 (the “Agreed Order”). The Agreed Order contained several requirements, including that Simplot had to resume monitoring at the existing monitoring wells (which it had inexplicably ceased doing for several years) and follow the existing Manure Management Plan and Wastewater Irrigation Plan. The Agreed Order did *not* mandate completion of the Hydrogeology Study; instead, Ecology abandoned basic science and its own position and simply “assume[d] that improved management is protecting ground water quality, and that any elevated levels resulted from past management that may not have been under the control of Simplot” so long as the data collected from the existing, admittedly unrepresentative, monitoring wells were promising.⁹

Finally, in 2018 and 2019 Simplot’s wastewater lagoons caused an outbreak of Botulism that killed over 200 wild birds.¹⁰ Following this incident, “Ecology and Simplot Feeders decided to regulate the facility under a State Waste Discharge permit instead of a NPDES permit” and Simplot submitted an application in April 2019.¹¹ But shockingly it appears that Ecology *never acted upon the permit application*, which Ecology now claims resulted in a temporary permit being issued to Simplot by operation of law with an effective date of June 8, 2019.¹² Thus, Simplot has been operating under permit terms and conditions that it set for itself with no input from the public and apparently no review by Ecology. Unsurprisingly, completing a Hydrogeologic Study, installing an effective network of monitoring wells, or adhering to set effluent limits were not part of the application.

Which takes us to the present Draft Permit in which Ecology *again* calls for Simplot to prepare a complete and appropriate Hydrogeologic Study to evaluate groundwater quality, in addition to updating its manure application and irrigation plans. Ecology proposes to give Simplot another year to submit a “Scope of Work” for said Hydrogeologic Study by August 1, 2026, with multiple additional steps of back-and-forth to follow. Under the Draft Permit Simplot may not have to install a single new monitoring well to remedy the problem that Ecology identified 20 years ago for several more years.¹³ Nor has Ecology reconsidered its misguided decision to abandon NPDES permitting despite Simplot’s history and close proximity to the Columbia River.

B. The Public Cannot Meaningfully Comment on this Draft Permit, Making Future Public Involvement Essential

⁸ Agreed Order No. DE 3132 at II (included here as Attachment B).

⁹ Attachment A at 2.

¹⁰ Fact Sheet at 7.

¹¹ *Id.* at 7.

¹² Letter from Adriane P. Borgias, Ecology, to David Modde, J.R. Simplot Co. at 1 (Apr. 9, 2025) (included here as Attachment C).

¹³ Permit at S8; Attachment A at 1.

Commenters are unable to comment on a large number of essential permit details because they are absent from the Draft Permit. Instead, the Draft Permit calls for further studies and plans from Simplot, to be approved and incorporated into the Permit by Ecology in some undisclosed way at some undisclosed time. This “plan for a permit” approach requires Simplot to prepare and submit the following, instead of including these details in Draft Permit at this time:

- Hydrogeologic Report (a.k.a. Groundwater Quality Evaluation)¹⁴
- Lined Lagoon Treatment System Engineering Design Report¹⁵
- Land Treatment System Engineering Design Report¹⁶
- Manure Pollution Prevention Plan

In sum, these constitute the *vast* majority of the substance of a discharge permit; everything from where, when, and in what quantities Simplot will land apply its waste to how it will line its wastewater impoundments. This “plan for a permit” approach is unacceptable, particularly given the history of this operation, its known danger to water quality, and Ecology’s repeated failures to responsibly oversee the site and Simplot’s operations.

Commenters request that Ecology treat each of the four submissions listed above as modifications to the Permit and provide for public notice and comment. Doing so will provide an opportunity for the public to scrutinize and weigh in on these critical details before Ecology accepts and incorporates them into the Permit. We further request that public comment periods be applied on the front end of any applicable deadlines in the Draft Permit – for example, Ecology should change the Draft Permit to require Simplot submit the Lined Lagoon Engineering Design to Ecology early enough so that Ecology can solicit and receive public comments *before* June 1, 2026.¹⁷ This will help make sure Ecology does not approve Simplot’s submissions arbitrarily or contrary to the facts and/or law.¹⁸ Unfortunately, Ecology’s failed history regulating Simplot makes public oversight of every permit detail essential.

C. We Support Enforceable Discharge Limits, but They Must Be Updated when Representative Monitoring Is Available

Ecology has a duty to issue permits that protect water quality via enforcement limits. The regulations protecting Washington’s groundwater quality “shall be met for all groundwaters to meet the requirements of [water quality standards] at all places and at all times.”¹⁹ This “shall be enforced through all legal, equitable, and other methods available to the department including, but not limited to: Issuance of state waste discharge permits, [and] other departmental permits[.]”²⁰ As such, “[p]ermits issued or reissued by the department shall be conditioned in

¹⁴ Permit at S8.

¹⁵ *Id.* at S6.

¹⁶ *Id.* at S7.

¹⁷ *See id.* at S6.

¹⁸ Commenters also oppose extending any of the Draft Permit’s proposed deadlines to accommodate public involvement; Simplot has had decades to get its act together and operate a feedlot that does not pollute Washington’s waters.

¹⁹ WAC 173- 200-100(1).

²⁰ WAC 173-200-100(3).

such a manner as to authorize only activities that will not cause violations of [water quality standards for groundwaters of the State].”²¹

Washington law is clear, Ecology must protect groundwater.²² Specifically, Washington’s “anti-degradation” policy for the State’s groundwater states that “[e]xisting and future beneficial uses shall be maintained and protected and degradation of groundwater quality that would interfere with or become injurious to beneficial uses shall not be allowed.”²³ Ecology enacted specific groundwater quality standards “to establish maximum contaminant concentrations for the protection of a variety of beneficial uses of Washington’s groundwater.”²⁴

Ecology implements the anti-degradation policy and its groundwater quality standards through “enforcement limits.”²⁵ When setting “enforcement limits” in compliance with the groundwater quality standards, Ecology is required to take into account:

- (i) The antidegradation policy;
- (ii) Establishment of an enforcement limit as near the natural groundwater quality as practical;
- (iii) Overall protection of human health and the environment;
- (iv) Whether the potentially affected area has been designated as a special protection area;
- (v) Protection of existing and future beneficial uses;
- (vi) Effects of the presence of multiple chemicals, multiple exposure pathways in accordance with subsection (5) of this section, and toxicity of individual contaminants;
- (vii) Federal, state, tribal, and local land use plans, policies, or ordinances including wellhead protection programs;
- (viii) Pollution of other media such as soils or surface waters; and
- (ix) Any other considerations the department deems pertinent to achieve the objectives of this chapter.²⁶

The starting point for any “enforcement limit” for a contaminant is the water quality standard criteria found in Appendix A of WAC 173-200-040.²⁷ However, “[w]hen the background groundwater quality exceeds a criterion, the enforcement limit at the point of compliance shall not exceed the background groundwater quality for that criterion.”²⁸ Importantly, “[e]nforcement limits based on elevated background groundwater quality *shall in no way be construed to allow continued pollution of the receiving groundwater.*”²⁹

²¹ WAC 173-200-100(4)

²² RCW 90.48.010, 020.

²³ WAC 173-200-030(2)(a).

²⁴ WAC 173-200-040(1).

²⁵ WAC 173-200-050(6) (“The enforcement limit for a specific activity may be established through, but not limited to the following mechanisms: A state administrative rule, a state waste discharge permit, other department permit, [1] or administrative order.”).

²⁶ WAC 173-200-050(3)(a).

²⁷ WAC 173-200-050(3)(b).

²⁸ WAC 173-200-050(3)(b)(ii).

²⁹ *Id.* (emphasis added).

Because Ecology has allowed Simplot to operate since 2006 without *any* enforceable pollution limits despite Simplot's degradation of groundwater, Commenters support the Draft Permit's inclusion of enforceable limitations going forward.³⁰ That said, the values for the limits must be responsive to the data collected by the updated monitoring wells Simplot is required to install after Ecology has approved the Hydrogeologic Study. It is arbitrary and not protective of water quality for Ecology to treat most of the Draft Permit as merely a "plan for a permit," with critical details and understanding of the site to be developed over the next several years, but make the Permit's Groundwater Enforcement Limits static and unresponsive to those updated findings. Ecology long ago acknowledged that data collected from existing wells MW-4A and MW-4B are not representative because they are downgradient of Simplot's land treatment fields.³¹ Under Ecology's own regulations, these data are not credible and should not be used for establishing water quality standards because they are not representative.³² Setting the Permit's enforcement limits based on bogus monitoring, without any mechanism to update them once Simplot actually conducts the Hydrogeologic Study it has failed to complete for decades, is arbitrary and unreasonable.

Therefore, Commenters request that Ecology modify the Draft Permit at S1.A to add the following text (in italics): "The limits will apply to new wells after they are installed as delineated in the approved Groundwater Quality Evaluation *until Ecology is able to establish accurate background groundwater quality based on data collected by the new wells upgradient of land treatment fields. Ecology will update the limits to reflect background groundwater quality as established through a minimum of three Discharge Monitoring Reports (DMRs) submitted pursuant to S3.A.*"³³

Commenters also request Ecology add ammonia to the list of Groundwater Enforcement Limits found at Table 2 in the Draft Permit. Current groundwater monitoring tests for ammonia and it appears to be a pollutant of concern.³⁴ We see no rationale or justification for its absence from the enforcement limits.

D. Commenters Support the Need for Lagoon Liners, but AKART Requires Double Synthetic Liners with Leak Detection

Commenters support better-controlling seepage from lagoon with liners, but Ecology cannot defer to Simplot to set the standard through the Lagoon Treatment System Engineering Design Report. Instead, Ecology must require "all known, available, and reasonable methods of prevention, control, and treatment" ("AKART") in the Permit.³⁵ Ecology must incorporate

³⁰ *Id.* at S1.A.

³¹ Attachment A at 1.

³² RCW 90.48.585 ("In collecting and analyzing water quality data ..., data is considered credible data if: ... The samples or measurements are representative of water quality conditions at the time the data was collected.").

³³ Commenters are unclear whether the Draft Permit's Discharge Monitoring Report submission requirement will result in Simplot's DMRs being available to the public on PARIS. If this is not the case, Commenters request that these records be uploaded to PARIS in a timely manner as Simplot submits them according to Permit S3.A.

³⁴ See Letter from Thomas F. Mullen, Northwest Groundwater Consultants, LLC, to Llyn Doremus, Ecology at 5 (Nov. 22, 2024) (included here as Attachment D ("Concentrations of ammonia and TKN in downgradient MW-1 have increased over the last several quarters.")).

³⁵ WAC 173-201A-020; RCW 90.48.520 ("In order to improve water quality by controlling toxicants in wastewater, the department of ecology shall in issuing and renewing state and federal wastewater discharge permits review the

permit conditions that require AKART “regardless of the quality of receiving water and regardless of the minimum water quality standards.”³⁶ The Water Resources Act specifies that for “all wastes and other materials and substances proposed for entry” into waters of the state, AKART must be applied “prior to entry.”³⁷ And as the Ecology’s Permit Writer’s Manual explains, Ecology must ensure CAFOs use the Best Available Technology Economically Achievable to control or eliminate any discharges.³⁸ To properly implement this approach, Ecology must require each facility to provide the information necessary to conduct the appropriate economic analysis based on the ownership of the facility and the type of financial information the facility can make available.³⁹

CAFO lagoons are a well-known and persistent cause of groundwater contamination, thus requiring AKART to be applied to these aspects of each permit.⁴⁰ As the Court of Appeals held regarding the 2017 general NPDES permit for dairies, requiring merely *study* of existing lagoons is not AKART.⁴¹ This individual permit must incorporate the most current technology, which means that as technology evolves, so too should the permit standards for discharges to state waters.⁴²

Ecology knows that technology exists to eliminate the discharge of pollutants from lagoons. There is no dispute that double-synthetic liners with leak detection systems are both known and available.⁴³ Thus, this must be the starting point for the AKART analysis, because this will ensure that all facilities comply with AKART. WAC 173-226-070(1) requires that “the department shall apply and insure compliance with . . . [t]echnology-based treatment

applicant’s operations and incorporate permit conditions which require all known, available, and reasonable methods to control toxicants in the applicant’s wastewater.”); *see also* RCW 90.48.010 (“the state of Washington will exercise its powers, as fully and as effectively as possible, to retain and secure high quality for all waters of the state.”); RCW 90.52.040 (the Director of Ecology “shall . . . require wastes to be provided with all known, available, and reasonable methods of treatment prior to their discharge or entry into waters of the state.”).

³⁶ RCW 90.48.520; *see Wash. State Dairy Fed’n v. Ecology*, 18 Wn. App. 2d 259, 275 (Ct. App. 2021) (“When issuing a general waste discharge permit, Ecology must ensure that the permit conditions “apply and insure compliance” with “[t]echnology-based treatment requirements” that “reflect [AKART].”).

³⁷ RCW 90.54.020(3)(b).

³⁸ Ecology, Water Quality Program Permit Writer’s Manual (rev. July 2018) at 106.

³⁹ Under this test, “treatment technology [is] to be economically achievable if its use would not cause the plant to shut down. That is, the technology is economically achievable if its annual cost is less than the plant’s annual profits.” *Id.* at 107. For this analysis, “[t]he permit holders are responsible for providing the cost, earnings, and revenue data needed to perform the economic achievability test. If they refuse to supply the data, then it should be assumed that the treatment technology is economically achievable.” *Id.* at 111.

⁴⁰ *Washington State Dairy Fed’n*, 18 Wash. App. 2d at 277, 279; *Cnty. Ass’n for Restoration of the Env’t, Inc. (CARE) v. Cow Palace, LLC*, 80 F. Supp. 3d 1180, 1196 (E.D. Wash. 2015); *see also Cnty. Ass’n for the Restoration of the Env’t v. Nelson Faria Dairy, Inc.*, No. CV-04-3060-LRS, 2011 WL 6934707, at *10 (E.D. Wash. Dec. 30, 2011) (“Faria’s manure management practices have caused or significantly contributed to the excessive nitrate contamination of the local groundwater . . .”).

⁴¹ *Wash. State Dairy Fed’n v. Ecology*, 18 Wash. App. 2d at 278.

⁴² *See* WAC 173-201A-020 (“AKART shall represent the most *current* methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with a discharge.”) (emphasis added); *Puget Soundkeeper v. State*, 102 Wn. App. 783, 789, 892, 895 (2000) (“[T]he statutory scheme envisions that effluent limitations will decrease as technology advances.”).

⁴³ *See Wash. State Dairy Fed’n v. State*, PCHB No. 17-016c *8 (Findings of Fact, Conclusions of Law and Order) (Oct. 25, 2018).

requirements and standards reflecting all known, available, and reasonable methods of prevention, treatment, and control”⁴⁴

As to this individual permit for Simplot, Commenters assert that double synthetic liners with leak detection systems should be AKART because this is the “most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with the discharge.”⁴⁵ Indeed, double lining and leak detection are standard in consent decrees for individual dairies in the Lower Yakima Valley to avoid further contamination of groundwater with nitrates, including conversion of existing lagoons.⁴⁶

The Draft Permit instead defers to Simplot to decide “whether to install a single-layer or double-layer liner” based on the yet-to-be-produced Engineering Design Report.⁴⁷ Regardless of what Simplot may think is most convenient for its operations, Ecology has a duty to issue a permit that “reflect[s] AKART.”⁴⁸ Ecology cannot defer to a permittee for this critical requirement.

Requiring AKART for Simplot’s wastewater—lagoons that are double lined with leak detection systems—would also allow Ecology to remove the ambiguous use of an “action leakage rate” (“ALR”) for Simplot to evaluate the performance of its lagoon liners.⁴⁹ Commenters note that Ecology’s Fact Sheet is unclear what role exactly it foresees the ALR to play in the operation of the Permit. If the Draft Permit would allow Simplot to not conduct any leak detection monitoring if the ALR evaluation does not “trigger the requirement to conduct a leak detection survey,” that would not be AKART and Commenters oppose that approach. Double synthetic liners with leak detection systems are a known, available, and reasonable technology that will control lagoon seepage and can actively monitor the integrity of the liners far better than allowing Simplot to *avoid* monitoring based on an ALR and to allow it to choose whether to install single or double liner systems. The Permit should require Simplot to install double synthetic liners with leak detection in their lagoons because state law requires it.

⁴⁴ The Court of Appeal’s reflection that “double-synthetic liners with leak protection” did not represent the AKART standard for existing manure lagoons for the purposes of the 2016 permit, is of course not dispositive here. *Wash. State Dairy Fed’n*, 18 Wn. App. 2d at 281. First, Ecology must evaluate what is necessary to ensure compliance with AKART each time it issues a permit. *Nw. Env’t Advocs. v. Dep’t of Ecology*, 18 Wn. App. 2d 1005 (2021) (“Ecology has interpreted RCW 90.48.520 to mandate that AKART be applied in each permit on a case-by-case basis.”). And what is AKART, will *by definition* change over time as new technology becomes known, available and reasonable to implement. See WAC 173-201A-020 (“AKART shall represent the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with a discharge.”); *Puget Soundkeeper v. State*, 102 Wn. App. 783, 789, 892, 895 (2000) (“[T]he statutory scheme envisions that effluent limitations will decrease as technology advances.”).

⁴⁵ WAC 173-201A-020.

⁴⁶ See, e.g., *Cnty. Ass’n for Restoration of the Env’t, Inc. v. Cow Palace, LLC*, No. 13-CV-3016-TOR, 2016 WL 3582754, at *17 (E.D. Wash. Jan. 12, 2016) (noting that consent decrees required cluster of dairies to “double line all their lagoons by specified time periods”); <http://charlietebbutt.com/files/CAFOs/CARE%20v.%20DBD%20Consent%20Decree.pdf>; <http://charlietebbutt.com/files/Cluster%20CD/169%20-%20DeRuyter%20Consent%20Decree%20with%20exhibits.pdf>.

⁴⁷ Fact Sheet at 23.

⁴⁸ *Wash. State Dairy Fed’n*, 18 Wn. App. 2d at 275.

⁴⁹ See Fact Sheet at 22.

E. Simplot Requires a NPDES Permit, in Addition to This State Discharge Permit

In addition to strengthening the State Discharge Permit in the ways described above, Commenters note that Simplot is almost certainly discharging to the Columbia River, a water of the United States (“WOTUS”), and thus requires NPDES permit coverage as well.⁵⁰ As explained above, Ecology knows the risk Simplot poses to the Columbia River and previously considered NPDES permit coverage necessary. Ecology has not pointed to any intervening change that could obviate that need.⁵¹ But Ecology nonetheless proposes to not issue a NPDES permit to Simplot because “[e]vidence of subsurface transport to the Columbia River has not been detected.”⁵² This is unpersuasive, as Ecology has apparently failed to look. As explained below, neither this nor anything else in the record supports Ecology’s decision; Simplot needs a NPDES permit to lawfully operate this CAFO.

Simplot needs a NPDES permit because it poses an ongoing threat to WOTUS and is almost certainly discharging pollution via groundwater in violation of the Clean Water Act. On the first, Simplot experienced a catastrophic lagoon failure in the past that discharged tens of millions of gallons of pollution into the Columbia River.⁵³ And then again in 1994 Ecology discovered that Simplot was causing its lagoon “to overflow into [a] railroad right-of-way, and into [a] culvert” discharging approximately “240,000 gallons per day.”⁵⁴ This rightfully led to NPDES permit coverage to ensure the same did not happen again. As Ecology admits, Simplot’s wastewater lagoons remain in close proximity to the Columbia River and “[m]anure is [still] managed according to the Manure Management Plan approved in 1997.”⁵⁵ Thus, apparently nothing has changed from when Ecology determined NPDES permit coverage was necessary.

Additionally, Ecology may be ignoring Simplot’s stockpiles of manure that are “collected and stacked in piles located to the west and south of the feedlots.”⁵⁶ Stockpiling and/or composting manure can discharge pollutants into the underlying groundwater, constituting another unaccounted-for source of pollution coming from Simplot.⁵⁷ Commenters’ review of recent satellite imagery indicates that Simplot may be stockpiling manure approximately 1000 *feet* from the banks of the Columbia River, far closer than Ecology’s assessment of approximately one mile.⁵⁸ Under these circumstances, Ecology must reconsider, and reverse, its decision to not continue requiring a NPDES permit.

⁵⁰ Commenters appreciate and agree that “Nothing in [the State Waste Discharge Permit] excuses the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.” Permit at G6.

⁵¹ Commenters cannot find any substantive support for Ecology’s decision, contrary to its past practice, “to regulate the facility under a State Waste Discharge permit instead of an NPDES permit.” Fact Sheet at 7.

⁵² Fact Sheet at 14.

⁵³ *Id.* at 6.

⁵⁴ Ecology, NPDES Compliance Inspection Report (Oct. 25, 1994) (included here as Attachment E).

⁵⁵ *Id.* at 12, 14.

⁵⁶ *Id.* at 12; *see id.* at 6 (map of “Facility Location” that omits these manure stockpile areas).

⁵⁷ *See Wash. State Dairy Fed’n*, 18 Wash. App. 2d at 266–67.

⁵⁸ Fact Sheet at 14 (stating that Simplot’s “lagoons are located approximately one mile from the nearest surface water, the Columbia River”); https://www.google.com/maps/@46.1187615,-118.9237038,1240m/data=!3m1!1e3?entry=ttu&g_ep=EgoyMDI1MDYwNC4wIKXMDSOASAFAw%3D%3D (close up of Commenters’ observation).

With respect to groundwater, Simplot's operations are seeping untold quantities of pollution into the underlying groundwater, which is flowing toward and "discharging to the Columbia River."⁵⁹ The U.S. Supreme Court clarified federal Clean Water Act jurisdiction and thus the proper scope of NPDES permitting in *County of Maui* in 2020. The Court held that the Clean Water Act prohibits discharging pollution to WOTUS via groundwater without a permit when it constitutes the "functional equivalent" of a direct discharge.⁶⁰ Ecology has apparently not considered, much less conducted any analysis into, whether Simplot's pollution to groundwater constitutes a "functional equivalent" discharge to the Columbia River such that Simplot is violating federal law without a NPDES permit.⁶¹

Instead of addressing whether Simplot has the "functional equivalent" of a direct discharge to the Columbia River, Ecology cites to a federal district court opinion from 1994 to conclude that because it does not have evidence that "trace[s Simplot's groundwater pollution] to surface waters," it will not reissue a NPDES permit.⁶² This does not support Ecology's conclusion because it employs flawed logic, misinterprets that judicial opinion, and ignores the Supreme Court's more recent controlling precedent. First, the absence of evidence is not the evidence of absence, especially when Ecology knows that Simplot has failed to conduct a complete Hydrogeologic Study to characterize groundwater quality for over 30 years – the very type of study that would uncover the evidence Ecology says it lacks. Second, in *Washington Wilderness Coalition v. Hecla Mining*, the District Court *agreed* that Clean Water Act jurisdiction includes a "discharge which reaches 'navigable waters' through groundwater."⁶³ The Court found the plaintiff there sufficiently alleged "a hydrological connection between seepage into groundwater and the nearby surface waters ... the complaint is thus sufficient to support a claim under the CWA."⁶⁴ In other words, even if *County of Maui* had not superseded its analysis, *Washington Wilderness Coalition* supports the need for Ecology to require a NPDES permit based on the facts we already know because a) Simplot is discharging to groundwater (from its lagoons at a minimum as monitoring data shows, plus an untold amount from its land treatment fields due to its decades-long failure to properly monitor those areas), b) that groundwater is traveling across its land treatment areas and production area in a southwesterly direction, and c) it eventually discharges to the Columbia River somewhere between 1000 ft and one mile from the discharge to groundwater.⁶⁵ This is a sufficient basis for Ecology to require Simplot to obtain NPDES permit coverage unless and until Simplot appropriately monitors its CAFO and submits credible data showing that somehow its pollution is ending up somewhere other than the Columbia River, despite the surrounding groundwater doing so.

In conclusion, Simplot's history of direct surface water discharge and apparent stockpiling of manure near WOTUS warrant a NPDES permit for this CAFO. Similarly,

⁵⁹ Fact Sheet at 14.

⁶⁰ *Cnty of Maui v. Hawaii Wildlife Fund et al.*, 590 U.S. 165, 169 (2020).

⁶¹ *Id.* at 184 (listing relevant factors to making this determination like "transit time" and "distance traveled").

⁶² Fact Sheet at 14.

⁶³ *Washington Wilderness Coalition v. Hecla Mining*, 870 F.Supp. 983, 990 (E.D. Wash. 1994) (agreeing with *McClellan Ecological Seepage Situation (MESS) v. Weinberger*, 707 F. Supp. 1182 (E.D. Cal. 1988)).

⁶⁴ *Id.* at 991.

⁶⁵ Fact Sheet at 10, 14 (acknowledging that Simplot's wastewater "infiltrates to groundwater" from its land treatment fields and "infiltrates to groundwater through the storage lagoons"); *id.* at 14 ("The regional groundwater gradient trends from northeast to southwest discharging to the Columbia River....").

Simplot's discharges to groundwater also warrant a NPDES permit to control and monitor for pollution discharged to groundwater that transports it the short distance to the Columbia. Commenters request that Ecology immediately begin the process of issuing NPDES permit coverage to Simplot.

Finally, since Simplot does need a NPDES permit to lawfully operate this CAFO, Commenters note that Simplot must be subject to all effluent limitations and monitoring requirements applicable to CAFOs, both for surface discharges activities and discharges via groundwater.⁶⁶

CONCLUSION

Commenters respectfully request Ecology strengthen the Draft Permit and ensure that its implementation is rigorous, based on science and credible data, and involves the public in setting critical Permit details in the future. Thank you for your time and work to protect Washington waters.

Sincerely,

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Buck@snakeriverwaterkeeper.org

⁶⁶ See 40 C.F.R. pt. 412; 40 C.F.R. § 122.42(e); *Food & Water Watch v. U.S. EPA*, 20 F.4th 506 (9th Cir. 2021).

Attachment A



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
TTY 711 or 800-833-6388 (for the speech or hearing impaired)

September 6, 2005

Mr. Ron Parks
Simplot Feeders Limited Partnership
Environmental Manager
233 Rodeo Avenue
Caldwell, ID 83605

Dear Mr. Parks:

Subject: Agreements from August 25, 2005 Meeting at Simplot Feeders,
Wallula Washington.

Thank you for meeting with the Department of Ecology (Ecology) and Washington Department of Agriculture (WSDA) on the August 25, 2005. We had a frank discussion of the important regulatory issues, economic realities, and history. At the end of our meeting, I believe that we had agreed on a pathway forward to resolve most of our current issues. This letter is intended to record the points upon which we reached agreement, as well as clearly identify the issues that may remain.

As Ecology's July 5, 2005 letter indicated and we discussed in the meeting, the Hydrogeologic Report (10/2003) does not include groundwater monitoring upgradient of the wastewater land application areas and therefore, does not provide water quality data from background monitoring wells that have not been affected by activities at the facility. It is difficult to determine if manure and waste water applications are degrading the ground water quality without background monitoring wells.

Nitrogen (as Nitrate, Ammonium or TKN) and Total Dissolved Solids (TDS) monitoring results from MW-4, and other wells, suggest that these levels are elevated, though the source of contamination cannot be identified using the existing monitoring well network. The Hydrogeologic Report documents an improvement in the ground water quality at all monitoring locations between 1993 and 2003. Unfortunately, there is no monitoring data from these wells after April 2003.

During our meeting, you indicated that Simplot has not analyzed the quality of wastewater or manure that is land applied to adjacent agricultural fields - apparently upgradient of the feedlot. Ecology and WSDA called your attention to the monitoring identified in your Manure Management Plan and the Wastewater Irrigation Plan submitted for the facility. It does not appear that Simplot has been following these plans in recent years.

I believe we reached agreement on the following points:

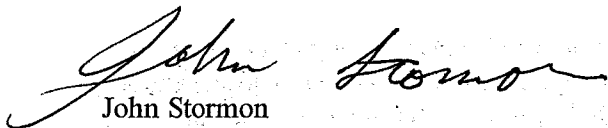
- Simplot will resume groundwater monitoring at existing monitoring wells in October 2005 and continue on a quarterly basis thereafter.

Mr. Ron Parks
Page 2
September 6, 2005

- Simplot will monitor wastewater quality quarterly for $\text{NH}_4\text{-N}$, TKN, Total P, Total K, Salts, and percent Solids, beginning in October 2005.
- Simplot will monitor solid manure quality twice annually for $\text{NH}_4\text{-N}$, TKN, Total P, Total K, Salts, and percent Solids.
- Simplot will follow the Wastewater Irrigation Plan for land application of wastewater including analyses, calculations, and application records described in the plan.
- Simplot will follow the Manure Management Plan for the land application of manure including analyses, calculations and land application records described in the plan.
- Simplot will submit analytical results from water quality monitoring to Ecology on a quarterly basis, within 30 days of receipt from the analytical laboratory.
- Soil and manure analytical results as well as the calculations for land application, and land application records described in the Wastewater Irrigation and Manure Management Plans will be kept on-site, by Simplot, for review by inspectors for at least three years.
- WSDA will conduct a follow-up inspection in Spring 2005 and then continue to inspect on a regular basis at 18-24 months intervals.
- Ecology will defer decision on additional groundwater characterization and monitoring wells dependant on the resumption of monitoring at existing wells. If monitoring results show that the ground water quality continues to improve (based on multi-year trend analysis), Ecology will assume that improved management is protecting ground water quality, and that any elevated levels resulted from past management that may not have been under the control of Simplot.

Thank you once again for meeting with us. We made a great deal of progress toward resolving outstanding issues and agreeing on a clear pathway forward. Please respond with concurrence or to identify areas of non-agreement with the bulleted points above. Once concurrence is reached, Ecology will formalize in appropriate permit documents, such as an Agreed Order under 90.48. If you have any questions or concerns, call me at (360) 407-7221.

Sincerely,



John Stormon
Hydrogeologist
Department of Ecology
Water Quality Program

cc: Kevin P. Hancock, Department of Ecology, WQP CAFO Permit Coordinator
Laurie Crose, Department of Agriculture, Livestock Nutrient Program

Attachment B



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
TTY 711 or 800-833-6388 (for the speech or hearing impaired)

February 28, 2006

CERTIFIED MAIL

Mr. Ron Parks
Simplot Feeders Limited Partnership
233 Rodeo Avenue
Caldwell, ID 82605

Dear Mr. Parks:

Re: Agreement Order between Simplot Feeders, Limited Partnership and the Washington State Department of Ecology

Enclosed you will find the official Agreed Order #3132. This agreement is connected with your Wallula, Washington feedlot, permit #WA0045420.

The terms in this Agreed Order are the same terms negotiated during the August 2005 meeting between Simplot Feeders Limited, the Department of Ecology and, the Washington State Department of Agriculture. You received a letter dated September 6, 2005 with these terms summarized.

After reviewing and signing this agreement, please return it to:

Kevin Hancock
Department of Ecology, Water Quality Program
P.O. Box 47600
Olympia, WA 98504-7600

Thank you for your continued cooperation and support. We look forward to a favorable conclusion of this issue. If you have any questions or concerns, please call Kevin Hancock at (360) 407-6283.

Sincerely,

Nancy L. Winters, Section Manager
Program Development Services
Water Quality Program

Enclosure

cc: Dewey Weaver, Department of Ecology
John Stormon, Department of Ecology
Kevin Hancock, Department of Ecology
Laurie Crose, Department of Agriculture



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF COMPLIANCE BY) AGREED ORDER No. DE 3132
Simplot Feeders Limited Partnership
Wallula, WA

To: Mr. Ron Parks
 Simplot Feeders Limited Partnership
 233 Rodeo Avenue
 Caldwell, ID 83605

This is an Agreed Order between the Simplot Feeders Limited Partnership Wallula, Washington and the Washington State Department of Ecology (Ecology) to achieve compliance with Chapter 90.48 RCW and Chapter 173-221 WAC by taking certain actions to determine Simplot Feeders Limited Partnership Wallula Feedlot's impact to ground water quality. These actions and their required completion schedule are described below. Simplot Feeders Limited Partnership owns and operates a feedlot that is allowed to discharge to the Columbia River, water body ID number WA-CR-1028, during a 24 hour, 25 year storm event or greater.

I. RECOGNITION OF ECOLOGY'S JURISDICTION

Chapter 90.48.030 of the Revised Code of Washington (RCW) provides that Ecology shall have the jurisdiction to control and prevent the pollution of streams, lakes, rivers, ponds, inland waters, salt waters, water courses, other surface and underground waters of the state of Washington.

Simplot Feeders Limited Partnership agrees to undertake all actions required of it by the terms and conditions of this agreed order and not to contest Ecology's jurisdiction and authority to administer this agreed order.

II. FINDINGS OF FACT

NPDES Permit # WA0045420, Simplot Feeders Limited Partnership, Wallula WA, Special Condition S8.B requires that a "Final Hydrogeologic Report" be submitted to Ecology no later than September 30, 2003. On July 5, 2005, the Department of Ecology notified Simplot Feeders, by Certified Letter, that the Hydrogeologic Report is not complete. The July 5, 2005 Certified Letter required the installation of additional background wells to monitor ground water quality that has not been affected by the land treatment of wastewater.

Simplot Feeders, the Department of Ecology, and the Washington Department of Agriculture met on August 25, 2005, to discuss how best to resolve outstanding issues. The agreements are listed in section III of this Agreed Order.

III. CORRECTIVE ACTIONS/COMPLIANCE SCHEDULE

For this reason, IT IS AGREED that Simplot Feeders Limited Partnership, shall take the following actions and not contest Ecology's jurisdiction and authority to administer this order.

- Simplot has resumed ground water monitoring at existing monitoring well and will continue on a quarterly basis thereafter.
- Simplot shall monitor wastewater quality quarterly for $\text{NH}_4\text{-N}$, TKN, Total P, Total K, Salts, and % Solids.
- Simplot shall monitor solid manure quality twice annually for $\text{NH}_4\text{-N}$, TKN, Total P, Total K, Salts, and % Solids.
- Simplot shall follow the Wastewater Irrigation Plan for land application of wastewater including analyses, calculations, and application records described in the Plan.
- Simplot shall follow the Manure Management Plan for the land application of manure including analyses, calculations, and land application records described in the Plan.
- Simplot shall submit analytical results from water quality monitoring to Ecology on a quarterly basis, within 30 days of receipt of results from the analytical laboratory.
- Soil and manure analytical results as well as the calculations for land application, and land application records described in the Wastewater Irrigation and Manure Management Plans shall be kept on-site, by Simplot, for review by inspectors for at least 3 years.
- WSDA will conduct a follow-up inspection in Spring 2006 and then continue to inspect on a regular basis at 18-24 month intervals.
- Ecology will defer decision on additional ground water characterization and monitoring wells until December 31, 2007 depending on the results of monitoring at existing wells.

IV. REGULATORY APPROACH

Simplot Feeders Limited Partnership's NPDES permit expired on June 30, 2005. Permit number WA0045420 has been extended until the impacts of the Simplot Wallula Feedlot are known and Ecology issues another permit. In order to give certainty to the schedule for the studies completion, Ecology and Simplot Feeders Limited Partnership have agreed to this Agreed Order formalizing the steps and schedule that Simplot Feeders Limited Partnership will take to complete the Hydrogeologic Study.

V. AMENDMENTS TO THE AGREED CORRECTIVE ACTIONS

Amendments to the agreed corrective actions may be requested for good cause. To be effective, all proposed amendments must be requested in writing at least thirty (30) days prior to the implementation date, signed by the person with signature authority for each party, and attached to the agreed order.

VII. TERMINATION OF THE AGREED ORDER

The agreed order shall be terminated when both parties agree that all compliance actions held in the agreed order and any amendments have been met.

VIII. DISPUTE RESOLUTION

If a dispute arises between the parties regarding any noncompliance with this agreed order, the parties shall attempt to resolve the dispute by informal resolution. A dispute shall be considered to have arisen when one party notifies another, in writing, that there is a dispute. If the parties cannot resolve the dispute informally within thirty (30) days, Simplot shall serve on Ecology a written Statement of Position. Within thirty (30) days thereafter, Ecology shall provide Simplot with a final administrative decision. The position advanced by Ecology shall be considered binding unless Simplot elects to pursue arbitration of the dispute. In order to pursue arbitration, Simplot must hire an arbitrator approved by Ecology within thirty (30) days of receiving Ecology's administrative decision. The arbitrator shall determine whether Ecology's administrative decision is consistent with this agreed order. In making this determination, the arbitrator shall review this agreed order and Simplot's Statement of Position, Ecology's final administrative decision, and evidence from Simplot and Ecology. The arbitrator will uphold Ecology's administrative decision unless Simplot demonstrates, by preponderance of evidence, that Ecology's administrative decision is inconsistent with this agreed order.

DATED this day February 28, 2006 at Olympia, Washington.

Ron Parks
Simplot Feeders Limited Partnership
Environmental Manager

Nancy L. Winters, Section Manager
Department of Ecology
Program Development Services
Water Quality Program

Attachment C



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Eastern Region Office

4601 North Monroe St., Spokane, WA 99205-1295 • 509-329-3400

April 9, 2025

David Modde
Environmental Manager
J.R. Simplot Company
223 Rodeo Avenue
Caldwell, Idaho 83605

RE: Notice of Temporary State Waste Discharge Permit for Simplot Feeders LLC –
ST0501324

Dear David Modde:

Simplot Feeders LLC's application for a State Waste Discharge permit was received by this office on April 9, 2019. The Department of Ecology (Ecology) has reviewed and accepted the application as sufficiently complete on June 7, 2019. A temporary permit was issued and effective 60-days from the date the application was received by our office (RCW 90.48.200). We recently reviewed our files and realized Simplot Feeders should have received a temporary permit letter based on the permit application received by Ecology.

A public notice was published on June 21, 2019 and June 28, 2019 in the Walla Walla Union Bulletin per WAC 173-216-090 informing the public that an application was available to the public.

Any applicant who proposes to discharge waste materials into waters of the state or into a municipal sewerage system must file an application with Ecology at least 60-days prior to discharging. Washington Administrative Code (WAC) 173-216-070 explains what satisfies the requirement for filing a permit application. WAC 173-216-090 requires publication of a public notice followed by a 30-day comment period.

Revised Code of Washington (RCW) 90.48.200 states, "In the event of failure of Ecology to act upon an application within 60 days after it has been filed, the applicant shall be deemed to have received a temporary permit. Said permit shall authorize the applicant to discharge wastes into waters of the state as requested in its application only until such time as Ecology shall have taken action upon said application".

Therefore, as RCW 90.48.200 and WAC 173-216 provide, your new temporary permit became effective June 8, 2019, and will remain in force until notified by Ecology.

Ecology requests that Simplot Feeders comply with any temporary provisions associated with the application accepted on June 7, 2019 or until Ecology issues a permit. Simplot Feeders will have an opportunity to review the proposed permit prior to final issuance by Ecology.

You are required to comply with all water pollution laws and regulations.

This authorization does not allow Simplot Feeders to discharge pollutants not specified in your application and attachments or in quantities exceeding those specified in your application. A new application or supplement to the current application must be submitted along with required engineering plans and reports, whenever a new or increased discharge or change in the nature of the discharge is anticipated. An application or supplement must be submitted at least 60 days prior to the proposed change or increase in discharge.

A new application must be submitted if the discharge of wastewater is to continue after five years from the effective date of the temporary permit. Ecology may issue a new permit for this discharge at any time. Ecology may also request an updated application if a substantial amount of time passes before acting on your original application.

Ecology has adopted a regulation (Chapter 173-224 WAC) establishing annual permit fees for all municipal/domestic and industrial wastewater discharge permit holders. Teck Washington Inc.'s temporary permit is subject to this fee starting on its effective date and will be notified of the amount of the fee, payment schedules, and other details in a separate mailing from Ecology Fee Unit.

Your right to appeal

You have a right to appeal this permit to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt. The appeal process is governed by RCW 43.21B and WAC 371-08. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal, you must do all of the following within 30 days of the date of receipt of this permit:

- File your notice of appeal and a copy of this permit with the PCHB (see filing information below). "Filing" means actual receipt by the PCHB during regular business hours as defined in WAC 371-08-305 and -335. "Notice of appeal" is defined in WAC 371-08-340.
- Serve a copy of your notice of appeal and this permit on the Department of Ecology by mail, in person, or by email (see addresses below).

You must also comply with other applicable requirements in RCW 43.21B and WAC 371-08.

Filing an appeal

Filing with the PCHB

For the most current information regarding filing with the PCHB, visit:
<https://eluho.wa.gov/> or call (360) 664-9160.

Service on Ecology

Street Addresses:

Department of Ecology
Attn: Appeals Processing Desk
300 Desmond Drive SE
Lacey, Washington 98503

Mailing Addresses:

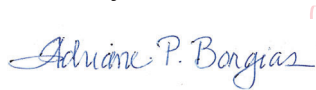
Department of Ecology
Attn: Appeals Processing Desk
PO Box 47608
Olympia, Washington 98504-7608

E-Mail Address:

ecologyappeals@ecy.wa.gov

Please contact Kate Hupp at (509) 319-5708 or by email at khup461@ecy.wa.gov if you have questions about the application or the permitting process.

Sincerely,

 Digitally signed by Borgias,
Adriane P. (ECY)
Date: 2025.04.09 16:24:28 -07'00'

Adriane P. Borgias
Water Quality Section Manager
Eastern Regional Office
Washington State Department of Ecology

APB:sj

cc: Steven Paget, Simplot Feeders LLC
Alika Conley, J.R. Simplot Company
Rachel Roskelley, J.R. Simplot Company
Ecology Permit Fee Unit
Kate Hupp, WQP Permit Manager, Ecology Eastern Region
Art Jenkins, PE, WQP Permit Management Unit Supervisor, Ecology Eastern Region
Greg Dobb, PE, WQP Permit Development Unit Supervisor, Ecology Eastern Region

Attachment D



Northwest Groundwater
Consultants, LLC

November 22, 2024

Project No. 01123-01

Ms. Llyn Doremus
Department of Ecology
4601 North Monroe Street
Spokane, Washington 99205

Subject: Letter Report, Third Quarter 2024 Water Quality Monitoring, Simplot Feeders Limited Partnership, Wallula, Washington

Dear Ms. Doremus:

On behalf of Simplot Livestock Company (Simplot), Northwest Groundwater Consultants, LLC (NWGC) has prepared this letter report summarizing the results of quarterly groundwater monitoring at the Simplot Feeders Limited Partnership near Wallula, Washington (Figure 1).

Groundwater monitoring consisted of gauging groundwater levels in shallow monitoring wells MW-1, MW-4B, and MW-5, and in deep monitoring well MW-4A (Table 1). Wells MW-1 and MW-5 are downgradient, and wells MW-4A and MW-4B are upgradient. Groundwater samples were collected from monitoring wells MW-1, MW-4A, MW-4B, and MW-5 using a submersible pump. Field parameters were measured at the time of sampling and samples were submitted for chemical analysis (Tables 2 and 3). Water quality samples were also collected from the Small and Large Lagoons (Tables 4 and 5).

Monitoring was conducted by NWGC staff on September 18, 2024, consistent with the sampling procedures presented in the Revised Scope of Work, Groundwater Quality Evaluation.¹ Due to a pump malfunction during sampling, wells MW-4A and MW-4B were sampled on October 9, 2024. As prescribed in the procedures, fecal coliform was removed from the monitoring program after non-detects were reported for four quarters. The historical data for fecal coliform are included in Tables 3 and 5. This event is considered a third-quarter sampling event.

FIELD ACTIVITIES

Prior to sampling, water levels were measured in each well. Water level data are summarized in Table 1. Groundwater levels were measured from the surveyed measuring

¹ MFG. Revised scope of work, groundwater quality evaluation. Prepared for Simplot Feeders Limited Partnership. McCulley, Frick & Gilman, Inc., February 2002.



point of each well to the nearest 0.01 foot using an electronic probe.

Monitoring wells were purged and sampled with a submersible pump using low-flow techniques. A YSI water quality meter was used to measure dissolved oxygen, pH, specific conductance, and temperature while purging. Samples were collected in appropriate laboratory-provided containers and placed in an ice-cooled, insulated chest for transport to the laboratory for analysis. A chain-of-custody (COC) record accompanied the samples to the laboratory. Non-disposable sampling equipment was decontaminated with a phosphate-free detergent solution and double-rinsed with distilled water before and after use. Field sampling data sheets and COC are presented in the Attachments.

Water samples were analyzed for the following parameters: ammonia, biological oxygen demand (BOD), chloride, nitrate-nitrogen, nitrite-nitrogen, total dissolved solids (TDS), and total Kjeldahl nitrogen (TKN). Additionally, the Small and Large Lagoon samples were analyzed for calcium, magnesium, phosphate (as phosphorus), potassium, and sodium. Samples were analyzed by SVL Analytical, Inc., a Washington State-certified laboratory in Kellogg, Idaho.

RESULTS

Groundwater Level Measurements

Groundwater-level measurements are summarized in Table 1, and groundwater hydrographs are provided in Figure 2. A comparison of measurements collected over the past several years indicates groundwater levels have been slowly increasing in most of the shallow monitoring wells.

A comparison between groundwater elevations measured during the third quarter 2024 monitoring event and the previous quarterly event, which took place in June 2024, indicates that groundwater elevations decreased in wells MW-4A (0.14 foot), MW-4B (0.01 foot) and MW-5 (0.03 foot). Groundwater elevation increased in well MW-1 (0.09 foot).

Field Parameter Measurements

Field parameter measurements from the third quarter 2024 monitoring event and past events are summarized in Table 2, and time-versus-field parameter measurement plots for dissolved oxygen, pH, and specific conductance are presented in Figures 3, 4, and 5, respectively.

In downgradient wells, dissolved oxygen was measured at 0.27 milligrams per liter (mg/L) (MW-1) and 0.58 mg/L (MW-5); pH was measured at 6.76 (MW-1) and 6.96 (MW-5); specific conductance was measured at 1,988 micromhos per centimeter ($\mu\text{mhos/cm}$) (MW-1) and 1,765 $\mu\text{mhos/cm}$ (MW-5); and temperature was measured at 14.3 degrees Celsius ($^{\circ}\text{C}$) (MW-1) and 17.2 $^{\circ}\text{C}$ (MW-5).



In upgradient wells, dissolved oxygen was measured at 2.96 mg/L (MW-4A) and 8.02 mg/L (MW-4B); pH was measured at 7.09 (MW-4A) and 7.11 (MW-4B); specific conductance was measured at 486 μ mhos /cm (MW-4A) and 856 μ mhos/cm (MW-4B); and temperature was measured at 16.2°C (MW-4A) and 15.1°C (MW-4B).

Groundwater Analytical Data

Analytical results from the September groundwater sampling event and past events are summarized in Table 3, and time-versus-concentration plots are presented in Figures 6 through 10. The laboratory analytical report and data quality assurance/quality control (QA/QC) review are presented in the Attachments.

Ammonia was detected in downgradient monitoring well MW-1 at 19.7 mg/L. Ammonia concentrations in upgradient well MW-4B and in downgradient well MW-5 were detected at 0.047 and 0.17 mg/L, respectively. Ammonia concentration in deep upgradient wells MW-4A was less than the reporting limit of 0.030 mg/L.

BOD concentrations were detected at less than the laboratory reporting limits in downgradient wells MW-1 and MW-5 and in the upgradient wells MW-4A and MW-4B.

Chloride was detected in downgradient wells MW-1 and MW-5 at 188 and 209 mg/L, respectively. Chloride concentrations in upgradient monitoring wells MW-4A and MW-4B were 26.4 and 120 mg/L, respectively.

The highest nitrate-nitrogen concentration was detected in shallow upgradient well MW-4B at 27.6 mg/L. Nitrate-nitrogen was also detected in deep upgradient monitoring well MW-4A at 6.25 mg/L. Nitrate-nitrogen was detected at 0.188 mg/L in MW-5 and less than the laboratory reporting limit of 0.05 mg/L in MW-1. Nitrite-nitrogen was detected at less than the laboratory reporting limit of 0.05 mg/L in all wells.

Concentrations of TDS in the downgradient wells MW-1 and MW-5 were detected at 1,170 and 1,050 mg/L, respectively. TDS was detected in upgradient wells MW-4A (372 mg/L) and MW-4B (636 mg/L).

TKN was detected in downgradient wells MW-1 and MW-5 at 21.8 and 0.85 mg/L, respectively. TKN detection levels were less than the laboratory reporting limits in upgradient wells MW-4A and MW-4B.

Surface Water Analytical Data

Field parameters associated with the Small and Large Lagoons are provided in Table 4. Analytical results for the water quality sample collected from the lagoons are summarized in Table 5.



Analyte concentrations in the Small Lagoon changed relative to the previous sampling event as follows:

Decreased

- Chloride (234 to 86.7 mg/L)
- Sodium (141 to 61.7 mg/L)

Increased

- Ammonia (72.1 to 112 mg/L)
- BOD (78.0 to 2,160 mg/L)
- Calcium (80.8 to 94.9 mg/L)
- Magnesium (28.2 to 43.2 mg/L)
- Phosphorus (30.1 to 68.4 mg/L)
- Potassium (252 to 260 mg/L)
- TDS (1,380 to 1,450 mg/L)
- TKN (113 to 142 mg/L)

Nitrate and nitrite concentrations remained less than laboratory reporting limits.

Analyte concentrations in the Large Lagoon changed relative to the previous sampling event as follows:

Decreased

- Calcium (222 to 122 mg/L)
- Chloride (185 to 80.7 mg/L)
- Magnesium (49.5 to 41.2 mg/L)
- Potassium (278 to 223 mg/L)
- Sodium (135 to 57.8 mg/L)
- TKN (125 to 111 mg/L)

Increased

- Ammonia (32.9 to 96.1 mg/L)
- BOD (202 to 2,120 mg/L)
- Phosphorus (47.2 to 63.2 mg/L)
- TDS (1,110 to 1,650 mg/L)

Nitrate and nitrite concentrations remained less than laboratory reporting limits.

CONCLUSIONS

The following observations can be made regarding concentration trends in the Site wells:



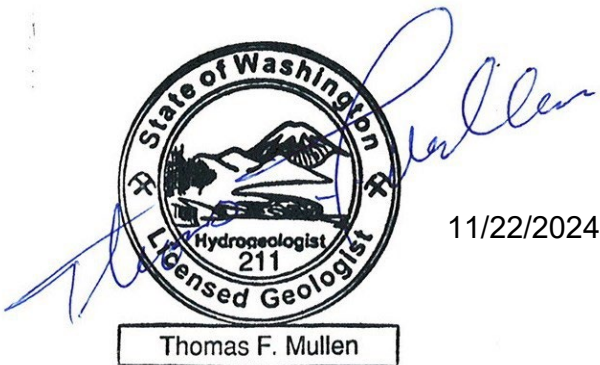
- MW-1: Concentrations of ammonia and TKN in downgradient MW-1 have increased over the last several quarters. Since 2013, ammonia and TKN concentrations appear to show a general downward trend. However, ammonia and TKN concentrations have increased since December 2020. TDS concentrations also show a general downward trend from early 2011 to December 2019. TDS concentrations have increased from December 2019 to April 2023. TDS concentrations generally decreased after April 2023 only to increase during the current sampling event. Chloride concentrations have generally increased since March 2017. Nitrate-nitrogen concentrations in MW-1 remain stable, near or below detection limits.
- MW-4A: Concentrations of chloride, nitrate-nitrogen, and TDS have remained relatively stable over the past several years. TKN concentrations peaked during the period between June 2019 and March 2021. TKN have then generally decreased since then. Concentrations of ammonia continue to be below reporting limits.
- MW-4B: Concentrations of chloride and TDS show a general downward trend over the past several years. Concentrations of nitrate-nitrogen continue to range between 27.6 and 30 mg/L. Concentrations of ammonia and TKN continue to be below reporting limits.
- MW-5: Chloride concentrations have been generally decreasing from September 2021 to present. TDS have also been generally decreasing from June 2021. The nitrate-nitrogen concentrations continue to generally report below 3 mg/L. Ammonia concentrations have remained stable, near or below detection limits since 2014. TKN concentrations generally continue to vary less than 1 mg/L.

The next quarterly sampling event is tentatively scheduled for December 2024. If you have any questions, or wish to discuss any items further, please do not hesitate to contact me at (208) 755-1094.

Sincerely,



Northwest Groundwater
Consultants, LLC



Thomas F. Mullen, LHG
Principal Hydrogeologist

cc: Kyrre Flege – WSDA
Kristina Gibson- WSDA
David Modde - Simplot

Attachments:

Tables
Figures
Field Sampling Data Sheets, Chain of Custody Records, Analytical Laboratory
Report, Data QA/QC Review

TABLE 1
SIMPLOT FEEDERS
MONITORING WELL WATER LEVEL DATA

Monitoring Well No.	Date Measured	Measuring Point Elevation (ft AMSL)	Depth to Water Below MP (ft)	Water Level Elevation (ft AMSL)
MW-1	4/26/2001	399.33	19.21	380.12
	7/23/2001	399.33	18.39	380.94
	10/22/2001	399.33	17.61	381.72
	1/28/2002	399.33	17.49	381.84
	4/22/2002	399.33	17.26	382.07
	7/24/2002	399.33	16.99	382.34
	10/31/2002	399.33	17.40	381.93
	1/22/2003	399.33	16.68	382.65
	4/9/2003	399.33	17.78	381.55
	10/26/2005	399.33	18.69	380.64
	1/31/2006	399.33	19.01	380.32
	4/27/2006	399.33	19.47	379.86
	7/27/2006	399.33	18.16	381.17
	10/31/2006	399.33	18.31	381.02
	1/31/2007	399.33	18.95	380.38
	4/26/2007	399.33	19.31	380.02
	7/25/2007	399.33	19.76	379.57
	10/31/2007	399.33	19.76	379.57
	1/30/2008	399.33	19.85	379.48
	4/30/2008	399.33	20.46	378.87
	7/30/2008	399.33	20.71	378.62
	11/20/2008	399.33	20.36	378.97
	1/29/2009	399.33	20.55	378.78
	4/30/2009	399.33	20.85	378.48
	7/29/2009	399.33	19.76	379.57
	11/5/2009	399.33	20.16	379.17
	1/26/2010	399.33	20.45	378.88
	4/26/2010	399.33	20.65	378.68
	7/28/2010	399.33	20.69	378.64
	10/28/2010	399.33	20.33	379.00
	1/27/2011	399.33	20.33	379.00
	4/28/2011	399.33	20.61	378.72
	8/1/2011	399.33	18.44	380.89
	12/1/2011	399.33	20.75	378.58
	2/28/2012	399.33	20.62	378.71
	5/15/2012	399.33	20.74	378.59
	8/29/2012	399.33	20.61	378.72
	11/16/2012	399.33	20.42	378.91
	2/19/2013	399.33	20.38	378.95
	5/22/2013	399.33	20.30	379.03
	8/21/2013	399.33	21.08	378.25
	1/2/2014	399.33	19.62	379.71
	3/26/2014	399.33	19.77	379.56
	7/8/2014	399.33	19.76	379.57
	9/23/2014	399.33	19.54	379.79
	12/8/2014	399.33	19.19	380.14
	3/11/2015	399.33	19.15	380.18
	6/17/2015	399.33	18.95	380.38
	9/22/2015	399.33	19.15	380.18
	12/16/2015	399.33	19.14	380.19
	3/21/2016	399.33	18.80	380.53

TABLE 1

**SIMPLOT FEEDERS
MONITORING WELL WATER LEVEL DATA**

Monitoring Well No.	Date Measured	Measuring Point Elevation (ft AMSL)	Depth to Water Below MP (ft)	Water Level Elevation (ft AMSL)
MW-1	6/22/2016	399.33	18.71	380.62
	9/20/2016	399.33	18.74	380.59
	12/13/2016	399.33	18.56	380.77
	3/14/2017	399.33	18.10	381.23
	6/20/2017	399.33	18.20	381.13
	9/19/2017	399.33	18.13	381.20
	12/14/2017	399.33	17.53	381.80
	3/7/2018	399.33	17.40	381.93
	6/19/2018	399.33	17.15	382.18
	9/27/2018	399.33	16.93	382.40
	12/20/2018	399.33	16.58	382.75
	3/26/2019	399.33	16.70	382.63
	6/18/2019	399.33	16.81	382.52
	9/25/2019	399.33	17.07	382.26
	12/17/2019	399.33	17.13	382.20
	3/25/2020	399.33	NM	
	6/17/2020	399.33	16.92	382.41
	9/30/2020	399.33	16.86	382.47
	12/16/2020	399.33	16.73	382.60
	3/30/2021	399.33	16.40	382.93
	6/23/2021	399.33	16.59	382.74
	9/22/2021	399.33	16.86	382.47
	12/14/2021	399.33	16.69	382.64
	3/29/2022	399.33	16.45	382.88
	6/28/2022	399.33	16.36	382.97
	9/28/2022	399.33	15.84	383.49
	12/20/2022	399.33	15.94	383.39
	4/4/2023	399.33	15.65	383.68
	6/27/2023	399.33	15.75	383.58
	9/26/2023	399.33	15.83	383.50
	12/19/2023	399.33	15.51	383.82
	3/19/2024	399.33	14.93	384.40
	6/19/2024	399.33	15.49	383.84
	9/18/2024	399.33	15.40	383.93
MW-4A	4/26/2001	449.82	73.43	376.39
	7/23/2001	449.82	72.79	377.03
	10/22/2001	449.82	72.32	377.50
	1/28/2002	449.82	72.31	377.51
	4/22/2002	449.82	71.53	378.29
	7/24/2002	449.82	70.61	379.21
	10/31/2002	449.82	79.71	370.11
	1/22/2003	449.82	69.79	380.03
	4/9/2003	449.82	60.59	389.23
	10/26/2005	449.82	63.55	386.27
	1/31/2006	449.82	62.85	386.97
	4/27/2006	449.82	62.31	387.51
	7/27/2006	449.82	61.51	388.31
	10/31/2006	449.82	61.65	388.17
	1/31/2007	449.82	61.19	388.63
	4/26/2007	449.82	60.67	389.15

TABLE 1

**SIMPLOT FEEDERS
MONITORING WELL WATER LEVEL DATA**

Monitoring Well No.	Date Measured	Measuring Point Elevation (ft AMSL)	Depth to Water Below MP (ft)	Water Level Elevation (ft AMSL)
MW-4A	7/25/2007	449.82	60.05	389.77
	10/31/2007	449.82	60.35	389.47
	1/30/2008	449.82	59.51	390.31
	4/30/2008	449.82	58.76	391.06
	7/30/2008	449.82	58.05	391.77
	11/20/2008	449.82	58.35	391.47
	1/29/2009	449.82	58.61	391.21
	4/30/2009	449.82	58.35	391.47
	7/29/2009	449.82	56.98	392.84
	11/5/2009	449.82	56.86	392.96
	1/26/2010	449.82	56.48	393.34
	4/26/2010	449.82	56.33	393.49
	7/28/2010	449.82	55.95	393.87
	10/28/2010	449.82	56.81	393.01
	1/27/2011	449.82	55.75	394.07
	4/28/2011	449.82	54.98	394.84
	8/1/2011	449.82	54.73	395.09
	12/1/2011	449.82	54.88	394.94
	2/28/2012	449.82	57.29	392.53
	5/15/2012	449.82	52.95	396.87
	8/29/2012	449.82	53.41	396.41
	11/16/2012	449.82	52.53	397.29
	2/19/2013	449.82	52.71	397.11
	5/22/2013	449.82	51.46	398.36
	8/21/2013	449.82	51.50	398.32
	1/2/2014	449.82	51.56	398.26
	3/26/2014	449.82	50.48	399.34
	7/8/2014	449.82	50.48	399.34
	9/23/2014	449.82	48.30	401.52
	12/8/2014	449.82	51.15	398.67
	3/11/2015	449.82	50.53	399.29
	6/17/2015	449.82	49.67	400.15
	9/22/2015	449.82	50.19	399.63
	12/16/2015	449.82	50.06	399.76
	3/21/2016	449.82	48.77	401.05
	6/22/2016	449.82	48.50	401.32
	9/20/2016	449.82	48.69	401.13
	12/13/2016	449.82	48.74	401.08
	3/14/2017	449.82	48.01	401.81
	6/20/2017	449.82	47.86	401.96
	9/19/2017	449.82	47.44	402.38
	12/14/2017	449.82	47.65	402.17
	3/7/2018	449.82	46.88	402.94
	6/19/2018	449.82	46.55	403.27
	9/27/2018	449.82	46.65	403.17
	12/20/2018	449.82	46.60	403.22
	3/26/2019	449.82	46.46	403.36
	6/18/2019	449.82	46.63	403.19
	9/25/2019	449.82	47.00	402.82
	12/17/2019	449.82	46.60	403.22
	3/25/2020	449.82	45.48	404.34

TABLE 1

**SIMPLOT FEEDERS
MONITORING WELL WATER LEVEL DATA**

Monitoring Well No.	Date Measured	Measuring Point Elevation (ft AMSL)	Depth to Water Below MP (ft)	Water Level Elevation (ft AMSL)
MW-4A	6/17/2020	449.82	45.70	404.12
	9/30/2020	449.82	44.54	405.28
	12/16/2020	449.82	45.41	404.41
	3/30/2021	449.82	45.29	404.53
	6/23/2021	449.82	45.14	404.68
	9/22/2021	449.82	45.39	404.43
	12/14/2021	449.82	44.53	405.29
	3/29/2022	449.82	44.85	404.97
	6/28/2022	449.82	43.17	406.65
	9/28/2022	449.82	44.54	405.28
	12/20/2022	449.82	44.19	405.63
	4/4/2023	449.82	43.65	406.17
	6/27/2023	449.82	43.33	406.49
	9/26/2023	449.82	43.60	406.22
	12/19/2023	449.82	43.07	406.75
	3/19/2024	449.82	42.89	406.93
	6/19/2024	449.82	42.61	407.21
	10/9/2024	449.82	42.75	407.07
MW-4B	4/26/2001	449.97	22.02	427.95
	7/23/2001	449.97	21.85	428.12
	10/22/2001	449.97	21.32	428.65
	1/28/2002	449.97	21.37	428.60
	4/22/2002	449.97	21.31	428.66
	7/24/2002	449.97	21.21	428.76
	10/31/2002	449.97	21.61	428.36
	1/22/2003	449.97	20.71	429.26
	4/9/2003	449.97	20.59	429.38
	10/26/2005	449.97	17.63	432.34
	1/31/2006	449.97	17.05	432.92
	4/27/2006	449.97	17.95	432.02
	7/27/2006	449.97	18.31	431.66
	10/31/2006	449.97	18.85	431.12
	1/31/2007	449.97	16.31	433.66
	4/26/2007	449.97	15.65	434.32
	7/25/2007	449.97	15.98	433.99
	10/31/2007	449.97	15.61	434.36
	1/30/2008	449.97	13.41	436.56
	4/30/2008	449.97	12.78	437.19
	7/30/2008	449.97	15.81	434.16
	11/20/2008	449.97	13.03	436.94
	1/29/2009	449.97	12.78	437.19
	4/30/2009	449.97	12.51	437.46
	7/29/2009	449.97	12.92	437.05
	11/5/2009	449.97	12.46	437.51
	1/26/2010	449.97	12.54	437.43
	4/26/2010	449.97	12.65	437.32
	7/28/2010	449.97	13.65	436.32
	10/28/2010	449.97	12.96	437.01
	1/27/2011	449.97	13.85	436.12
	4/28/2011	449.97	13.86	436.11

TABLE 1

**SIMPLOT FEEDERS
MONITORING WELL WATER LEVEL DATA**

Monitoring Well No.	Date Measured	Measuring Point Elevation (ft AMSL)	Depth to Water Below MP (ft)	Water Level Elevation (ft AMSL)
MW-4B	8/1/2011	449.97	12.94	437.03
	12/1/2011	449.97	12.74	437.23
	2/28/2012	449.97	12.18	437.79
	5/15/2012	449.97	11.89	438.08
	8/29/2012	449.97	13.62	436.35
	11/16/2012	449.97	11.97	438.00
	2/19/2013	449.97	11.73	438.24
	5/22/2013	449.97	12.05	437.92
	8/21/2013	449.97	12.54	437.43
	1/2/2014	449.97	11.87	438.10
	3/26/2014	449.97	11.52	438.45
	7/8/2014	449.97	12.17	437.80
	9/23/2014	449.97	12.17	437.80
	12/8/2014	449.97	11.91	438.06
	3/11/2015	449.97	11.77	438.20
	6/17/2015	449.97	12.17	437.80
	9/22/2015	449.97	12.11	437.86
	12/16/2015	449.97	11.94	438.03
	3/21/2016	449.97	11.38	438.59
	6/22/2016	449.97	11.70	438.27
	9/20/2016	449.97	11.91	438.06
	12/13/2016	449.97	11.92	438.05
	3/14/2017	449.97	11.41	438.56
	6/20/2017	449.97	11.71	438.26
	9/19/2017	449.97	11.71	438.26
	12/14/2017	449.97	11.60	438.37
	3/7/2018	449.97	11.48	438.49
	6/19/2018	449.97	11.88	438.09
	9/27/2018	449.97	11.83	438.14
	12/20/2018	449.97	12.20	437.77
	3/26/2019	449.97	12.23	437.74
	6/18/2019	449.97	12.85	437.12
	9/25/2019	449.97	12.66	437.31
	12/17/2019	449.97	12.40	437.57
	3/25/2020	449.97	12.25	437.72
	6/17/2020	449.97	12.93	437.04
	9/30/2020	449.97	13.01	436.96
	12/16/2020	449.97	12.60	437.37
	3/30/2021	449.97	12.96	437.01
	6/23/2021	449.97	11.66	438.31
	9/22/2021	449.97	13.45	436.52
	12/14/2021	449.97	12.83	437.14
	3/29/2022	449.97	11.61	438.36
	6/28/2022	449.97	11.64	438.33
	9/28/2022	449.97	12.92	437.05
	12/20/2022	449.97	12.76	437.21
	4/4/2023	449.97	13.31	436.66
	6/27/2023	449.97	12.93	437.04
	9/26/2023	449.97	13.27	436.70
	12/19/2023	449.97	12.87	437.10
	3/19/2024	449.97	12.26	437.71

TABLE 1

**SIMPLOT FEEDERS
MONITORING WELL WATER LEVEL DATA**

Monitoring Well No.	Date Measured	Measuring Point Elevation (ft AMSL)	Depth to Water Below MP (ft)	Water Level Elevation (ft AMSL)
MW-4B	6/19/2024	449.97	12.62	437.35
	10/9/2024	449.97	12.63	437.34
MW-5	4/26/2001	400.30	30.36	369.94
	7/23/2001	400.3	30.09	370.21
	10/22/2001	400.3	29.46	370.84
	1/28/2002	400.3	29.14	371.16
	4/22/2002	400.3	29.37	370.93
	7/24/2002	400.3	29.05	371.25
	10/31/2002	400.3	29.31	370.99
	1/22/2003	400.3	28.79	371.51
	4/9/2003	400.3	29.05	371.25
	10/26/2005	400.3	29.65	370.65
	1/31/2006	400.3	30.16	370.14
	4/27/2006	400.3	30.41	369.89
	7/27/2006	400.3	30.39	369.91
	10/31/2006	400.3	31.10	369.20
	1/31/2007	400.3	31.16	369.14
	4/26/2007	400.3	30.65	369.65
	7/25/2007	400.3	31.65	368.65
	10/31/2007	400.3	32.26	368.04
	1/30/2008	400.3	32.19	368.11
	4/30/2008	400.3	32.50	367.80
	7/30/2008	400.3	32.63	367.67
	11/20/2008	400.3	32.31	367.99
	1/29/2009	400.3	32.78	367.52
	4/30/2009	400.3	32.65	367.65
	7/29/2009	400.3	32.72	367.58
	11/5/2009	400.3	32.73	367.57
	1/26/2010	400.3	32.88	367.42
	4/26/2010	400.3	32.19	368.11
	7/28/2010	400.3	32.85	367.45
	10/28/2010	400.3	32.60	367.70
	1/27/2011	400.3	32.66	367.64
	4/28/2011	400.3	32.90	367.40
	8/1/2011	400.3	32.92	367.38
	12/1/2011	400.3	32.72	367.58
	2/28/2012	400.3	32.84	367.46
	5/15/2012	400.3	32.58	367.72
	8/29/2012	400.3	32.82	367.48
	11/16/2012	400.3	32.50	367.80
	2/19/2013	400.3	32.61	367.69
	5/22/2013	400.3	32.55	367.75
	8/21/2013	400.3	32.40	367.90
	1/2/2014	400.3	32.27	368.03
	3/26/2014	400.3	32.27	368.03
	7/8/2014	400.3	32.26	368.04
	9/23/2014	400.3	32.18	368.12
	12/8/2014	400.3	32.07	368.23
	3/11/2015	400.3	31.74	368.56
	6/17/2015	400.3	31.66	368.64

TABLE 1
SIMPLOT FEEDERS
MONITORING WELL WATER LEVEL DATA

Monitoring Well No.	Date Measured	Measuring Point Elevation (ft AMSL)	Depth to Water Below MP (ft)	Water Level Elevation (ft AMSL)
MW-5	9/22/2015	400.3	31.65	368.65
	12/16/2015	400.3	31.70	368.60
	3/21/2016	400.3	31.51	368.79
	6/22/2016	400.3	31.45	368.85
	9/20/2016	400.3	31.55	368.75
	12/13/2016	400.3	31.58	368.72
	3/14/2017	400.3	31.25	369.05
	6/20/2017	400.3	30.91	369.39
	9/19/2017	400.3	30.81	369.49
	12/14/2017	400.3	30.70	369.60
	3/7/2018	400.3	30.45	369.85
	6/19/2018	400.3	30.33	369.97
	9/27/2018	400.3	29.95	370.35
	12/20/2018	400.3	29.69	370.61
	3/26/2019	400.3	29.61	370.69
	6/18/2019	400.3	29.53	370.77
	9/25/2019	400.3	29.82	370.48
	12/17/2019	400.3	29.63	370.67
	3/25/2020	400.3	29.78	370.52
	6/17/2020	400.3	29.65	370.65
	9/30/2020	400.3	29.81	370.49
	12/16/2020	400.3	29.67	370.63
	3/30/2021	400.3	29.64	370.66
	6/23/2021	400.3	29.52	370.78
	9/22/2021	400.3	29.75	370.55
	12/14/2021	400.3	29.80	370.50
	3/29/2022	400.3	29.51	370.79
	6/28/2022	400.3	29.41	370.89
	9/28/2022	400.3	29.36	370.94
	12/20/2022	400.3	29.32	370.98
	4/4/2023	400.3	28.96	371.34
	6/27/2023	400.3	29.02	371.28
	9/26/2023	400.3	28.98	371.32
	12/19/2023	400.3	28.87	371.43
	3/19/2024	400.3	28.66	371.64
	6/19/2024	400.3	28.71	371.59
	9/18/2024	400.3	28.74	371.56

Notes: ft AMSL = feet above mean sea level
MP = measuring point
NM = not measured

TABLE 2

FIELD PARAMETERS OF GROUNDWATER SAMPLES

		FIELD PARAMETERS			
		Dissolved Oxygen	pH	Specific Conductance	Temperature
		mg/L	Standard Units	umhos/cm	Celsius
		NC	6.5 - 8.5	700	NC
Units	GWQC				
MW-1	7/15/1997	NM	6.72	2440	16.1
	4/26/2001	NM	6.80	1696	15.4
	7/24/2002	1.18	7.22	759	16.9
	10/31/2002	NM	7.59	684	14.2
	1/22/2003	0.73	7.26	645	14.1
	4/9/2003	0.50	6.99	47.9	15.3
	10/26/2005	0.30	7.08	886	15.1
	1/31/2006	0.93	7.91	1456	11.4
	4/27/2006	0.87	7.54	1391	16.4
	7/27/2006	1.22	7.65	1428	15.4
	10/31/2006	1.81	8.79	1419	14.3
	1/31/2007	1.99	7.59	2105	8.2
	4/26/2007	1.80	8.74	1433	13.4
	7/25/2007	1.59	6.82	1470	17.3
	10/31/2007	2.02	6.85	1049	14.2
	1/30/2008	1.59	8.50	1442	12.0
	4/30/2008	1.50	7.59	989	15.8
	7/30/2008	1.49	6.80	997	16.3
	11/20/2008	1.89	7.34	1014	15.4
	1/29/2009	2.15	7.25	1234	15.4
	4/30/2009	0.79	7.20	1270	15.0
	7/29/2009	1.78	7.12	1312	18.4
	11/5/2009	1.93	8.29	1342	14.2
	1/26/2010	1.99	7.07	1602	15.0
	4/26/2010	1.58	7.14	1629	16.8
	7/28/2010	1.79	6.94	1699	17.1
	10/28/2010	1.41	6.9	1635	15.1
	1/27/2011	1.96	6.83	1836	13.5
	4/28/2011	2.22	6.69	1670	15.6
	8/1/2011	1.88	6.96	1524	15.0
	12/1/2011	2.11	6.79	1806	13.9
	2/28/2012	2.18	7.01	2694	14.0
	5/15/2012	NM	7.17	2380	15.6
	8/29/2012	NM	6.94	1912	17.3
	11/16/2012	NM	7.02	1867	14.4
	2/19/2013	NM	7.04	1857	13.6
	5/22/2013	NM	6.52	1958	14.9
	8/21/2013	NM	7.5	1568	16.9
	1/2/2014	NM	7.22	1636	14.6
	3/26/2014	NM	7.47	1743	15.1
	7/8/2014	1.41	7.16	1647	17.0
	9/23/2014	0.21	6.97	1656	15.5
	12/8/2014	0.1	6.66	1622	15.0
	3/11/2015	0.21	7.00	1554	15.3
	6/17/2015	0.48	6.66	1669	15.7
	9/22/2015	12.1	6.99	2190	17.9
	12/16/2015	1.79	6.99	1880	14.8
	3/21/2016	0.71	6.72	1700	16.4
	6/22/2016	2.87	6.65	1800	17.9
	9/20/2016	6.24	6.52	1720	16.8

TABLE 2

FIELD PARAMETERS OF GROUNDWATER SAMPLES

		FIELD PARAMETERS			
		Dissolved Oxygen	pH	Specific Conductance	Temperature
		mg/L	Standard Units	umhos/cm	Celsius
		NC	6.5 - 8.5	700	NC
Units	GWQC				
MW-1	12/13/2016	0.46	7.03	1088	13.7
	3/14/2017	0.38	7.10	1375	15.6
	6/20/2017	NM	NM	NM	NM
	9/15/2017	NM	7.28	1172	16.9
	12/14/2017	3.9	6.61	1500	13.8
	3/7/2018	NM	7.11	1480	14.8
	6/19/2018	0.69	7.14	1050	15.6
	9/27/2018	0.18	7.02	1226	15.3
	12/20/2018	0.27	7.1	1227	15.2
	3/26/2019	0.29	7.03	1227	15.4
	6/18/2019	0.27	7.04	1185	15.4
	9/25/2019	0.57	6.95	1490	15.3
	12/17/2019	0.2	7.16	1284	15.2
	3/25/2020	NS	NS	NS	NS
	6/17/2020	0.99	7.12	1293	15.3
	9/30/2020	0.22	7.24	1457	15.1
	12/16/2020	0.45	6.98	1866	15.1
	3/30/2021	3.96	7.03	1441	15.1
	6/23/2021	0.30	7.13	1155	15.4
	9/22/2021	3.33	6.91	1580	15.2
	12/14/2021	1.01	6.84	1378	15.2
	3/29/2022	1.01	6.89	1742	15.5
	6/28/2022	0.47	6.83	1585	15.6
	9/28/2022	0.09	6.84	1641	15.5
	12/20/2022	0.23	6.72	1724	15.2
	4/4/2023	0.45	6.81	2173	15.5
	6/27/2023	0.87	6.87	2785	15.3
	9/26/2023	1.49	6.93	1990	14.8
	12/19/2023	0.84	6.79	1420	14.7
	3/19/2024	0.24	6.83	2308	15.1
	6/19/2024	0.17	6.92	1999	14.8
	9/18/2024	0.27	6.76	1988	14.3
MW-4A	7/15/1997	NM	7.53	765	17.7
	4/26/2001	NM	7.71	579	18.2
	7/24/2002	NM	NM	NM	NM
	10/31/2002	NM	NM	NM	NM
	1/22/2003	NM	NM	NM	NM
	4/9/2003	NM	NM	NM	NM
	10/26/2005	5.08	7.27	348	14.7
	1/31/2006	5.55	7.84	481	13.7
	4/27/2006	4.67	7.76	510	18.5
	7/27/2006	4.67	7.39	524	17.1
	10/31/2006	5.38	8.19	609	12.2
	1/31/2007	5.69	7.41	694	12.3
	4/26/2007	5.09	8.18	619	12.3
	7/25/2007	5.74	7.19	573	17.6
	10/31/2007	4.88	7.14	407	14.8
	1/30/2008	5.01	7.89	636	11.3
	4/30/2008	5.00	7.92	597	14.1

TABLE 2

FIELD PARAMETERS OF GROUNDWATER SAMPLES

		FIELD PARAMETERS			
		Dissolved Oxygen	pH	Specific Conductance	Temperature
		mg/L	Standard Units	umhos/cm	Celsius
		NC	6.5 - 8.5	700	NC
Units	GWQC				
MW-4A	7/30/2008	5.29	7.31	432	17.0
	11/20/2008	5.25	7.86	402	16.8
	1/29/2009	5.18	7.69	592	14.5
	4/30/2009	5.98	7.74	590	14.7
	7/29/2009	4.91	7.51	422	17.6
	11/5/2009	5.21	7.83	457	11.9
	1/26/2010	4.91	7.55	527	15.5
	4/26/2010	5.13	7.55	513	16.6
	7/28/2010	4.96	7.26	590	18.2
	10/28/2010	4.99	7.59	439	13.0
	1/27/2011	5.29	7.28	447	14.8
	4/28/2011	5.31	7.33	612	16.1
	8/1/2011	4.91	7.47	566	18.0
	12/1/2011	5.50	6.99	712	13.4
	2/28/2012	5.20	7.48	672	15.4
	5/15/2012	NM	7.66	955	17.4
	8/29/2012	NM	7.58	602	16.5
	11/16/2012	NM	7.46	640	14.9
	2/19/2013	NM	8.49	608	14.6
	5/22/2013	NM	6.97	602	15.4
	8/21/2013	NM	8.76	489	16.7
	1/2/2014	NM	7.69	513	15.3
	3/26/2014	NM	7.75	577	16.4
	7/8/2014	7.59	7.79	552	17.3
	9/23/2014	8.35	7.58	563	17.1
	12/8/2014	10.3	7.29	554	16.8
	3/11/2015	9.16	7.59	539	17.0
	6/17/2015	14.2	7.09	581	17.1
	9/22/2015	8.60	7.51	726	16.5
	12/16/2015	8.47	7.40	722	16.2
	3/21/2016	8.27	7.24	660	16.4
	6/22/2016	8.29	7.04	710	17.0
	9/20/2016	NM	NM	NM	NM
	12/13/2016	6.83	7.42	432	14.8
	3/14/2017	6.39	7.70	541	16.0
	6/20/2017	NM	NM	NM	NM
	9/15/2017	NM	7.84	475	17.0
	12/14/2017	9.70	7.26	630	15.7
	3/7/2018	3.79	6.94	504	17.3
	6/19/2018	9.42	7.43	427	15.1
	9/27/2018	8.78	7.50	512	17.0
	12/20/2018	8.81	7.61	503	16.4
	3/26/2019	7.54	7.54	515	16.8
	6/18/2019	9.49	7.56	499	17.3
	9/25/2019	6.46	7.37	610	16.8
	12/17/2019	7.66	7.62	522.8	15.8
	3/25/2020	5.28	7.28	543	16.8
	6/17/2020	3.84	7.41	521	16.6
	9/30/2020	4.54	7.59	555	16.7

TABLE 2

FIELD PARAMETERS OF GROUNDWATER SAMPLES

		FIELD PARAMETERS			
		Dissolved Oxygen	pH	Specific Conductance	Temperature
		mg/L	Standard Units	umhos/cm	Celsius
		NC	6.5 - 8.5	700	NC
MW-4A	12/16/2020	1.01	7.18	671	15.5
	3/30/2021	10.91	7.50	548	16.4
	6/23/2021	2.59	7.36	461	17.2
	9/22/2021	3.61	7.10	617	16.1
	12/14/2021	3.70	7.29	525	15.9
	3/29/2022	0.16	7.29	891	16.4
	6/28/2022	1.03	6.94	600	16.8
	9/28/2022	7.04	7.33	553	16.7
	12/20/2022	4.95	7.18	550	15.7
	4/4/2023	3.43	7.19	598	16.0
	6/27/2023	7.90	7.38	771	16.8
	9/26/2023	2.87	7.29	601	15.5
	12/19/2023	4.73	7.22	474	15.5
	3/19/2024	2.93	7.28	675	16.3
	6/19/2024	5.08	7.50	559	17.4
	10/9/2024	2.96	7.09	486	16.2
MW-4B	7/15/1997	NM	7.32	2080	16.7
	4/26/2001	NM	7.21	1969	16.6
	7/24/2002	8.80	7.66	1033	17.7
	10/31/2002	NM	7.86	1022	14.6
	1/22/2003	10.0	7.30	830	15.1
	4/9/2003	9.84	7.13	1496	16.5
	10/26/2005	7.99	7.55	581	16.3
	1/31/2006	7.01	7.75	798	15.9
	4/27/2006	5.90	7.67	797	18.0
	7/27/2006	5.01	7.29	855	16.7
	10/31/2006	4.87	8.41	889	15.9
	1/31/2007	5.49	7.72	950	15.2
	4/26/2007	4.64	8.23	899	15.2
	7/25/2007	8.79	7.11	1010	17.2
	10/31/2007	8.50	7.09	729	16.0
	1/30/2008	4.36	7.95	906	12.4
	4/30/2008	5.50	7.91	760	15.7
	7/30/2008	4.76	7.35	775	16.4
	11/20/2008	5.12	7.77	779	16.0
	1/29/2009	5.15	7.67	940	12.9
	4/30/2009	8.58	7.58	966	14.3
	7/29/2009	4.73	7.53	998	17.6
	11/5/2009	4.79	7.90	741	14.5
	1/26/2010	4.50	7.59	1083	14.9
	4/26/2010	5.20	7.48	813	17.3
	7/28/2010	4.71	6.79	1100	16.0
	10/28/2010	4.51	7.62	780	15.1
	1/27/2011	5.14	7.28	1142	14.4
	4/28/2011	5.05	7.60	1073	16.0
	8/1/2011	5.36	7.5	1167	15.8
	12/1/2011	5.14	7.3	1169	12.9
	2/28/2012	5.09	7.40	1130	14.6
	5/15/2012	NM	7.60	1586	15.0

TABLE 2

FIELD PARAMETERS OF GROUNDWATER SAMPLES

		FIELD PARAMETERS			
		Dissolved Oxygen	pH	Specific Conductance	Temperature
		mg/L	Standard Units	umhos/cm	Celsius
		NC	6.5 - 8.5	700	NC
Units	GWQC				
MW-4B	8/29/2012	NM	7.56	1287	15.8
	11/16/2012	NM	7.80	1260	13.2
	2/19/2013	NM	8.79	1281	12.5
	5/22/2013	NM	7.28	1362	14.3
	8/21/2013	NM	9.18	1099	15.0
	1/2/2014	NM	7.80	1173	13.5
	3/26/2014	NM	7.72	1237	15.3
	7/8/2014	10.6	7.50	1166	16.6
	9/23/2014	11.3	7.49	1224	15.8
	12/8/2014	14.2	7.09	1206	15.2
	3/11/2015	13.1	7.60	1174	15.5
	6/17/2015	16.8	7.20	1272	15.7
	9/22/2015	10.0	7.39	1360	15.4
	12/16/2015	9.96	7.22	1470	14.9
	3/21/2016	11.0	7.04	1300	15.3
	6/22/2016	10.2	6.91	1400	16.0
	9/20/2016	NM	NM	NM	NM
	12/13/2016	8.16	7.44	914	13.9
	3/14/2017	7.05	7.56	1188	14.7
	6/20/2017	NM	NM	NM	NM
	9/15/2017	NM	7.70	997	15.9
	12/14/2017	11.7	7.25	1300	14.5
	3/7/2018	NM	6.83	1065	15.6
	6/19/2018	11.2	7.87	890	13.6
	9/27/2018	11.3	7.44	1095	15.7
	12/20/2018	14.0	7.48	1091	15.3
	3/26/2019	13.3	7.50	1092	15.4
	6/18/2019	10.8	7.44	1057	15.6
	9/25/2019	10.4	7.40	1290	15.4
	12/17/2019	12.2	7.60	1112	15.2
	3/25/2020	9.42	7.12	1145	15.2
	6/17/2020	10.1	7.41	1081	15.3
	9/30/2020	9.3	7.60	1168	15.4
	12/16/2020	10.4	7.31	1465	15.2
	3/30/2021	13.4	7.38	1115	15.1
	6/23/2021	10.1	7.44	890	15.4
	9/22/2021	14.1	7.18	1228	15.1
	12/14/2021	7.72	7.16	1040	15.0
	3/29/2022	1.2	7.30	1374	15.2
	6/28/2022	11.4	7.09	1132	15.4
	9/28/2022	11.4	7.26	1075	15.4
	12/20/2022	12.4	7.32	1062	15.1
	4/4/2023	11.6	7.36	1120	15.1
	6/27/2023	11.8	7.39	1455	15.3
	9/26/2023	13.9	7.35	1120	15.1
	12/19/2023	11.2	7.27	869	15.0
	3/19/2024	11.3	7.32	1238	15.2
	6/19/2024	10.5	7.40	1018	15.5
	10/9/2024	8.02	7.11	856	15.1

TABLE 2

FIELD PARAMETERS OF GROUNDWATER SAMPLES

		FIELD PARAMETERS			
		Dissolved Oxygen	pH	Specific Conductance	Temperature
		mg/L	Standard Units	umhos/cm	Celsius
		NC	6.5 - 8.5	700	NC
Units	GWQC				
MW-5	7/15/1997	NM	6.96	1626	16.4
	4/26/2001	NM	6.90	1430	16.3
	7/24/2002	1.20	7.25	701	16.5
	10/31/2002	NM	7.51	753	14.4
	1/22/2003	3.87	7.59	530	14.8
	4/9/2003	0.70	7.40	33.2	15.7
	10/26/2005	0.89	6.91	1090	16.1
	1/31/2006	1.09	7.59	1613	16.0
	4/27/2006	0.80	7.33	1586	16.3
	7/27/2006	0.54	6.69	1644	16.5
	10/31/2006	1.95	6.64	1693	14.5
	1/31/2007	2.19	7.59	1658	16.3
	4/26/2007	1.55	6.78	1699	12.6
	7/25/2007	1.77	6.71	1700	17.4
	10/31/2007	1.67	6.71	1276	14.8
	1/30/2008	1.62	6.98	1665	12.0
	4/30/2008	1.60	7.60	1164	17.0
	7/30/2008	1.96	6.55	1210	16.8
	11/20/2008	2.07	7.31	1080	16.1
	1/29/2009	2.40	7.20	1336	15.9
	4/30/2009	1.48	6.93	1239	16.3
	7/29/2009	1.58	7.05	2067	18.0
	11/5/2009	2.11	6.85	1510	14.2
	1/26/2010	1.92	7.15	1455	15.6
	4/26/2010	2.00	6.95	1510	17.2
	7/28/2010	2.19	6.89	1668	16.9
	10/28/2010	1.83	6.88	1310	16.2
	1/27/2011	1.84	6.75	1579	15.9
	4/28/2011	2.20	6.96	1401	16.5
	8/1/2011	2.39	6.85	1555	16.8
	12/1/2011	1.90	6.74	1366	14.2
	2/28/2012	1.90	7.00	1747	14.5
	5/15/2012	NM	7.10	1956	16.9
	8/29/2012	NM	7.07	1692	17.4
	11/16/2012	NM	7.24	1517	15.2
	2/19/2013	NM	8.03	1592	16.6
	5/22/2013	NM	6.82	1729	16.7
	8/21/2013	NM	7.59	1392	18.2
	1/2/2014	NM	7.05	1513	15.6
	3/26/2014	NM	6.59	1735	16.1
	7/8/2014	1.18	7.00	1655	16.5
	9/23/2014	0.37	6.73	1647	16.8
	12/8/2014	0.34	6.84	1742	16.2
	3/11/2015	0.37	6.98	1609	16.6
	6/17/2015	0.54	6.39	1841	16.8
	9/22/2015	1.1	7.04	2690	16.6
	12/16/2015	NM	7.00	1990	16.9
	3/21/2016	1.03	6.82	1800	17.0
	6/22/2016	2.58	6.75	1800	17.8

TABLE 2

FIELD PARAMETERS OF GROUNDWATER SAMPLES

		FIELD PARAMETERS			
		Dissolved Oxygen	pH	Specific Conductance	Temperature
		mg/L	Standard Units	umhos/cm	Celsius
		NC	6.5 - 8.5	700	NC
MW-5	9/20/2016	6.1	6.73	1890	17.8
	12/13/2016	0.37	7.30	1420	16.9
	3/14/2017	0.80	7.24	1592	17.7
	6/20/2017	NM	NM	NM	NM
	9/15/2017	NM	7.33	1445	17.4
	12/14/2017	3.23	6.70	2000	15.5
	3/7/2018	NM	6.88	2000	16.5
	6/19/2018	0.79	6.61	1471	14.9
	9/27/2018	0.30	6.99	1769	16.6
	12/20/2018	0.27	7.05	1752	16.4
	3/26/2019	1.21	7.02	1783	16.5
	6/18/2019	0.25	6.87	1701	16.6
	9/25/2019	0.09	6.97	2050	16.6
	12/17/2019	0.24	7.14	1768	16.5
	3/25/2020	0.21	6.86	1814	16.7
	6/17/2020	0.94	7.09	1697	16.7
	9/30/2020	0.67	7.29	1934	16.7
	12/16/2020	0.83	6.94	2299	16.6
	3/30/2021	0.75	7.05	1830	16.7
	6/23/2021	0.41	6.98	1534	16.9
	9/22/2021	5.01	7.06	2034	16.0
	12/14/2021	1.10	6.73	1719	16.7
	3/29/2022	7.47	6.98	2013	17.0
	6/28/2022	1.08	6.85	1860	16.9
	9/28/2022	0.21	6.83	1789	16.9
	12/20/2022	0.33	6.97	1777	16.7
	4/4/2023	0.43	6.95	1853	16.7
	6/27/2023	0.83	7.03	2389	16.8
	9/26/2023	0.90	7.10	1840	16.7
	12/19/2023	0.92	6.96	1466	16.7
	3/19/2024	0.24	7.03	2000	16.8
	6/19/2024	0.30	7.17	1638	17.5
	9/18/2024	0.58	6.96	1765	17.2

Notes: GWQC - Groundwater Quality Criteria per WAC 173-200-040(3).

mg/L = milligrams per liter

umhos/cm = micromhos per centimeter

NC = No Criterion

NM = Not Measured

NS = No Sample Collected

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
		mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L
		NC	NC	250	NC	10	1	500	NC
Units	GWQC								
MW-1	7/24/2002	1.77	4.0 U	92.0	1 U	0.220	0.100 U	907	4.04
	10/31/2002	2.59	2.0 U	79.7	1 U	0.257	NM	900	3.53
	1/22/2003	2.91	37.4	95.2	1 U	0.050 U	NM	903	3.36
	4/9/2003	1.90	6.6	74.9	NM	0.500 U	NM	894	6.27
	10/26/2005	1.64	2.0 U	99.5	NM	0.050	0.050 U	837	2.38
	1/31/2006	1.55	2.0 U	105	NM	0.050 U	0.050 U	840	2.88
	4/27/2006	1.86	2.0 U	106	NM	0.050 U	0.050 U	821	3.56
	7/27/2006	1.79	2.0 U	100	NM	0.050 U	0.050 U	853	4.49
	10/31/2006	1.68	2.0 U	97.7	NM	0.050 U	0.050 U	823	2.03
	1/31/2007	1.75	2.0 U	89.1	NM	0.050 U	0.050 U	805	2.83
	4/26/2007	1.44	2.0 U	88.8	NM	0.050 U	0.050 U	788	2.60
	7/25/2007	1.41	2.0 U	90.0	NM	0.050 U	0.050 U	763	2.95
	10/31/2007	1.54	2.0 U	86.9	NM	0.050 U	0.050 U	780	2.61
	1/30/2008	1.09	3.0	87.5	NM	0.087	0.050 U	770	3.27
	4/30/2008	1.02	2.0 U	85.4	NM	0.050 U	0.050 U	780	2.48
	7/30/2008	1.01	2.0 U	79.6	NM	0.050 U	0.050 U	780	2.30
	11/20/2008	0.936	2.0 U	80.1	NM	0.050 U	0.050 U	780	2.20
	1/29/2009	0.970	2.0 U	84.4	NM	0.050 U	0.050 U	787	2.28
	4/30/2009	0.814	2.0 U	95.9	NM	0.050 U	0.050 U	829	2.28
	7/29/2009	0.922	2.0 U	95.6	NM	0.050 U	0.050 U	881	2.58
	11/5/2009	1.17	2.9	37.4	NM	0.050 U	0.050 U	933	2.66
	1/26/2010	1.29	2.9	95.3	NM	0.142	0.050 U	923	2.48
	4/26/2010	1.28	2.0 U	108	NM	0.072	0.050 U	995	2.82
	7/28/2010	1.51	2.0 U	105	NM	0.087	0.050 U	1020	2.94
	10/28/2010	1.57	3.9	112	NM	0.076	0.500 U	1040	3.25
	1/27/2011	1.75	2.0 U	111	NM	0.050 U	0.050 U	1100	3.40
	4/28/2011	1.87	2.0 U	114	NM	0.050 U	0.050 U	1110	3.64
	8/1/2011	1.90	3.1	116	NM	0.059	0.050 U	1090	3.74
	12/1/2011	2.23	2.8	113	NM	0.122	0.050 U	1040	4.26

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
		mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L
		NC	NC	250	NC	10	1	500	NC
Units	GWQC								
MW-1	2/28/2012	2.21	5.5	116	NM	0.060	0.250 U	1040	4.25
	5/15/2012	2.35	5.5	118	NM	0.065	0.250 U	1060	4.00
	8/29/2012	2.39	7.6	111	NM	0.092	0.250 U	1060	3.75
	11/16/2012	2.44	10.2	119	NM	0.263	0.250 U	1030	3.68
	2/19/2013	2.50	11.6	120	NM	0.084	0.250 U	1010	4.40
	5/22/2013	2.54	10.9	131	NM	0.069	0.500 U	1020	4.36
	8/21/2013	2.50	10.8	130	NM	0.078	0.500 U	1040	4.32
	1/2/2014	2.16	10.2	130	NM	0.082	0.250 U	1000	4.04
	3/26/2014	1.94	7.2	134	NM	0.050 U	0.250 U	993	3.42
	7/8/2014	2.12	8.4	133	NM	0.060	0.050 U	997	3.41
	9/23/2014	3.17	2.0 U	127	NM	0.250 U	0.250 U	973	2.68
	12/8/2014	1.75	2.0 U	128	NM	0.196	0.050 U	978	0.80
	3/11/2015	1.35	2.0 UJ	127	NM	0.050 U	0.050 U	962	2.77
	6/17/2015	1.13	2.0 U	134	NM	0.050 U	0.050 U	919	2.42
	9/22/2015	1.39	2.0 U	128	NM	0.050 U	0.050 U	946	2.20
	12/16/2015	1.19	2.0 U	129	NM	0.050 U	1.250 UJ	952	2.40
	3/21/2016	0.717	2.0 U	122	NM	0.050 U	0.050 U	894	2.12
	6/22/2016	1.30	2.0 U	117	NM	0.050 U	0.050 U	914	1.93
	9/20/2016	1.40	2.0 U	103	NM	0.050 U	0.443	871	2.15
	12/13/2016	1.23	2.0 U	97.2	NM	0.574	0.050 U	865	2.50
	3/14/2017	1.31	2.0 U	95.1	NM	0.050 U	0.050 U	839	2.41
	6/20/2017	1.47	2.0 U	105	NM	0.191	0.050 U	813	2.46
	9/19/2017	1.36	2.0 U	103	NM	0.050 U	0.050 U	831	2.43
	12/14/2017	1.3	2.0 U	105	NM	0.050 U	0.050 U	810	1.53
	3/7/2018	1.28	2.0 U	104	NM	0.050 UJ	0.050 UJ	803 J	1.84
	6/19/2018	1.14	2.0 U	106	NM	0.050 U	0.050 U	785	2.04
	9/27/2018	1.14	2.0 U	107	NM	0.050 U	0.050 U	811	1.59
	12/20/2018	1.00	2.1	105	NM	0.050 U	0.050 U	786	1.53
	3/26/2019	1.03	2.2	108	NM	0.050 U	0.050 U	788	1.41

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
		mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L
		NC	NC	250	NC	10	1	500	NC
MW-1	6/18/2019	1.12	2.0 U	112	NM	0.050 U	0.050 U	815	1.64
	9/25/2019	0.984	2.0 U	106	NM	0.050 U	0.050 U	800	1.24
	12/17/2019	1.02	3.33	114	NM	0.050 U	0.050 U	789	1.77
	3/25/2020	NS	NS	NS	NS	NS	NS	NS	NS
	6/17/2020	1.05	2.0 U	114	NM	0.050 U	0.050 U	791	1.62
	9/30/2020	1.14	2.0 U	120	NM	2.500 U	0.050 U	825	1.44
	12/16/2020	1.06	0.72 U	117	NM	0.070	0.050 U	826	1.65
	3/30/2021	1.37	14.1	128	NM	0.050 U	0.050 U	841	2.13
	6/23/2021	1.43	2.0 U	130	NM	0.161	0.050 U	847	2.23
	9/22/2021	1.41	2.0 U	137	NM	0.050 U	0.050 U	840	2.27
	12/14/2021	1.73	2.0 U	136	NM	0.050 U	0.050 U	864	2.55
	3/29/2022	2.07	2.0 U	144	NM	0.050 U	0.050 U	839	3.18
	6/28/2022	1.84	2.0 U	147	NM	0.050 U	0.050 U	883	2.71
	9/28/2022	1.87	2.0 U	158	NM	0.050 U	0.050 U	982	2.50 U
	12/20/2022	3.38	2.0 U	158	NM	0.050 U	0.050 U	1010	4.99
	4/4/2023	6.94	3.2	191	NM	0.050 U	0.050 U	1240	7.68
	6/27/2023	7.57	54.6	190	NM	0.050 U	0.050 U	1180	10.1
	9/26/2023	8.27	2.0 U	180	NM	0.050 U	0.050 U	1070	10.9
	12/19/2023	8.11	4.3	164	NM	0.050 U	0.050 U	1090	8.5
	3/19/2024	12.4	2.0 U	192	NM	0.050 U	0.050 U	1050	12.8
	6/19/2024	17.4	2.2	204	NM	0.050 U	0.050 U	900	19.5
	9/18/2024	19.7	2.0 U	188	NM	0.050 U	0.050 U	1170	21.8
MW-4A	7/24/2002	NM	NM	NM	NM	NM	NM	NM	NM
	10/31/2002	NM	NM	NM	NM	NM	NM	NM	NM
	1/22/2003	NM	NM	NM	NM	NM	NM	NM	NM
	4/9/2003	NM	NM	NM	NM	NM	NM	NM	NM
	10/26/2005	0.030 U	2.0 U	24.0	NM	6.43	0.050 U	378	0.78
	1/31/2006	0.060	2.3	22.3	NM	6.39	0.050 U	360	0.52

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
		mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L
		NC	NC	250	NC	10	1	500	NC
MW-4A	4/27/2006	0.080	2.0 U	22.7	NM	6.27	0.050 U	344	0.78
	7/27/2006	0.030 U	4.4	21.4	NM	6.33	0.050 U	364	0.21
	10/31/2006	0.040	2.8	22.6	NM	6.39	0.050 U	358	0.40
	1/31/2007	0.030 U	2.2	21.7	NM	6.33	0.050 U	348	0.10 U
	4/26/2007	0.110	2.8	21.7	NM	6.44	0.050 U	369	0.42
	7/25/2007	0.030 U	2.0 U	30.4	NM	7.78	0.050 U	490	0.15
	10/31/2007	0.030 U	2.0 U	20.3	NM	6.26	0.050 U	350	0.21
	1/30/2008	0.030 U	2.0 U	20.3	NM	6.80	0.050 U	360	0.10
	4/30/2008	0.030 U	2.0 U	19.6	NM	6.69	0.050 U	380	0.15
	7/30/2008	0.058	2.0 U	19.8	NM	6.68	0.050 U	370	0.83
	11/20/2008	0.030 U	2.0 U	19.9	NM	6.83	0.050 U	380	0.50 U
	1/29/2009	0.043	2.4	20.2	NM	6.67	0.050 U	362	0.50 U
	4/30/2009	0.030 U	2.0 U	19.2	NM	6.59	0.050 U	381	0.50 U
	7/29/2009	0.030 U	2.0 U	18.9	NM	6.53	0.050 U	390	0.60
	11/5/2009	0.048	2.0 U	17.4	NM	6.17	0.050 U	380	0.50 U
	1/26/2010	0.071	2.7	19.3	NM	5.71	0.050 U	354	0.50 U
	4/26/2010	0.033	2.0 U	19.7	NM	6.47	0.050 U	348	0.50 U
	7/28/2010	0.030 U	2.0 U	20.4	NM	6.67	0.050 U	327	0.50 U
	10/28/2010	0.030 U	2.0 U	22.0	NM	6.88	0.050 U	330	0.50 U
	1/27/2011	0.030 U	2.0 U	22.3	NM	6.85	0.050 U	411	0.50 U
	4/28/2011	0.030 U	2.0 U	21.9	NM	6.84	0.050 U	401	0.50 U
	8/1/2011	0.030 U	2.0 U	22.3	NM	6.70	0.050 U	369	0.50 U
	12/1/2011	0.030 U	2.0 U	22	NM	6.49	0.050 U	348	0.50 U
	2/28/2012	0.030 U	2.0 U	21.1	NM	6.59	0.050 U	353	0.50 U
	5/15/2012	0.039	2.0 U	22.5	NM	6.65	0.250 U	383	0.50 U
	8/29/2012	0.030 U	2.0 U	21.3	NM	6.53	0.050 U	371	0.50 U
	11/16/2012	0.030 U	2.0 U	22.5	NM	6.50	0.050 U	375	0.50 U
	2/19/2013	0.030 U	2.0 U	21.1	NM	6.47	0.050 U	368	0.50 U
	5/22/2013	0.030 U	2.3	19.7	NM	6.22	0.050 U	349	0.50 U

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
		mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L
		NC	NC	250	NC	10	1	500	NC
Units	GWQC								
MW-4A	8/21/2013	0.030 U	2.0 U	21.8	NM	6.41	0.050 U	378	0.50 U
	1/2/2014	0.056	2.0 U	21.7	NM	6.6	0.050 U	360	0.50 U
	3/26/2014	0.030 U	2.0 U	25.5	NM	6.77	0.050 U	379	0.50 U
	7/8/2014	0.030 U	3.2	26.8	NM	7.40	0.050 U	391	1.19
	9/23/2014	0.030 U	2.0 U	27.4	NM	6.57	0.050 U	378	0.50 U
	12/8/2014	0.030 U	2.0 U	26.6	NM	6.95	0.050 U	380	0.63
	3/11/2015	0.030 U	2.0 UJ	25.1	NM	6.73	0.050 U	378	0.50 U
	6/17/2015	0.030 U	2.0 U	27.8	NM	6.93	0.500 U	367	0.50 U
	9/22/2015	0.030 U	2.0 U	28	NM	6.64 J	0.050 UJ	386	0.50 U
	12/16/2015	0.030 U	2.0 U	26.8	NM	6.64	0.500 U	375	0.50 U
	3/21/2016	0.030 U	2.0 U	26.4	NM	6.84	0.050 U	350	0.50 U
	6/22/2016	0.039	2.0 U	26.1	NM	6.81	0.050 U	370	0.50 U
	9/20/2016	0.030 U	2.0 U	25.1	NM	6.57	0.183	381	0.50 U
	12/13/2016	0.030 U	2.0 U	24.2	NM	6.48	0.500 U	385	0.50 U
	3/14/2017	0.030 U	2.0 U	25.5	NM	6.63	0.050 U	378	0.50 U
	6/20/2017	0.030 U	2.0 U	28.1	NM	7.48	0.050 U	378	0.50 U
	9/19/2017	0.030 U	2.0 U	25.1	NM	6.42 J	0.050 UJ	367	0.50 U
	12/14/2017	0.030 U	2.0 U	25.6	NM	6.34	0.050 U	366	0.50 U
	3/7/2018	0.030 U	2.0	26.9	NM	7.17 J	0.050 UJ	369 J	0.50 U
	6/19/2018	0.030 U	2.0 U	25.6	NM	6.56	0.050 U	366	0.50 U
	9/27/2018	0.030 U	2.0 U	25.5	NM	6.23	0.050 U	400	0.50 U
	12/20/2018	0.030 U	2.0 U	24.1	NM	6.52	0.050 U	352	0.50 U
	3/26/2019	0.030 U	2.0 U	24.5	NM	5.92	0.050 U	347	0.50 U
	6/18/2019	0.030 U	2.0 U	25.1	NM	6.21	0.050 U	380	0.50 U
	9/25/2019	0.030 U	2.0 U	22.7	NM	6.09	0.050 U	402	0.50 U
	12/17/2019	0.030 U	2.0 U	25.5	NM	6.34	0.050 U	352	0.50 U
	3/25/2020	0.030 U	2.0 U	23.8	NM	6	0.050 U	357	0.50 U
	6/17/2020	0.030 U	2.6	24.5	NM	6.25	0.050 U	374	0.50 U
	9/30/2020	0.030 U	4.4	24.5	NM	6.12	0.050 U	388	0.50 U

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

Units GWQC		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L		
NC	NC	250	NC	10	1	500	NC		
MW-4A	12/16/2020	0.037	6.3	23.3	NM	5.81	0.050 U	353	0.50 U
	3/30/2021	0.030 U	2.0 U	23.8	NM	6.51	0.050 U	344	0.50 U
	6/23/2021	0.037	3.2	25.0	NM	6.65	0.050 U	370	0.50 U
	9/22/2021	0.030 U	3.6	27.1	NM	6.02	0.050 U	381	0.50 U
	12/14/2021	0.030 U	2.0 U	25.8	NM	6.59	0.050 U	376	0.50 U
	3/29/2022	0.030 U	2.0 U	28.9	NM	6.38	0.050 U	347	0.50 U
	6/28/2022	0.034	2.0 U	28.8	NM	6.52	0.050 U	377	2.50 U
	9/28/2022	0.030 U	2.3	25.3	NM	6.10	0.050 U	333	0.50 U
	12/20/2022	0.030 U	2.0 U	25.9	NM	6.24	0.050 U	371	0.50 U
	4/4/2023	0.044	2.8	26.9	NM	6.41	0.050 U	375	0.50 U
	6/27/2023	0.030 U	2.0 U	25.2	NM	6.33	0.050 U	374	0.50 U
	9/26/2023	0.030 U	7.3	29.8	NM	6.61	0.050 U	395	0.50 U
	12/19/2023	0.030 U	5.9	26.6	NM	6.57	0.050 U	356	0.50 U
	3/19/2024	0.030 U	2.0 U	28.7	NM	6.74	0.050 U	404	0.50 U
	6/19/2024	0.030 U	2.0 U	27.0	NM	6.53	0.050 U	385	0.50 U
10/9/2024	0.030 U	2.0 U	26.4	NM	6.25	0.050 U	372	0.50 U	
MW-4B	7/24/2002	0.050 U	4.0 U	200	NM	42.2	0.100 U	1800	0.50 U
	10/31/2002	0.100 U	2.0 U	197	NM	40.1	NM	1800	1.00 U
	1/22/2003	0.100 U	5.6	222	NM	35.5	NM	1740	1.00 U
	4/9/2003	0.500 U	3.8	184	NM	31.1	NM	1640	0.50 U
	10/26/2005	0.030 U	2.0 U	105	NM	18.2	0.050 U	554	1.82
	1/31/2006	0.030 U	3.1	105	NM	18.3	0.050 U	543	0.30
	4/27/2006	0.030 U	2.0 U	109	NM	18.7	0.050 U	512	0.12
	7/27/2006	0.030	2.0 U	108	NM	18.6	0.050 U	534	0.10 U
	10/31/2006	0.030 U	2.0 U	118	NM	20.6	0.050 U	560	0.20
	1/31/2007	0.030 U	2.3	113	NM	20.3	0.050 U	602	0.13
	4/26/2007	0.030 U	2.0 U	118	NM	21.1	0.050 U	600	0.11
	7/25/2007	0.030 U	2.0 U	126	NM	22.0	0.050 U	606	0.30

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

Units GWQC		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L		
NC	NC	250	NC	10	1	500	NC		
MW-4B	10/31/2007	0.030 U	2.0 U	131	NM	22.5	0.050 U	560	0.14
	1/30/2008	0.030 U	2.3	135	NM	24.4	0.050 U	600	0.10 U
	4/30/2008	0.030 U	2.0 U	137	NM	23.8	0.050 U	690	0.10 U
	7/30/2008	0.035	2.1	136	NM	24.0	0.050 U	700	0.50 U
	11/20/2008	0.030 U	2.0 U	138	NM	24.2	0.050 U	690	0.50 U
	1/29/2009	0.047	6.5	138	NM	24.5	0.050 U	650	0.64
	4/30/2009	0.033	2.0 U	147	NM	26.8	0.050 U	675	0.50 U
	7/29/2009	0.030 U	2.4	136	NM	27.4	0.050 U	782	0.66
	11/5/2009	0.030 U	2.0 U	140	NM	26.5	0.050 U	671	0.50 U
	1/26/2010	0.048	2.5	147	NM	26.0	0.050 U	639	0.50 U
	4/26/2010	0.030 U	2.0 U	136	NM	28.0	0.050 U	651	0.50 U
	7/28/2010	0.030 U	2.0 U	154	NM	27.9	0.050 U	674	0.50 U
	10/28/2010	0.030 U	2.0 U	163	NM	29.6	0.050 U	713	0.50 U
	1/27/2011	0.030 U	2.0 U	150	NM	28.4	0.050 U	745	0.50 U
	4/28/2011	0.030 U	2.0 U	162	NM	30.7	0.050 U	734	0.50 U
	8/1/2011	0.030 U	2.0 U	157	NM	28.8	0.050 U	804	0.50 U
	12/1/2011	0.030 U	2.0 U	154	NM	28.4	0.050 U	701	0.50 U
	2/28/2012	0.030 U	2.0 U	166	NM	30.4	0.250 U	690	0.50 U
	5/15/2012	0.039	2.0 U	164	NM	31.3	0.100 U	773	0.50 U
	8/29/2012	0.030 U	2.0 U	157	NM	30.8	0.250 U	829	0.50 U
	11/16/2012	0.030 U	2.0 U	161	NM	31.3	0.250 U	851	0.52
	2/19/2013	0.030 U	2.0 U	150	NM	30.8	0.250 U	777	0.50 U
	5/22/2013	0.030 U	2.0	152	NM	30.9	0.500 U	748	0.50 U
	8/21/2013	0.030 U	2.1	158	NM	30.6	0.250 U	829	0.50 U
	1/2/2014	0.072	2.0 U	154	NM	32.1	0.250 U	763	0.50 U
	3/26/2014	0.030 U	2.0 U	157	NM	31.1	0.250 U	823	0.50 U
	7/8/2014	0.030 U	2.0 U	152	NM	32.4	0.250 U	801	0.80
	9/23/2014	0.030 U	2.6	153	NM	30.6	0.250 U	843	0.50 U
	12/8/2014	0.030	2.0 U	155	NM	31.6	0.050 U	820	0.50 U

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
Units GWQC		mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L
		NC	NC	250	NC	10	1	500	NC
MW-4B	3/11/2015	0.030 U	2.0 UJ	156	NM	30.7	0.050 U	790	0.50 U
	6/17/2015	0.050	2.0 U	162	NM	32.7	0.500 U	774	0.50 U
	9/22/2015	0.030 U	2.0 U	200	NM	39.0	0.050 U	795	0.50 U
	12/16/2015	0.030 U	2.0	161	NM	30.8	1.250 U	817	0.50 U
	3/21/2016	0.030 U	2.0 U	160	NM	32.2	0.050 U	848	0.50 U
	6/22/2016	0.030 U	2.0 U	162	NM	31.5	0.050 U	803	0.50 U
	9/20/2016	0.030 U	2.0 U	149	NM	29.9	1.140	796	0.50 U
	12/13/2016	0.030 U	2.0 U	146	NM	29.9	1.250 U	798	0.50 U
	3/14/2017	0.030 U	2.0 U	152	NM	31.3	0.050 U	806	0.50 U
	6/20/2017	0.030 U	2.0 U	167	NM	34.2	0.050 U	769	0.50 U
	9/19/2017	0.030 U	2.0 U	154	NM	31.2 J	0.050 UJ	833	0.50 U
	12/14/2017	0.030 U	2.0 U	161	NM	32.8	0.057	747	0.50 U
	3/7/2018	0.030 U	2.1	157	NM	32.3 J	0.050 UJ	778 J	0.50 U
	6/19/2018	0.030 U	2.0 U	151	NM	30.9	0.050 U	874	0.50 U
	9/27/2018	0.030 U	2.0 U	152	NM	31.6	0.050 U	729	0.50 U
	12/20/2018	0.030 U	2.0 U	142	NM	34.4	0.050 U	730	0.50 U
	3/26/2019	0.030 U	2.0 U	146	NM	30.8	0.050 U	769	0.50 U
	6/18/2019	0.030 U	2.0 U	146	NM	31.2	0.050 U	877	0.50 U
	9/25/2019	0.030 U	2.0 U	138	NM	29.2	0.050 U	747	0.50 U
	12/17/2019	0.030 U	2.0 U	147	NM	31.9	0.050 U	732	0.50 U
	3/25/2020	0.030 U	2.0 U	138	NM	29.6	0.050 U	716	0.50 U
	6/17/2020	0.030 U	2.0 U	136	NM	28.6	0.050 U	763	0.50 U
	9/30/2020	0.030 U	0.405 U	137	NM	30.1	0.050 U	749	0.50 U
	12/16/2020	0.030 U	2.0 U	131	NM	28.5	0.050 U	660	0.50 U
	3/30/2021	0.030 U	2.0 U	135	NM	32.7	0.090 J	703	0.50 U
	6/23/2021	0.030 U	2.0 U	135	NM	30.4	0.075	770	0.50 U
	9/22/2021	0.030 U	2.0 U	140	NM	30.2	0.050 U	746	0.50 U
	12/14/2021	0.030 U	2.0 U	137	NM	30.2	0.050 U	660	0.50 U
	3/29/2022	0.030 U	2.0 U	134	NM	29.1	0.050 U	637	0.50 U

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
		mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L
		NC	NC	250	NC	10	1	500	NC
MW-4B	6/28/2022	0.030 U	2.0 U	132	NM	28.7	0.050 U	675	0.50 U
	9/28/2022	0.030 U	2.0 U	134	NM	29.2	0.050 U	628	0.50 U
	12/20/2022	0.030 U	2.0 U	130	NM	29.4	0.050 U	612	0.50 U
	4/4/2023	0.030 U	2.0 U	130	NM	30.9	0.050 U	645	0.50 U
	6/27/2023	0.030 U	2.0 U	125	NM	29.6	0.050 U	661	0.50 U
	9/26/2023	0.030 U	2.0 U	130	NM	29.6	0.050 U	660	0.50 U
	12/19/2023	0.030 U	5.4	128	NM	28.5	0.050 U	665	0.50 U
	3/19/2024	0.030 U	2.0 U	125	NM	29.4	0.050 U	635	0.50 U
	6/19/2024	0.030 U	2.0 U	125	NM	28.5	0.050 U	602	0.50 U
	10/9/2024	0.047	2.0 U	120	NM	27.6	0.050 U	636	0.50 U
MW-5	7/24/2002	0.050 U	4.0 U	176	1 U	5.68	1.00 U	964	1.39
	10/31/2002	0.100 U	2.0 U	176	1 U	2.37	NM	980	1.15
	1/22/2003	0.100 U	15.6	179	1 U	4.46	NM	917	1.00 U
	4/9/2003	0.500 U	4.1	158	NM	10.7	NM	1140	0.50 U
	10/26/2005	0.030 U	2.0 U	134	NM	8.10	0.050 U	1030	0.97
	1/31/2006	0.050	2.0 U	140	NM	8.08	0.050 U	987	1.20
	4/27/2006	0.030 U	2.0 U	152	NM	2.62	0.050 U	940	1.11
	7/27/2006	0.060	2.0 U	143	NM	6.69	0.050 U	960	1.17
	10/31/2006	0.030 U	2.0 U	157	NM	1.58	0.050 U	927	1.10
	1/31/2007	0.030 U	2.0 U	145	NM	1.94	0.050 U	907	0.84
	4/26/2007	0.030	2.0 U	142	NM	2.14	0.050 U	944	0.75
	7/25/2007	0.030 U	2.0 U	150	NM	2.18	0.050 U	911	1.26
	10/31/2007	0.030 U	2.0 U	129	NM	1.80	0.050 U	930	1.02
	1/30/2008	0.030 U	2.0 U	124	NM	1.48	0.050 U	920	1.08
	4/30/2008	0.030 U	2.0 U	127	NM	1.34	0.050 U	930	0.88
	7/30/2008	0.040	2.0 U	133	NM	1.17	0.050 U	890	1.00
	11/20/2008	0.030 U	2.0 U	147	NM	1.24	0.050 U	830	0.76
	1/29/2009	0.030 U	2.0 U	135	NM	0.860	0.050 U	900	1.05

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
Units		mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L
GWQC		NC	NC	250	NC	10	1	500	NC
MW-5	4/30/2009	0.040	2.0 U	159	NM	3.04	0.736	828	0.76
	7/29/2009	0.030 U	2.0 U	161	NM	4.82	0.050 U	844	1.36
	11/5/2009	0.036	2.0 U	158	NM	1.830	0.050 U	773	0.78
	1/26/2010	0.081	2.0 U	148	NM	3.290	0.050 U	882	0.99
	4/26/2010	0.145	2.0 U	152	NM	0.430	0.050 U	1020	1.52
	7/28/2010	0.099	2.0 U	170	NM	0.820	0.050 U	954	1.40
	10/28/2010	0.030 U	2.0 U	184	NM	0.694	0.050 U	691	1.03
	1/27/2011	0.030	2.0 U	176	NM	1.02	0.050 U	941	1.12
	4/28/2011	0.030	2.0 U	212	NM	0.499	0.050 U	1040	1.33
	8/1/2011	0.099	2.0 U	190	NM	0.642	0.050 U	955	1.09
	12/1/2011	0.040	2.0 U	182	NM	0.637	0.050 U	912	0.99
	2/28/2012	0.219	2.0 U	204	NM	0.641	0.250 U	907	1.32
	5/15/2012	0.067	2.0 U	193	NM	0.741	0.250 U	871	0.85
	8/29/2012	0.223	2.0 U	200	NM	0.468	0.500 U	995	1.17
	11/16/2012	0.030 U	2.0 U	191	NM	1.12	0.500 U	869	0.55
	2/19/2013	0.089	2.0 U	207	NM	0.527	0.250 U	920	1.01
	5/22/2013	0.055	2.0 U	206	NM	0.672	0.250 U	910	0.82
	8/21/2013	0.057	2.0 U	215	NM	0.591	0.250 U	975	0.80
	1/2/2014	0.100	2.0 U	218	NM	0.55	0.250 U	952	0.89
	3/26/2014	0.448	2.0 U	246	NM	0.354	0.250 U	1070	1.54
	7/8/2014	0.130	2.0 U	242	NM	0.442	0.250 U	1020	0.93
	9/23/2014	0.030 U	2.0 U	236	NM	0.435	0.250 U	960	0.60
	12/8/2014	0.091	2.0 UJ	248	NM	0.379 U	0.250 U	1040	0.50 U
	3/11/2015	0.046	2.0 UJ	247	NM	0.727	0.050 U	976	0.75
	6/17/2015	0.070	2.0 U	263	NM	0.5 U	0.500 U	1030	0.69
	9/22/2015	0.032	2.0 U	256	NM	1.45	1.250 U	987	0.64
	12/16/2015	0.030 U	2.0 U	255	NM	0.752	2.500 U	969	0.51
	3/21/2016	0.030 U	2.0 U	245	NM	0.992	0.250 U	956	0.61
	6/22/2016	0.030 U	2.0 U	273	NM	1.40	0.050 U	914	0.50 U

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
		mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L
		NC	NC	250	NC	10	1	500	NC
Units	GWQC								
MW-5	9/20/2016	0.030 U	2.0 U	251	NM	0.960	2.200	947	0.50 U
	12/13/2016	0.030 U	2.0 U	243	NM	0.830	2.500 U	1030	0.61
	3/14/2017	0.030 U	2.0 U	262	NM	0.279	0.050 U	961	0.50 U
	6/20/2017	0.030 U	2.0 U	296	NM	1.33	0.050 U	925	0.5 U
	9/19/2017	0.030 U	2.0 U	272	NM	0.912 J	0.050 UJ	1010	0.63
	12/14/2017	0.030 U	2.0 U	295	NM	1.30	0.091	1020	0.50 U
	3/7/2018	0.030 U	2.0 U	288	NM	1.37 J	0.050 UJ	1040 J	0.56
	6/19/2018	0.030 U	2.0 U	273	NM	0.368	0.050 U	1190	0.69
	9/27/2018	0.030 U	2.0 U	263	NM	0.808	0.050 U	1160	0.63
	12/20/2018	0.064	2.0	229	NM	0.608	0.050 U	1100	0.85
	3/26/2019	0.048	2.0 U	207	NM	0.848	0.050 U	1010	0.74
	6/18/2019	0.030 U	2.54	205	NM	0.266	0.050 U	1160	0.92
	9/25/2019	0.030 U	3.12	207	NM	0.812	0.050 U	1100	0.53
	12/17/2019	0.030 U	3.28	212	NM	0.050 U	0.050 U	1090	0.82
	3/25/2020	0.030 U	2.0 U	209	NM	1.00	0.050 U	1120	0.65
	6/17/2020	0.030 U	3.4	221	NM	1.52	0.050 U	1050	0.66
	9/30/2020	0.030	2.0	223	NM	2.50 U	0.050 U	1100	0.62
	12/16/2020	0.030 U	2.0 U	225	NM	0.868	0.050 U	1030	0.75
	3/30/2021	0.030 U	2.0 U	247	NM	0.727	0.050 U	1090	0.86
	6/23/2021	0.030 U	2.0 U	258	NM	1.24	0.050 U	1140	0.95
	9/22/2021	0.030 U	6.1	272	NM	0.97	0.050 U	1130	0.95
	12/14/2021	0.030 U	2.0 U	268	NM	0.08	0.050 U	1110	1.32
	3/29/2022	0.030 U	2.0 U	255	NM	1.35	0.050 U	1050	0.72
	6/28/2022	0.030 U	2.0 U	257	NM	1.75	0.050 U	1040	0.81
	9/28/2022	0.030 U	4.99	268	NM	0.155	0.050 U	1030	0.60
	12/20/2022	0.030 U	2.0 U	247	NM	0.680	0.050 U	1030	0.75
	4/4/2023	0.030 U	2.0 U	239	NM	1.56	0.050 U	1060	0.5 U
	6/27/2023	0.030 U	2.00 U	237	NM	2.220	0.050 U	1050	0.50
	9/26/2023	0.030 U	2.0 U	234	NM	0.454	0.050 U	1050	0.58

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

Units GWQC		ANALYTES							
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Chloride	Fecal Coliform	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Total Dissolved Solids	Total Kjeldahl Nitrogen
		mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L
		NC	NC	250	NC	10	1	500	NC
MW-5	12/19/2023	0.030 U	4.1	224	NM	1.87	0.050 U	1060	0.50
	3/19/2024	0.030 U	2.0 U	225	NM	2.63	0.050 U	1020	0.57
	6/19/2024	0.030 U	2.0 U	220	NM	0.05 U	0.050 U	998	0.61
	9/18/2024	0.170	2.0 U	209	NM	0.188	0.050 U	1050	0.85

Notes: as N = as nitrogen
 CFU/100 ml = colony forming units per 100 milliliters
 GWQC - Groundwater Quality Criteria per WAC 173-200-040(3).
 mg/L = milligrams per liter
 NC = No Criterion
 NM = Not Measured
 NS = No Sample Collected
 Differences in detection limits for a given analyte can be attributed to dilution factors during analysis.
 J = analyte concentration is an estimate
 U = analyte was not detected above the method reporting limit

TABLE 4

FIELD PARAMETERS OF LAGOON SAMPLES

		FIELD PARAMETERS			
		Dissolved Oxygen	pH	Specific Conductance	Temperature
		mg/L	Standard Units	umhos/cm	Celsius
		NC	6.5 - 8.5	700	NC
Small Lagoon	7/15/1997	NM	7.61	3160	27.0
	4/26/2001	NM	9.94	394	21.5
	10/26/2005	3.09	7.40	325	14.0
	1/31/2006	2.25	9.35	2047	7.3
	4/27/2006	1.79	7.87	557	17.8
	7/27/2006	3.21	7.97	635	20.8
	10/31/2006	2.52	9.01	711.3	9.6
	1/31/2007	1.72	8.58	675	3.1
	4/26/2007	2.01	8.95	743	12.8
	7/25/2007	3.10	8.05	704	25.4
	10/31/2007	2.58	4.10	2291	7.2
	1/30/2008	1.93	8.76	818.10	3.2
	4/30/2008	2.10	7.43	1100	14.1
	7/30/2008	1.96	5.67	867	20.7
	11/20/2008	1.98	5.04	1480	10.3
	1/29/2009	3.15	7.29	NM	9.7
	4/30/2009	2.19	6.79	1962	16.9
	7/29/2009	2.00	7.35	457	25.5
	11/5/2009	1.99	8.41	756	9.6
	1/26/2010	1.88	5.92	2352	7.8
	4/26/2010	1.93	7.13	1616	16.9
	7/28/2010	2.01	6.91	881	23.5
	10/28/2010	2.06	5.13	1641	10.9
	1/27/2011	1.93	6.47	3033	6.5
	4/28/2011	2.09	7.25	996	14.0
	8/1/2011	2.36	7.54	510	23.5
	12/1/2011	1.98	4.92	2239	5.2
	2/28/2012	2.18	5.73	3072	7.1
	5/15/2012	NM	7.00	1292	17.7
	8/29/2012	NM	4.26	1397	22.3
	11/16/2012	NM	4.72	1100	8.3
	2/19/2013	NM	6.13	1068	10.3
	5/22/2013	NM	8.24	550	17.1
	8/21/2013	NM	5.99	321	29.9
	1/2/2014	NM	4.55	963	2.2
	3/26/2014	NM	6.65	881	11.2
	7/8/2014	1.38	7.64	399	26.6
	9/23/2014	1.24	4.49	1357	19.9
	12/8/2014	2.13	4.27	698	6.2
	3/11/2015	2.71	6.67	705	12.2
	6/17/2015	0.84	7.18	919	21.7
	9/22/2015	9.90	4.49	1260	18.1
	12/16/2015	4.68	4.98	1950	5.2
	3/21/2016	3.12	7.12	1100	13.1
	6/22/2016	8.25	7.28	640	22.2
	9/20/2016	7.73	4.42	1020	18.9
	12/13/2016	NM	NM	NM	NM
	3/14/2017	3.89	7.02	3251	10.9
	6/20/2017	NM	NM	NM	NM
	9/15/2017	NM	6.70	1920	18.6
	12/14/2017	11.1	5.18	1100	4.2
	3/7/2018	NM	7.77	630	9.8
	6/19/2018	2.84	7.70	519	21.9
	9/27/2018	2.19	4.70	1458	18.4
	12/20/2018	5.19	4.71	1138	6.0
	3/26/2019	5.20	7.82	4414	10.2
	6/18/2019	0.88	7.30	3845	24.5
	9/25/2019	1.99	6.80	4100	17.3
	12/17/2019	12.0	4.91	2645	3.1
	3/25/2020	2.9	5.33	1801	10.0

TABLE 4

FIELD PARAMETERS OF LAGOON SAMPLES

		FIELD PARAMETERS			
		Dissolved Oxygen	pH	Specific Conductance	Temperature
		mg/L	Standard Units	umhos/cm	Celsius
		Units GWQC	NC	6.5 - 8.5	700
Small Lagoon	6/17/2020	5.20	7.27	2125	18.4
	9/30/2020	2.13	5.20	4022	16.6
	12/16/2020	11.6	4.23	4476	3.9
	3/30/2021	4.75	6.60	3720	8.4
	6/23/2021	1.15	7.67	3163	23.2
	9/22/2021	13.4	6.80	5445	18.1
	12/14/2021	6.04	6.00	4289	4.4
	3/29/2022	1.16	7.15	3396	12.7
	6/28/2022	2.36	7.35	3072	21.1
	9/28/2022	1.24	6.13	3125	18.6
	12/20/2022	NS	NS	NS	NS
	4/4/2023	3.08	7.15	3241	7.2
	6/27/2023	1.56	7.47	2762	20.4
	9/26/2023	2.72	6.05	2690	17.2
	12/19/2023	5.38	5.29	1562	4.1
	3/19/2024	0.75	7.43	492	11.8
6/19/2024	1.46	7.83	2365	18.0	
9/18/2024	1.38	4.71	2577	17.3	
Large Lagoon	12/20/2018	7.24	4.69	1041	6.6
	3/26/2019	2.16	7.62	5489	12.1
	6/18/2019	1.37	7.92	5495	24.1
	9/25/2019	1.81	7.68	4570	18.9
	12/17/2019	5.40	6.88	3520	3.0
	3/25/2020	NS	NS	NS	NS
	6/17/2020	NS	NS	NS	NS
	9/30/2020	NS	NS	NS	NS
	12/16/2020	NS	NS	NS	NS
	3/30/2021	5.39	7.18	3114	7.5
	6/23/2021	NS	NS	NS	NS
	9/22/2021	NS	NS	NS	NS
	12/14/2021	7.32	7.26	3047	2.8
	3/29/2022	0.19	7.73	3561	13.1
	6/28/2022	2.37	7.27	3288	21.2
	9/28/2022	11.73	8.69	1627	16.5
	12/20/2022	NS	NS	NS	NS
	4/4/2023	4.28	7.15	4032	6.7
	6/27/2023	5.15	8.01	2660	20.0
	9/26/2023	8.72	8.22	1280	15.1
	12/19/2023	4.64	6.79	1318	4.5
	3/19/2024	1.50	7.48	531	7.2
	6/19/2024	2.01	8.00	1825	19.2
	9/18/2024	2.41	5.28	2153	15.9

Notes: GWQC - Groundwater Quality Criteria per WAC 173-200-040(3).

mg/L = milligrams per liter

umhos/cm = micromhos per centimeter

NC = No Criterion

NM = Not Measured

NS = No Sample Collected

TABLE 5

ANALYTICAL RESULTS OF LAGOON SAMPLES

		ANALYTES												
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Calcium	Chloride	Fecal Coliform	Magnesium	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Phosphorus	Potassium	Sodium	Total Dissolved Solids	Total Kjeldahl Nitrogen
Units		mg/L	mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Small Lagoon	7/15/1997	42.0	110	NM	360	3400	NM	0.010 U	0.120	NM	NM	NM	2400	79.0
	4/26/2001	1.09	17.3	NM	31.9	1 U	NM	0.100 U	0.100 U	NM	NM	NM	380	7.42
	10/26/2005	0.890	34.7	14.9	19.2	NM	3.89	0.050 U	0.050 U	2.62	15.6	50.1	255	6.73
	1/31/2006	43.4	714	64.9	174	NM	13.0	0.050 U	0.050 U	23.8	247	136	1660	105
	4/27/2006	9.18	23.8	23.3	31.8	NM	3.65	0.050 U	0.050 U	6.20	23.5	62.0	367	12.7
	7/27/2006	0.750	166	24.4	18.6	NM	4.20	0.050 U	0.050 U	3.70	16.9	50.6	326	10.1
	10/31/2006	16.2	977	19.1	31.8	NM	6.12	0.050 U	0.050 U	12.5	45.5	68.9	552	29.9
	1/31/2007	25.6	316	33.4	93.5	NM	8.33	0.050 U	0.050 U	14.8	135	116	886	41.5
	4/26/2007	17.2	35.4	28.9	54.2	NM	5.50	0.050 U	0.050 U	7.80	71.0	96.8	554	23.4
	7/25/2007	0.120	54.8	23.4	52.1	NM	3.84	0.050 U	0.050 U	5.60	48.7	91.9	450	9.10
	10/31/2007	98.1	874	80.9	66.9	NM	57.4	0.050 U	0.500 U	21.0	364	67.9	3000	252
	1/30/2008	27.7	982	38	86.7	NM	9.40	0.156	0.050 U	16.0	109	87.9	940	59.2
	4/30/2008	40.4	435	54.5	91.1	NM	12.0	0.072	0.050	19.5	148	125	1100	68.2
	7/30/2008	27.7	710	37.8	59.1	NM	9.97	0.050 U	0.050 U	18.0	102	91.2	860	41.9
	11/20/2008	60.0	3400	66.5	66.5	NM	27.3	0.063	0.050 U	5.04	183	82.9	1300	114
	1/29/2009	85.1	1800	113	285	NM	31.7	1.42	1.56	56.4	469	192	3090	180
	4/30/2009	25.2	754	75.0	140	NM	20.2	0.050 U	0.370	47.9	213	130	1670	92.0
	7/29/2009	0.441	39.2	18.7	26.2	NM	2.75	0.050 U	0.050 U	29.5	16.4	70.1	402	8.75
	11/5/2009	70.1	3500	92.1	65.4	NM	47.7	0.050 U	0.500 U	54.9	259	72.0	1810	152
	1/26/2010	53.5	1550	85.7	155	NM	19.9	0.180	0.100 U	30.6	285	135	1810	106
	4/26/2010	49.2	462	52.9	119	NM	11.1	0.050 U	0.050 U	19.0	175	117	1240	70.4
	7/28/2010	13.9	315	28.2	51.3	NM	5.38	0.050 U	0.050 U	8.94	64.8	90.8	550	27.2
	10/28/2010	55.7	3510	58.1	69.2	NM	31.2	0.050 U	0.050 U	48.7	186	50.1	1010	108
	1/27/2011	71.0	1390	113	263	NM	27.9	0.050 U	0.050 U	36.4	397	162	2540	166
	4/28/2011	27.4	214	37.9	60.1	NM	8.84	0.050 U	0.050 U	10.7	82.8	86.8	684	40.6
	8/1/2011	10.2	40.5	33.4	19.1	NM	6.85	0.064	0.720	6.37	31.4	28.7	277	14.2
	12/1/2011	49.2	3630	69.0	81.6	NM	46.2	0.431	0.050 U	89.4	249	57.2	3060	200
	2/28/2012	49.3	2060	73.9	167	NM	22.6	0.065	0.500 U	35.2	274	123	1680	127
	5/15/2012	36.9	318	29.6	56.0	NM	8.32	0.050 U	0.050 U	15.3	76.6	58.2	612	53.3
	8/29/2012	34.5	959	54.0	45.3	NM	27.4	0.050 U	0.250 U	45.1	156	32.1	1040	74.1
	11/16/2012	22.7	1770	33.4	50.5	NM	14.9	0.250 U	0.250 U	24.0	109	55.5	861	61.4
	2/19/2013	31.7	678	31.1	47.7	NM	8.35	0.297	0.050 U	13.5	59.5	74.5	681	52.8
	5/22/2013	15.7	39.1	14.6	21.7	NM	3.37	0.062	0.050 U	5.34	20.8	55.2	314	23.8
	8/21/2013	4.66	386	19.8	8.27	NM	7.83	0.050 U	0.050 U	5.87	20.9	10.6	252	13.1
	1/2/2014	22.3	1940	29.6	38.6	NM	13.8	0.050 U	0.500 U	25.0	85.9	66.8	1080	77.0

TABLE 5

ANALYTICAL RESULTS OF LAGOON SAMPLES

		ANALYTES												
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Calcium	Chloride	Fecal Coliform	Magnesium	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Phosphorus	Potassium	Sodium	Total Dissolved Solids	Total Kjeldahl Nitrogen
Small Lagoon	3/26/2014	26.5	363	26.1	46.7	NM	6.33	0.050 U	0.050 U	11.7	65.3	82.5	651	40.3
	7/8/2014	2.37	85.1	16.1	20.1	NM	3.39	0.050 U	0.050 U	3.75	24.4	49.3	319	13.2
	9/23/2014	37.7	654	34.4	49.2	NM	22.9	0.357	1.11	36.2	146	69.3	1020	90.0
	12/8/2014	16.1	920	18.9	33.4	NM	7.08	0.178 U	1.07	11.8	50.2	69.1	614	36.9
	3/11/2015	14.9	173	20.7	47.2	NM	4.74	0.050 U	0.050 U	7.29	51.7	74.6	520	28.7
	6/17/2015	14.6	60.6	32.2	75.9	NM	8.93	0.500 U	0.500 U	8.69	105	65.6	606	21.7
	9/22/2015	30.6	925	43.4	49.1	NM	24.3	0.050 U	0.500 U	19.1	130	48.5	806	72.4
	12/16/2015	35.0	902	69.9	129	NM	27.0	0.050 U	0.050 U	30.8	174	89.9	1540	85.4
	3/21/2016	26.7	221	30.8	75.0	NM	7.34	0.050 U	0.050 U	9.72	89.3	92.0	719	34.7
	6/22/2016	6.67	43.4	15.1	29.1	NM	3.43	0.050 U	0.050 U	3.92	25.6	57.3	319	12.0
	9/20/2016	32.5	1650	30.0	24.1	NM	18.9	0.058	0.050 U	27.3	91.6	29.8	584	12.5
	12/13/2016	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	3/14/2017	82.2	1030	132	323	NM	34.0	0.050 U	0.154	41.5	488	172	3170	173
	6/20/2017	42.4	144	1.52	110	NM	0.50	0.169	0.050 U	18.5	3.27	1.88	1090	51.3
	9/19/2017	140	1030	107	61.7	NM	43.5	0.050 U	0.050 U	72.9	229	59.5	1200	142
	12/14/2017	24.9	935	37.1	36.8	NM	12.1	0.050 U	0.050 U	21.3	69.3	74.4	775	45.0
	3/7/2018	5.96	136	14.9	35.3	NM	2.99	0.050 UJ	0.050 UJ	3.99	31.9	74.0	375 J	8.79
	6/19/2018	13.4	38.7	17.2	31.2	NM	4.42	0.050 U	0.050 U	4.29	24.2	62.4	353	15.3
	9/27/2018	62.9	2060	53.7	49.3	NM	31.4	0.050 U	0.050 U	52.7	154	59.3	1160	96.4
	12/20/2018	37.2	1850	47.2	63.5	NM	25.3	0.062	0.050 U	29.0	96.1	68.2	968	76.7
	3/26/2019	142	1310	216	474	NM	58.5	0.250 U	0.250 U	57.8	758	262	4770	268
	6/18/2019	153	704	151	419	NM	81.9	0.250 U	0.250 U	49.1	533	196	3110	221
	9/25/2019	180	955	146	117	NM	86.4	0.250 U	0.250 U	120	403	59.1	1960	169
	12/17/2019	111	2060	141	87.2	NM	64.4	0.050 U	0.050 U	98.7	310	65.4	1920	186
	3/25/2020	66.4	1460	70.2	103	NM	32.0	0.050 U	0.050 U	34.1	148	91.8	1210	81.2
	6/17/2020	93.2	381	70.5	149	NM	32.3	0.050 U	0.050 U	32.6	221	94.7	1150	97.7
	9/30/2020	191	2484	105	137	NM	69.7	5.00 U	0.250 U	132	356	59.1	2440	202
	12/16/2020	82.9	4950	153	169	NM	70.9	0.185	0.050 U	110	421	121	3550	307
	3/30/2021	159	1480	150	298	NM	51.8	0.050 U	0.050 U	60.9	425	169	2800	180
	6/23/2021	143	447	110	246	NM	41.9	0.486	0.050 U	44.5	335	160	1940	119
	9/22/2021	287	2500	306	238	NM	97.3	0.050 U	0.050 U	82.0	0.50 U	13.6	2940	328
	12/14/2021	348	200	170	181	NM	93.2	0.050 U	0.050 U	152 J	552	119	2630	352
	3/29/2022	148	580	114	264	NM	38.6	0.258	0.050 U	65.4	353	152	2340	193
	6/28/2022	121	18.8	88.4	251	NM	35.1	0.250 U	0.250 U	47.2	304	133	1600	125
	9/28/2022	157	4510	93.6	119	NM	52.9	0.069	0.050 U	80.6	351	80.9	1810	156

TABLE 5

ANALYTICAL RESULTS OF LAGOON SAMPLES

		ANALYTES												
		Ammonia (as Nitrogen)	Biological Oxygen Demand	Calcium	Chloride	Fecal Coliform	Magnesium	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Phosphorus	Potassium	Sodium	Total Dissolved Solids	Total Kjeldahl Nitrogen
Units		mg/L	mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Small Lagoon	12/20/2022	NS	NS	NS	NS	NM	NS	NS	NS	NS	NS	NS	NS	NS
	4/4/2023	106	462	114	276	NM	40.7	0.172	0.050 U	48.2	352	145	2350	149
	6/27/2023	64.9	118	64.0	164	NM	21.1	0.050 U	0.050 U	50.8	168	115	1180	93.6
	9/26/2023	119	773	19.0	137	NM	8.59	0.050 U	0.050 U	62.9	56.9	19.9	1400	137
	12/19/2023	111	153	106	155	NM	40.3	0.126	0.050 U	18.3	280	103	1360	120
	3/19/2024	151	1130	158	474	NM	49.4	0.250 U	0.250 U	60.5	622	217	3340	188
	6/19/2024	72.1	78	81	234	NM	28.2	0.050 U	0.050 U	30.1	252	141	1380	113
	9/18/2024	112	2160	95	86.7	NM	43.2	0.050 U	0.050 U	68.4	260	61.7	1450	142
Large Lagoon	12/20/2018	34.2	1910	40.0	56.4	NM	20.0	0.088	0.050 U	25.0	90.6	66.0	790	62.7
	3/26/2019	183	1620	286	641	NM	77.7	0.500 U	0.500 U	76.5	942	320	6580	394
	6/18/2019	180	889	236	710	NM	107.0	0.500 U	0.500 U	86.1	968	334	4290	305
	9/25/2019	135	574	304	282	NM	138.0	0.250 U	0.250 U	173	600	160	1960	140
	12/17/2019	121	1890	144	191	NM	80.2	0.050 U	0.050 U	83.1	529	104	2380	164
	3/25/2020	NS	NS	NS	NS	NM	NS	NS	NS	NS	NS	NS	NS	NS
	6/17/2020	NS	NS	NS	NS	NM	NS	NS	NS	NS	NS	NS	NS	NS
	9/30/2020	NS	NS	NS	NS	NM	NS	NS	NS	NS	NS	NS	NS	NS
	12/16/2020	NS	NS	NS	NS	NM	NS	NS	NS	NS	NS	NS	NS	NS
	3/30/2021	119	1120	147	232	NM	52.0	0.105	0.050 U	63.5	376	146	2110	132
	6/23/2021	NS	NS	NS	NS	NM	NS	NS	NS	NS	NS	NS	NS	NS
	9/22/2021	NS	NS	NS	NS	NM	NS	NS	NS	NS	NS	NS	NS	NS
	12/14/2021	150	1400	134	150	NM	59.5	0.050 U	0.050 U	72.5 J	413	110	2030	177
	3/29/2022	129	580	118	343	NM	45.3	0.399	0.050 U	90.0	486	165	1990	167
	6/28/2022	41.6	24.8	732	430	NM	139.0	0.250 U	0.250 U	328.0	599	207	1690	73.7
	9/28/2022	1.14	516	49.6	167	NM	31.1	0.656	0.290	20.0	281	111	1130	9.85
	12/20/2022	NS	NS	NS	NS	NM	NS	NS	NS	NS	NS	NS	NS	NS
	4/4/2023	132	928	134	373	NM	45.3	0.484	0.050 U	64.8	482	159	3110	203
	6/27/2023	29.6	408	97	183	NM	35.9	0.050 U	0.050 U	61.5	248	97	1430	65.6
	9/26/2023	12.3	88.5	11.6	102	NM	5.24	0.059	0.058	22.8	36.1	13.6	776	26.2
	12/19/2023	65.3	149	116	132	NM	33.5	0.103	0.097	31.9	214	93.8	1220	86.6
	3/19/2024	148	1480	164	467	NM	54.3	0.250 U	0.250 U	67.0	683	206	3690	193
	6/19/2024	32.9	202	222	185	NM	49.5	0.050 U	0.050 U	47.2	278	135	1110	125
	9/18/2024	96.1	2120	122	80.7	NM	41.2	0.050 U	0.050 U	63.2	223	57.8	1650	111

TABLE 5

ANALYTICAL RESULTS OF LAGOON SAMPLES

Units	ANALYTES												
	Ammonia (as Nitrogen)	Biological Oxygen Demand	Calcium	Chloride	Fecal Coliform	Magnesium	Nitrate (as Nitrogen)	Nitrite (as Nitrogen)	Phosphorus	Potassium	Sodium	Total Dissolved Solids	Total Kjeldahl Nitrogen
	mg/L	mg/L	mg/L	mg/L	CFU/100 ml	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L

Notes: as N = as nitrogen

CFU/100 ml = colony forming units per 100 milliliters

GWQC - Groundwater Quality Criteria per WAC 173-200-040(3).

mg/L = milligrams per liter

NC = No Criterion

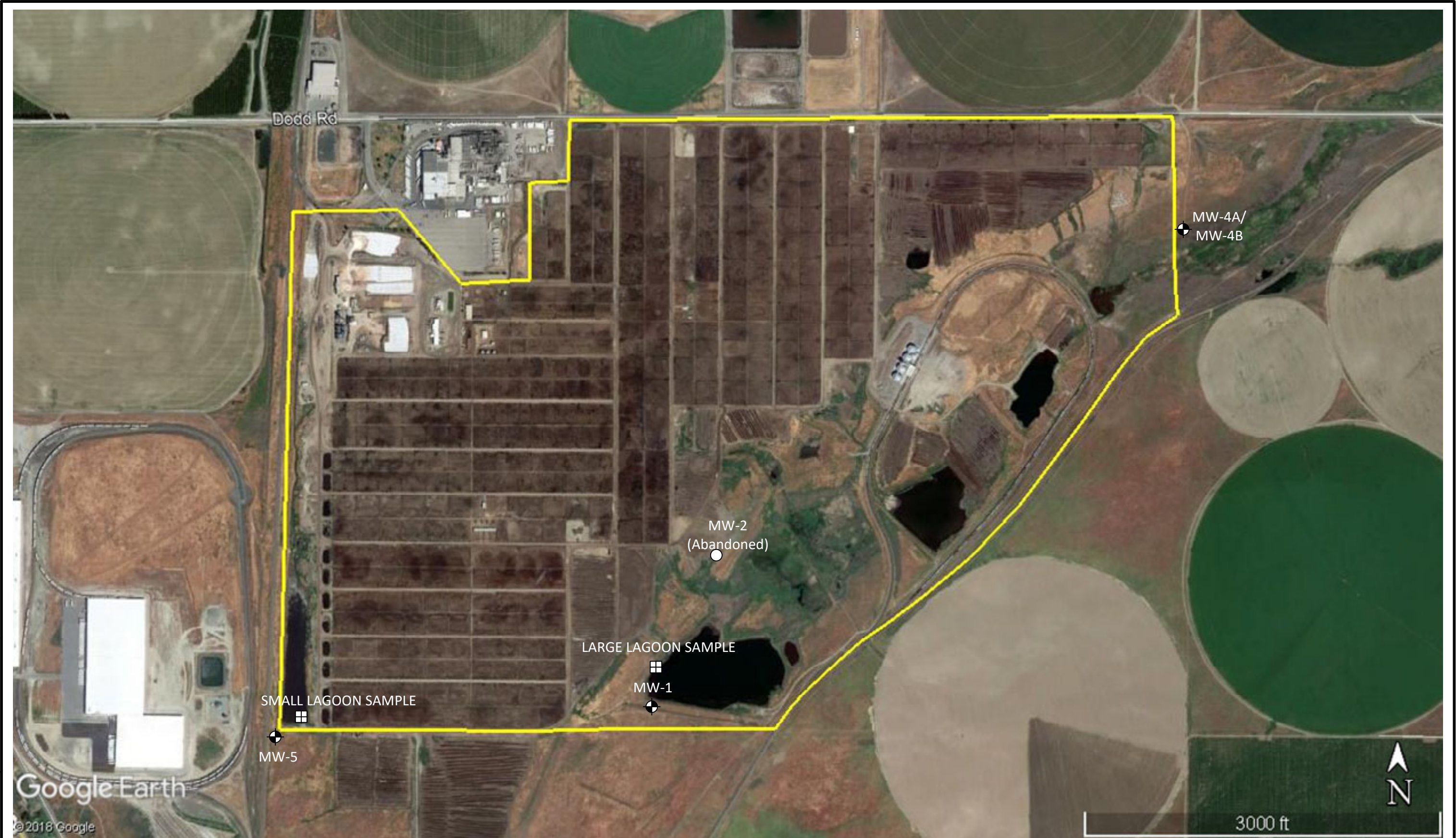
NM = Not Measured

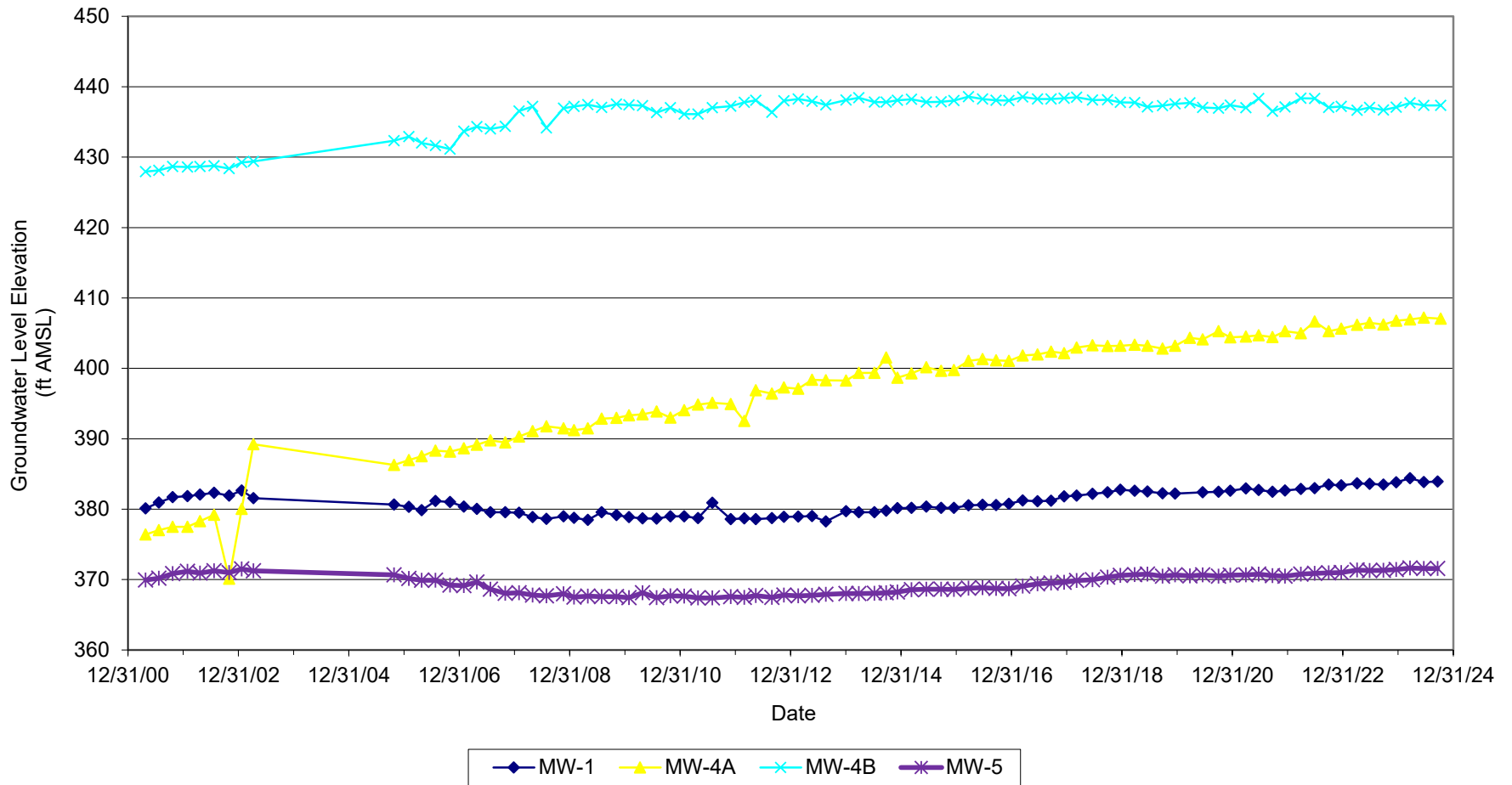
NS = No Sample Collected

Differences in detection limits for a given analyte can be attributed to dilution factors during analysis.

J = analyte concentration is an estimate

U = analyte was not detected above the method reporting limit



**NOTES:**

ft AMSL = feet above mean sea level

Monitoring well MW-2 abandoned April 2017

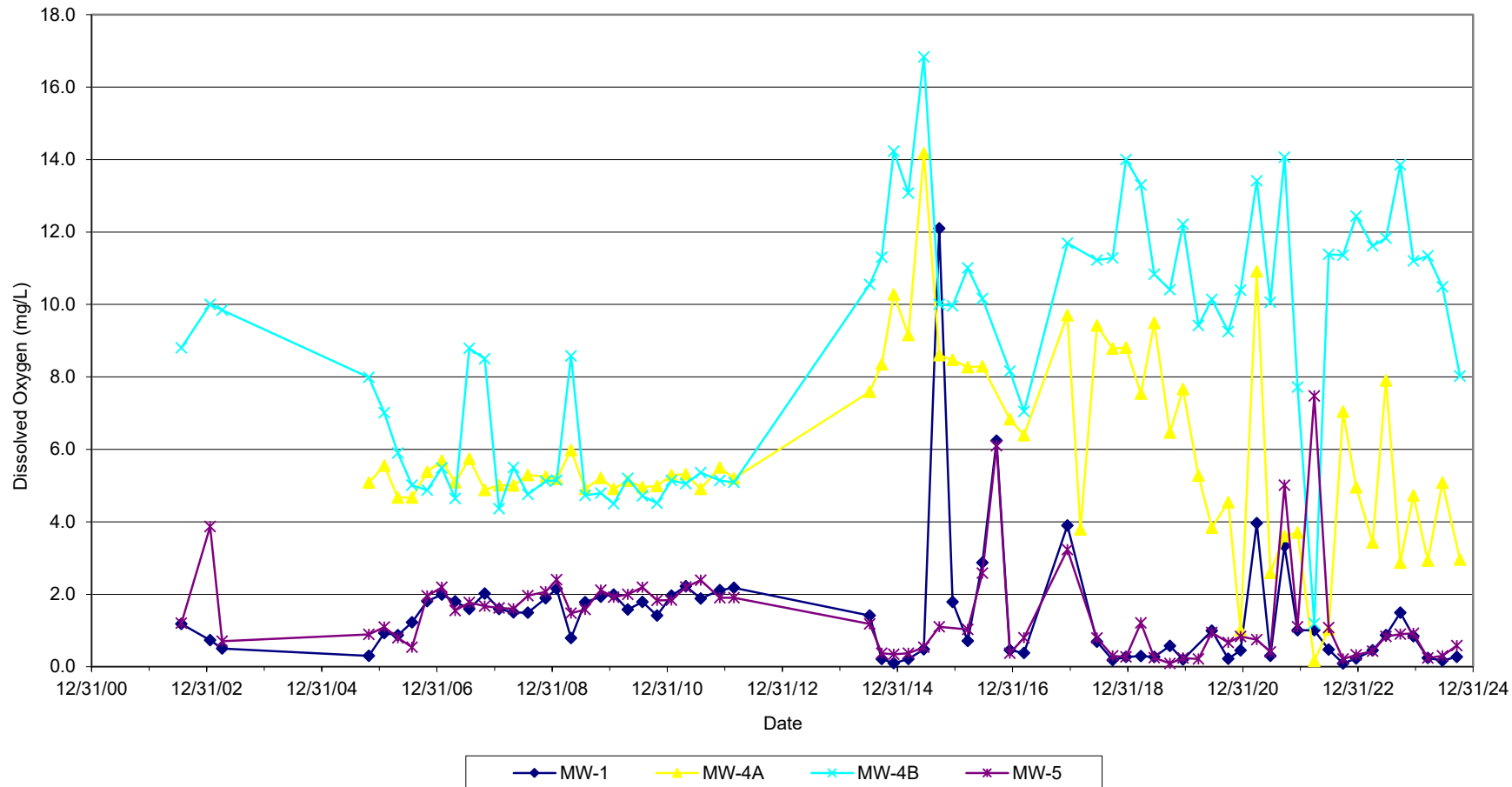
SIMPLOT FEEDERS LIMITED PARTNERSHIP
WALLULA, WASHINGTON

**THIRD QUARTER 2024 WATER QUALITY
MONITORING REPORT**

MONITORING WELL HYDROGRAPHS

**NORTHWEST
GROUNDWATER
CONSULTANTS, LLC**

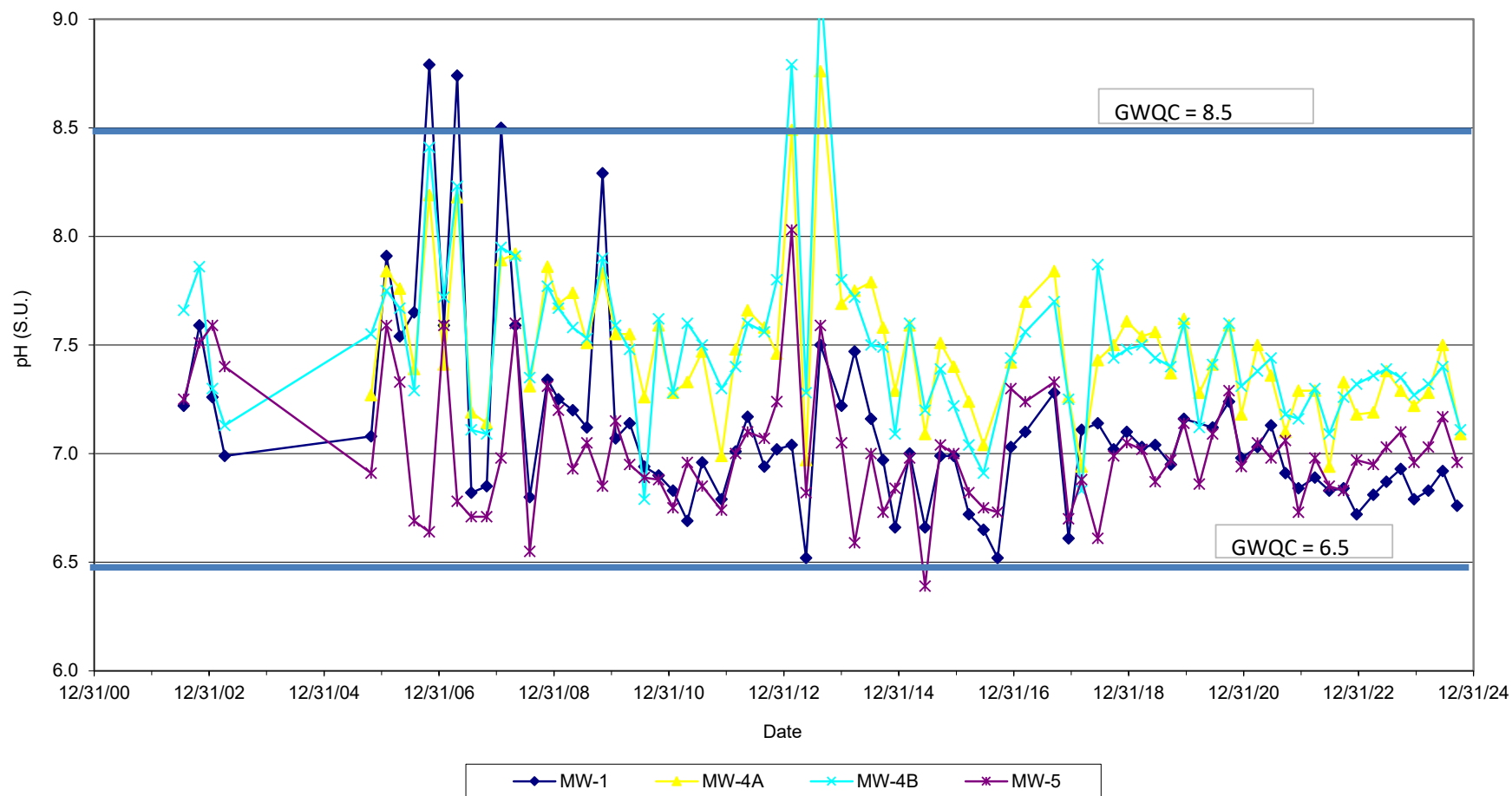
FIGURE
2

**NOTES:**

mg/L = milligrams per liter

Monitoring well MW-2 was abandoned April 2017

SIMPLOT FEEDERS LIMITED PARTNERSHIP
WALLULA, WASHINGTON**THIRD QUARTER 2024 WATER QUALITY
MONITORING REPORT****DISSOLVED OXYGEN IN GROUNDWATER****NORTHWEST
GROUNDWATER
CONSULTANTS, LLC****FIGURE
3**

**NOTES:**

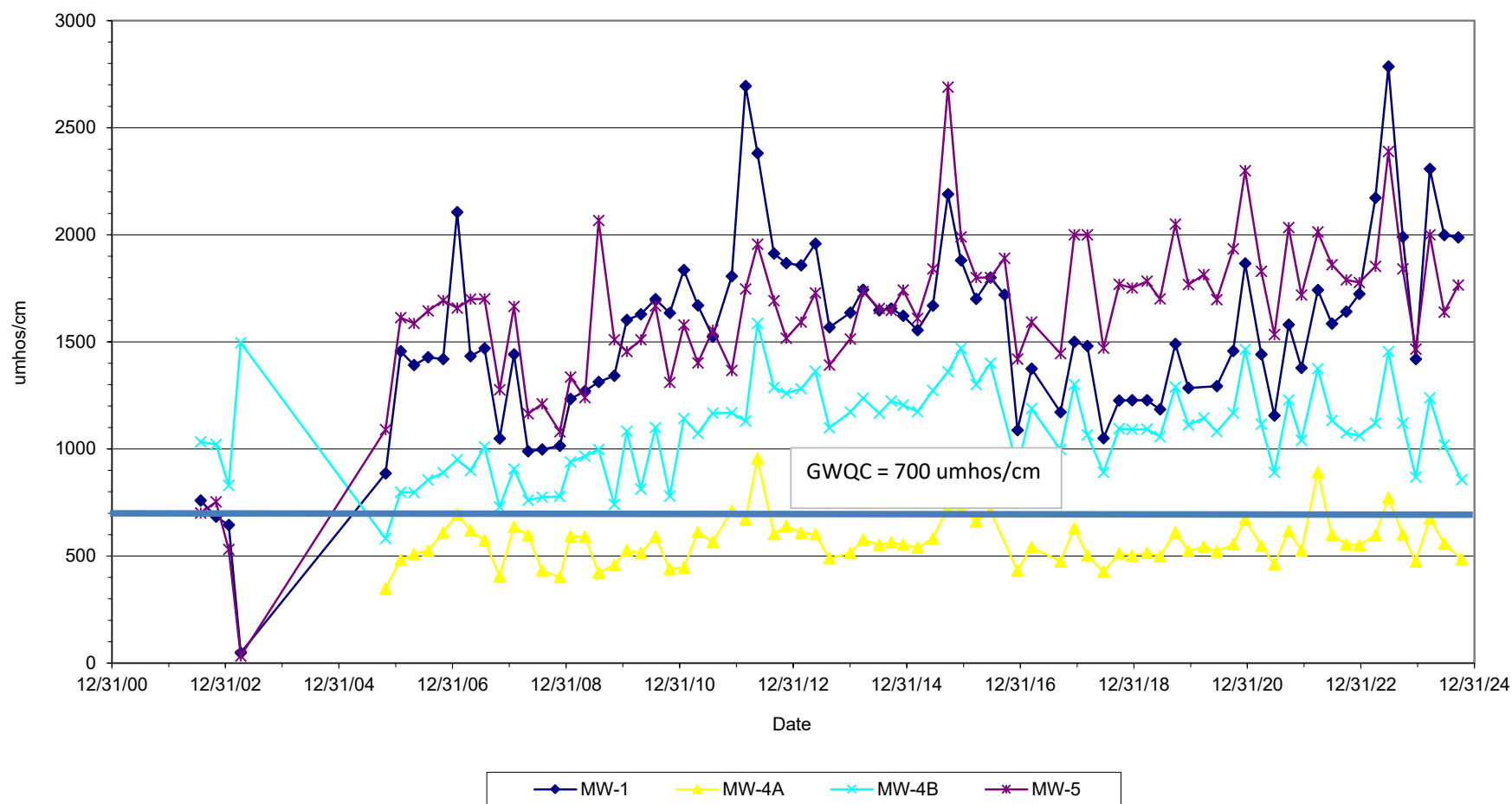
S.U. = standard units

Monitoring well MW-2 was abandoned April 2017

SIMPLOT FEEDERS LIMITED PARTNERSHIP
WALLULA, WASHINGTON**THIRD QUARTER 2024 WATER QUALITY
MONITORING REPORT****pH IN GROUNDWATER****NORTHWEST
GROUNDWATER
CONSULTANTS, LLC**

FIGURE

4

**NOTES:**

umhos/cm = micromhos per centimeter

Monitoring well MW-2 was abandoned April 2017

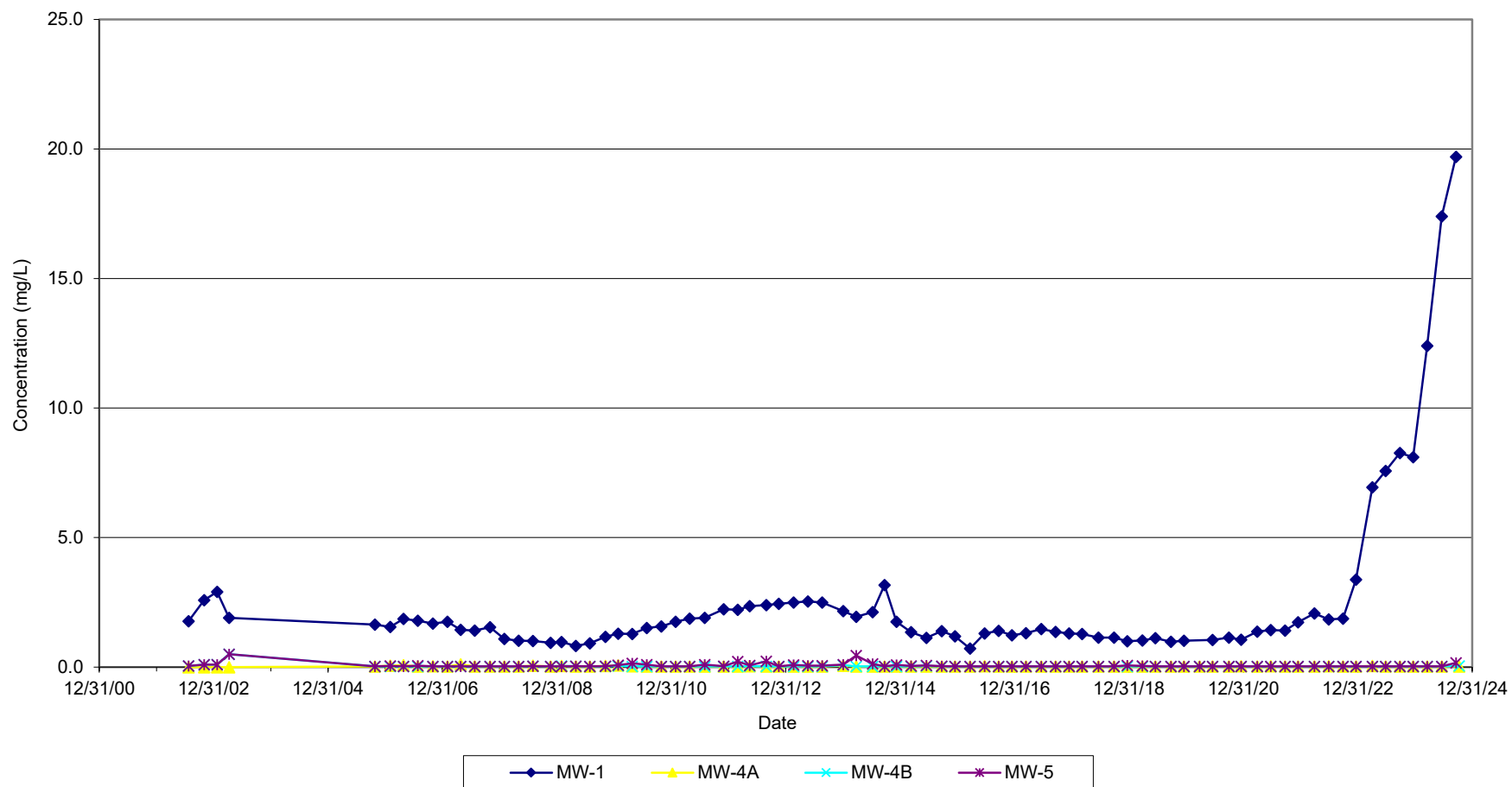
SIMPLOT FEEDERS LIMITED PARTNERSHIP
WALLULA, WASHINGTONTHIRD QUARTER 2024 WATER QUALITY
MONITORING REPORT

SPECIFIC CONDUCTANCE IN GROUNDWATER

NORTHWEST
GROUNDWATER
CONSULTANTS, LLC

FIGURE

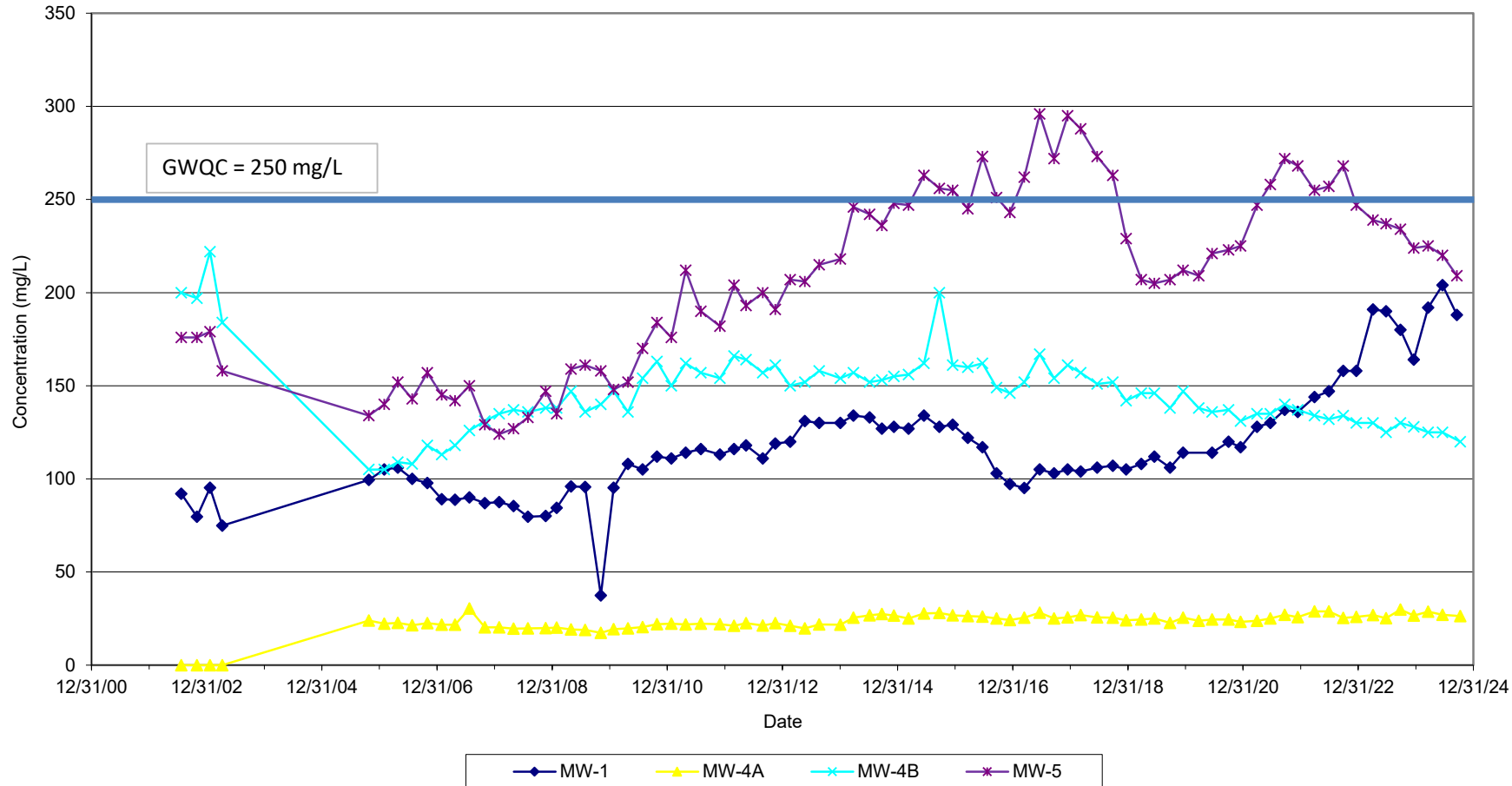
5

**NOTES:**

mg/L = milligrams per liter

Monitoring well MW-2 was abandoned April 2017

SIMPLOT FEEDERS LIMITED PARTNERSHIP
WALLULA, WASHINGTON**THIRD QUARTER 2024 WATER QUALITY
MONITORING REPORT****AMMONIA
CONCENTRATIONS IN GROUNDWATER****NORTHWEST
GROUNDWATER
CONSULTANTS, LLC****FIGURE
6**

**NOTES:**

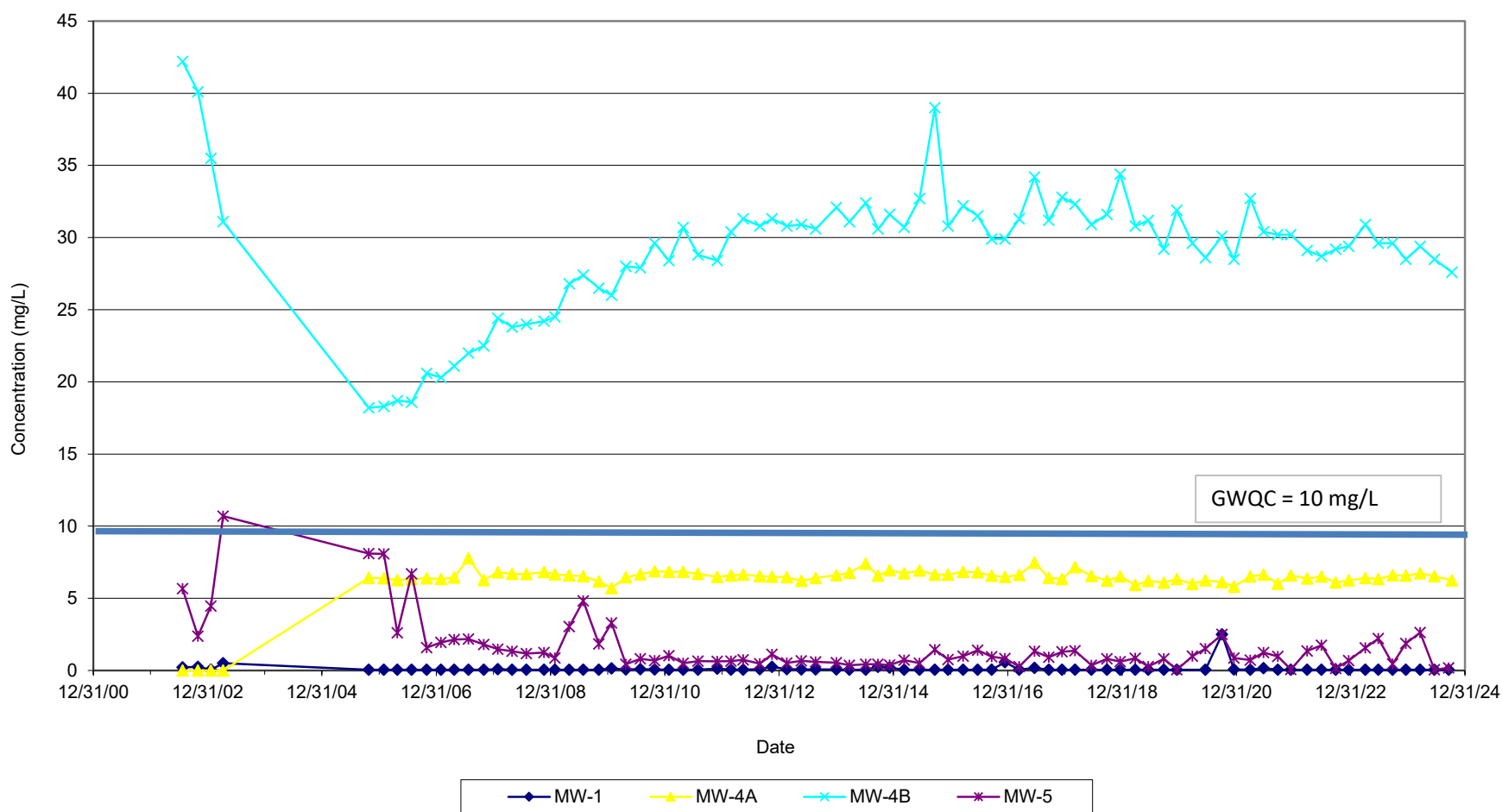
mg/L = milligrams per liter

Monitoring well MW-2 was abandoned April 2017

SIMPLOT FEEDERS LIMITED PARTNERSHIP
WALLULA, WASHINGTON**THIRD QUARTER 2024 WATER QUALITY
MONITORING REPORT****CHLORIDE
CONCENTRATIONS IN GROUNDWATER****NORTHWEST
GROUNDWATER
CONSULTANTS, LLC**

FIGURE

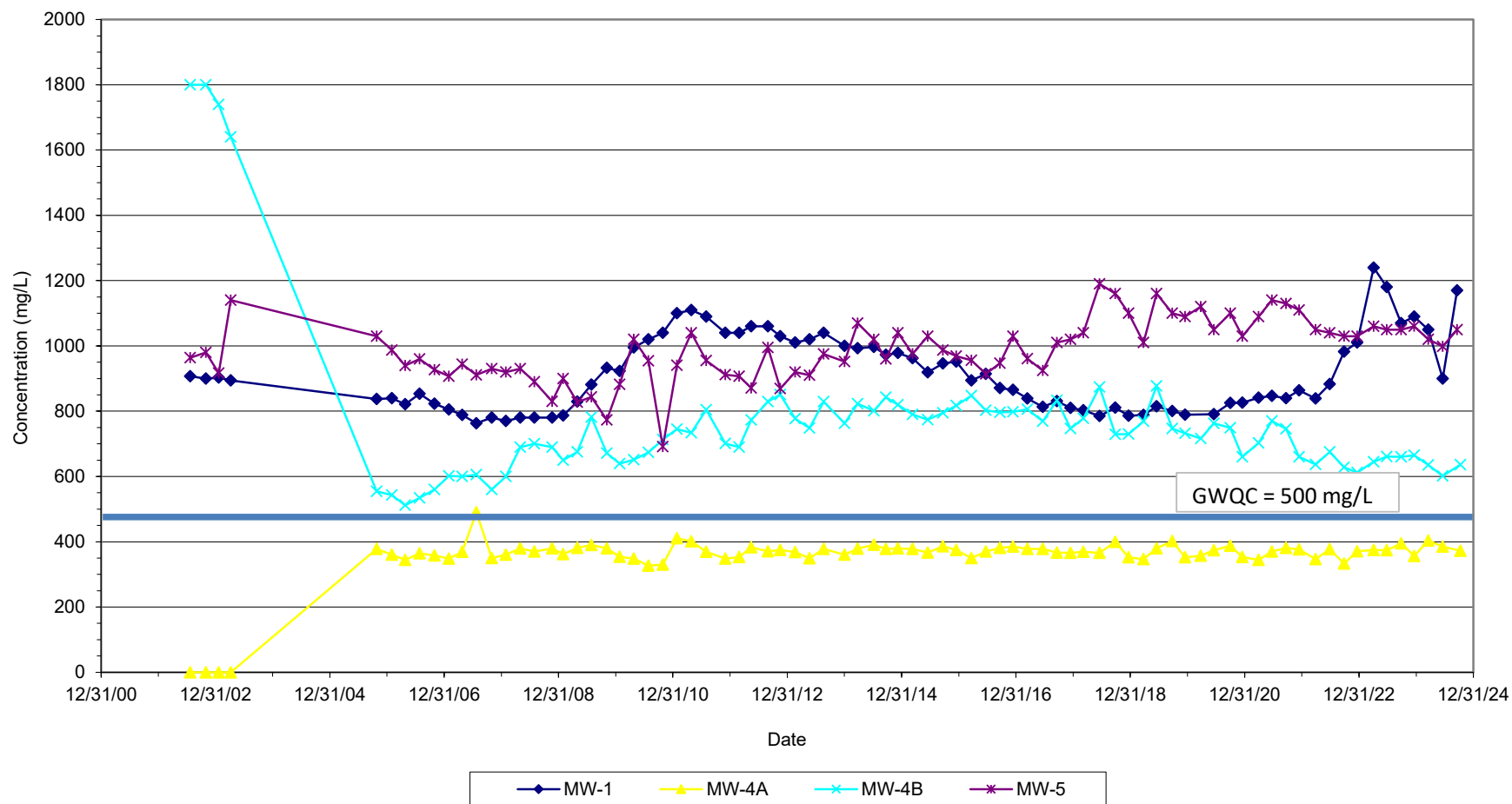
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**NOTES:**

mg/L = milligrams per liter

Monitoring well MW-2 was abandoned April 2017

SIMPLOT FEEDERS LIMITED PARTNERSHIP
WALLULA, WASHINGTON**THIRD QUARTER 2024 WATER QUALITY
MONITORING REPORT****NITRATE-NITROGEN CONCENTRATIONS
IN GROUNDWATER****NORTHWEST
GROUNDWATER
CONSULTANTS, LLC****FIGURE
8**

**NOTES:**

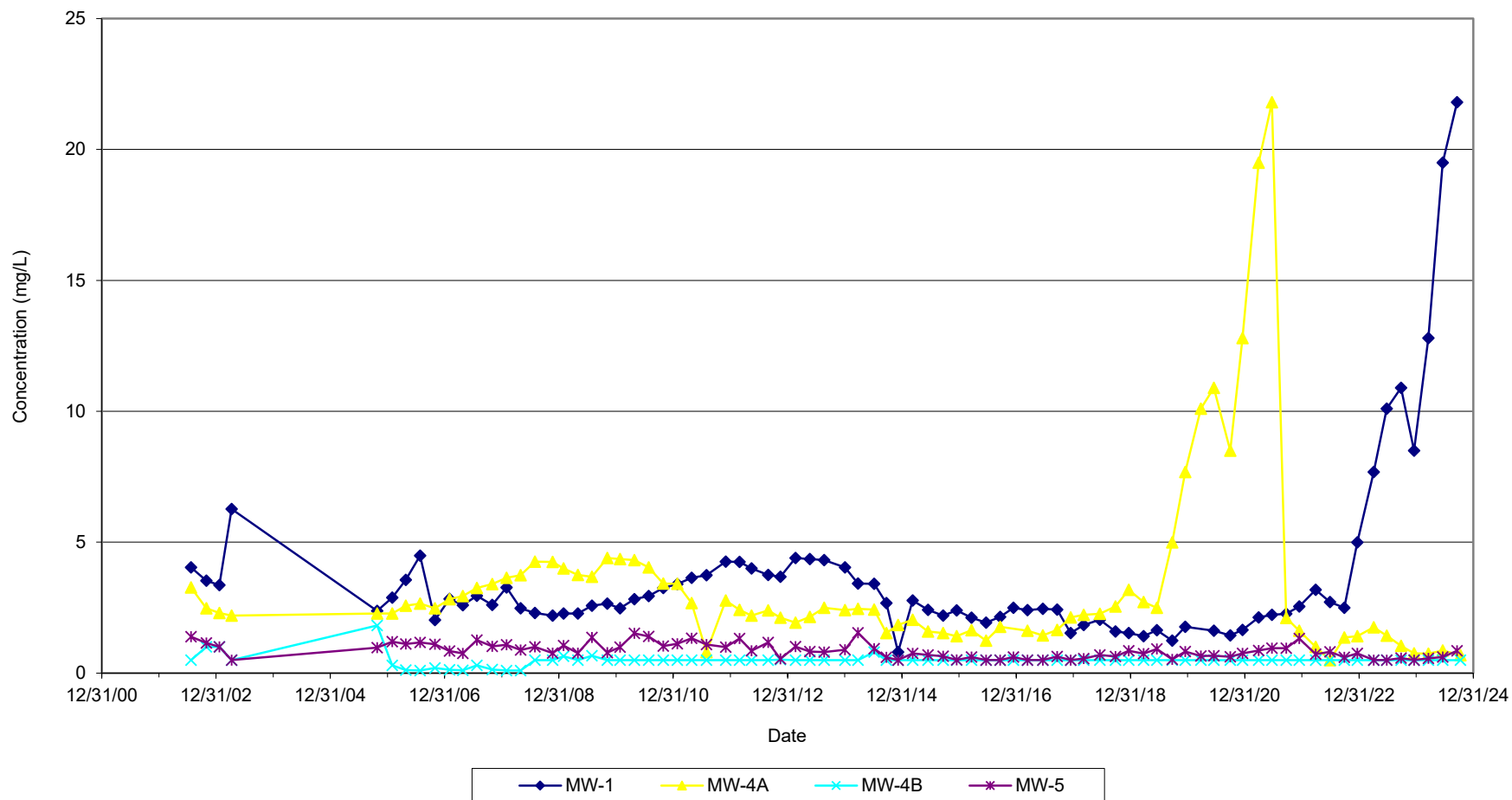
mg/L = milligrams per liter

Monitoring well MW-2 was abandoned April 2017

SIMPLOT FEEDERS LIMITED PARTNERSHIP
WALLULA, WASHINGTON**THIRD QUARTER 2024 WATER QUALITY
MONITORING REPORT****TOTAL DISSOLVED SOLIDS
CONCENTRATIONS IN GROUNDWATER****NORTHWEST
GROUNDWATER
CONSULTANTS, LLC**

FIGURE

9

**NOTES:**

mg/L = milligrams per liter

Monitoring well MW-2 was abandoned April 2017

SIMPLOT FEEDERS LIMITED PARTNERSHIP
WALLULA, WASHINGTON**THIRD QUARTER 2024 WATER QUALITY
MONITORING REPORT****TOTAL KJELDAHL NITROGEN CONCENTRATIONS
IN GROUNDWATER**NORTHWEST
GROUNDWATER
CONSULTANTS, LLCFIGURE
10

ATTACHMENTS

FIELD SAMPLING DATA SHEETS

CHAIN OF CUSTODY RECORDS

ANALYTICAL LABORATORY REPORT

DATA QA/QC REVIEW

GROUNDWATER SAMPLING RECORD

SAMPLE ID:

PAGE: 1 of 1

MW-1

Project No: 01123-01

Project Name: Simplot Feeders

Date: 9/18/24

Sampling Location (well ID, etc.): MW-1

Starting Water Level (ft. BMP): 15.40

Sampled by: TM/CS

Total Depth (ft. BMP): _____ Water Column Height (ft): _____

Measuring Point (MP) of Well: TOC

Casing Diameter (in ID): _____ Multiplication Factor: _____

Screened Interval (ft. BGL): _____

Casing Volume (gal.): _____ 2X: _____ 3X: _____ 4X: _____

Filter Pack Interval (ft. BGL): _____

Water Level (ft. BMP) at End of Purge: _____

Casing Stickup (ft.): _____

Total Depth (ft. BMP) at End of Purge: _____

QUALITY ASSURANCE

METHODS (describe):

Cleaning Equipment: Alconox detergent / distilled water rinse

Purging: Submersible pump

Sampling: Submersible pump

Disposal of Discharged Water: On site

INSTRUMENTS (indicate make, model, i.d.):

Water Level: Solinst water level meter

Thermometer: YSI flow cell

pH Meter YSI flow cell

Field Calibration: 4.00, 7.00, & 10.00 pH buffers

Conductivity Meter: YSI flow cell

Field Calibration: 1413 umhos/cm std

Filtration: None

Other: _____

SAMPLING MEASUREMENTS

Date/ Time	Purge Characteristics		Water Quality Data				Appearance		DO mgl Remarks
	Cumul. Vol. (gal)	Purge Rate (gpm)	Temp. (□C)	pH	Specific Conductance (µmhos/cm)		Color	Turbidity & Sediment	
					@ Field Temp.	@ 25□ C.			
9:09	0						lt brown	clear w/ br. flicks	
9:11	2		14.2	6.63	1983		"	"	6.74
9:12	4		14.3	6.72	1981				6.44
9:14	6		14.3	6.76	1488		"	clear	0.27

Water Level (ft. BMP) at End of Purge: _____

Sample Intake Depth (ft. BMP): _____

SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)	Remarks (quality control sample, other)
Time	Volume	Composition (glass, plastic)	Quantity			
9:15	500 mL	Plastic	1	N	none	
"	500 mL	Plastic	1	N	none	
"	250 mL	Plastic	1	N	H2SO4	

Chain-of-Custody Record No. _____

ABBREVIATIONS:

BMP - below measuring point

C - Celsius

BGL - below ground level

gal. - gallons

Cumul. Vol. - Cumulative volume removed

gpm - gallons per minute

ID - Inside Diameter

in. - inches

**NORTHWEST GROUNDWATER
CONSULTANTS, LLC**
PO Box 2951
COEUR D'ALENE, ID 83816
(208) 755-1094

GROUNDWATER SAMPLING RECORD

SAMPLE ID:

PAGE: ___ of: ___

MW-4A

Project No: 01123-01

Project Name: Simplot Feeders

Date: 10/9/24

Sampling Location (well ID, etc.): MW-4A

Starting Water Level (ft. BMP): 42.75

Sampled by: TW

Total Depth (ft. BMP): _____ Water Column Height (ft): _____

Measuring Point (MP) of Well: TOC

Casing Diameter (in ID): _____ Multiplication Factor: _____

Screened Interval (ft. BGL): _____

Casing Volume (gal.): _____ 2X: _____ 3X: _____ 4X: _____

Filter Pack Interval (ft. BGL): _____

Water Level (ft. BMP) at End of Purge: _____

Casing Stickup (ft.): _____

Total Depth (ft. BMP) at End of Purge: _____

QUALITY ASSURANCE

METHODS (describe):

Cleaning Equipment: Alconox detergent / distilled water rinse

Purging: Submersible pump

Sampling: Submersible pump

Disposal of Discharged Water: On site

INSTRUMENTS (indicate make, model, i.d.):

Water Level: Solinst water level meter

Thermometer: YSI flow cell

pH Meter YSI flow cell

Field Calibration: 4.00, 7.00, & 10.00 pH buffers

Conductivity Meter: YSI flow cell

Field Calibration: 1413 umhos/cm std

Filtration: None

Other: _____

SAMPLING MEASUREMENTS

Date/ Time	Purge Characteristics		Water Quality Data				Appearance		Remarks
	Cumul. Vol. (gal)	Purge Rate (gpm)	Temp. (°C)	pH	Specific Conductance (µmhos/cm)		Color	Turbidity & Sediment	
					@ Field Temp.	@ 25°C.			
0903	1		16.0	7.08	484.8				DO (µg/L) 2.60 2.48 2.96
0904	2		16.1	7.08	485.7				
0905	3		16.2	7.09	486.0				

Water Level (ft. BMP) at End of Purge: _____

Sample Intake Depth (ft. BMP): _____

SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)	Remarks (quality control sample, other)
Time	Volume	Composition (glass, plastic)	Quantity			
<u>0907</u>	500 mL	Plastic	1	N	none	
<u>0907</u>	500 mL	Plastic	1	N	none	
<u>0907</u>	250 mL	Plastic	1	N	H2SO4	

Chain-of-Custody Record No. _____

ABBREVIATIONS:

BMP - below measuring point

C - Celsius

BGL - below ground level

gal. - gallons

Cumul. Vol. - Cumulative volume removed

gpm - gallons per minute

ID - Inside Diameter

in. - inches

**NORTHWEST GROUNDWATER
CONSULTANTS, LLC**

PO Box 2951
COEUR D'ALENE, ID 83816
(208) 755-1094

GROUNDWATER SAMPLING RECORD

SAMPLE ID:

PAGE: ___ of: ___

MCW-4B

Project No: 01123-01

Project Name: Simplot Feeders

Date: *10/9/24*

Sampling Location (well ID, etc.): *MCW-4B*

Starting Water Level (ft. BMP): *12.63*

Sampled by: *TM*

Total Depth (ft. BMP): _____ Water Column Height (ft): _____

Measuring Point (MP) of Well: TOC

Casing Diameter (in ID): _____ Multiplication Factor: _____

Screened Interval (ft. BGL): _____

Casing Volume (gal.): _____ 2X: _____ 3X: _____ 4X: _____

Filter Pack Interval (ft. BGL): _____

Water Level (ft. BMP) at End of Purge: _____

Casing Stickup (ft.): _____

Total Depth (ft. BMP) at End of Purge: _____

QUALITY ASSURANCE

METHODS (describe):

Cleaning Equipment: Alconox detergent / distilled water rinse

Purging: Submersible pump

Sampling: Submersible pump

Disposal of Discharged Water: On site

INSTRUMENTS (indicate make, model, i.d.):

Water Level: Solinst water level meter

Thermometer: YSI flow cell

pH Meter YSI flow cell

Field Calibration: 4.00, 7.00, & 10.00 pH buffers

Conductivity Meter: YSI flow cell

Field Calibration: 1413 umhos/cm std

Filtration: None

Other: _____

SAMPLING MEASUREMENTS

Date/ Time	Purge Characteristics		Water Quality Data				Appearance		Remarks DO (mg/L)
	Cumul. Vol. (gal)	Purge Rate (gpm)	Temp. (°C)	pH	Specific Conductance (µmhos/cm)		Color	Turbidity & Sediment	
					@ Field Temp.	@ 25° C.			
0844	2		15.1	6.89	860				5.51
0845	4		15.0	7.01	859				6.10
0846	6		15.0	7.08	855				7.42
0847	8		15.1	7.11	854				8.02

Water Level (ft. BMP) at End of Purge: _____

Sample Intake Depth (ft. BMP): _____

SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)	Remarks (quality control sample, other)
Time	Volume	Composition (glass, plastic)	Quantity			
<i>0849</i>	<i>1L</i>	Plastic	1	N	none	
	500 mL	Plastic	1	N	none	
	250 mL	Plastic	1	N	H2SO4	

Chain-of-Custody Record No. _____

ABBREVIATIONS:

BMP - below measuring point

C - Celsius

BGL - below ground level

gal. - gallons

Cumul. Vol. - Cumulative volume removed

gpm - gallons per minute

ID - Inside Diameter

in. - inches

**NORTHWEST GROUNDWATER
CONSULTANTS, LLC**

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GROUNDWATER SAMPLING RECORD

SAMPLE ID:

PAGE: 1 of 1

MW-5

Project No: 01123-01

Project Name: Simplot Feeders

Date: 9/18/24

Sampling Location (well ID, etc.): MW-5

Starting Water Level (ft. BMP): 28.74

Sampled by: CS/SM

Total Depth (ft. BMP): _____ Water Column Height (ft): _____

Measuring Point (MP) of Well: TOC

Casing Diameter (in ID): _____ Multiplication Factor: _____

Screened Interval (ft. BGL): _____

Casing Volume (gal.): _____ 2X: _____ 3X: _____ 4X: _____

Filter Pack Interval (ft. BGL): _____

Water Level (ft. BMP) at End of Purge: _____

Casing Stickup (ft.): _____

Total Depth (ft. BMP) at End of Purge: _____

QUALITY ASSURANCE

METHODS (describe):

Cleaning Equipment: Alconox detergent / distilled water rinse

Purging: Submersible pump

Sampling: Submersible pump

Disposal of Discharged Water: On site

INSTRUMENTS (indicate make, model, i.d.):

Water Level: Solinst water level meter

Thermometer: YSI flow cell

pH Meter YSI flow cell

Field Calibration: 4.00, 7.00, & 10.00 pH buffers

Conductivity Meter: YSI flow cell

Field Calibration: 1413 umhos/cm std

Filtration: None

Other: _____

SAMPLING MEASUREMENTS

Date/ Time	Purge Characteristics		Water Quality Data				Appearance		DO Remarks (mg/L)
	Cumul.Vol. (gal)	Purge Rate (gpm)	Temp. (°C)	pH	Specific Conductance (µmhos/cm)		Color	Turbidity & Sediment	
					@ Field Temp.	@ 25°C.			
8:20	0		6.95	6.95	1727	-	clear	white flecks	Start
8:25	2		17.1	6.95	1727		"	"	1.36
8:29	4		17.2	6.97	1731		"	"	1.01
8:31	6		17.2	6.76	1749		"	"	1.56
8:34	8		17.2	6.96	1765		"	"	0.58

Water Level (ft. BMP) at End of Purge: _____

Sample Intake Depth (ft. BMP): _____

SAMPLE INVENTORY

Bottles Collected				Filtration (Y/N)	Preservation (type)	Remarks (quality control sample, other)
Time	Volume	Composition (glass, plastic)	Quantity			
<u>8:34</u>	500 mL	Plastic	1	N	none	
<u>8:34</u>	500 mL	Plastic	1	N	none	
<u>8:34</u>	250 mL	Plastic	1	N	H2SO4	

Chain-of-Custody Record No. _____

ABBREVIATIONS:

BMP - below measuring point

C - Celsius

BGL - below ground level

gal. - gallons

Cumul. Vol. - Cumulative volume removed

gpm - gallons per minute

ID - Inside Diameter

in. - inches

**NORTHWEST GROUNDWATER
CONSULTANTS, LLC**

PO Box 2951

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SURFACE WATER SAMPLING RECORD					LOCATION NUMBER: <u>Small Lagoon</u>			
Project No: <u>01123-01</u>		Project Name: <u>Simplot Feeders</u>			Page <u>1</u> of: <u> </u>			
Sampled by: <u>CS/tm</u>				Date: <u>9/18/24</u>				
Weather (when sampling) <u>windy sunny</u>				Weather (past 48 hrs.) <u> </u>				
Sampling Location (ID, description): <u>small lagoon</u>								
Water Body (describe type, flow): <u>N/A</u>								
QUALITY ASSURANCE								
METHODS (describe):								
Cleaning Equipment: <u>Alconox detergent / distilled water rinse</u>								
Sampling: <u>Telescoping pole with sample jar</u>								
INSTRUMENTS (indicate make, model, i.d.):								
Flow Measurement: <u> </u>				Thermometer: <u>YSI flow cell</u>				
pH Meter: <u>YSI flow cell</u>				Field Calibration: <u>4.00, 7.00, & 10.00 pH buffers</u>				
Conductivity Meter: <u>YSI flow cell</u>				Field Calibration: <u>1413 umhos/cm std.</u>				
Filtration: <u>None</u>				Other: <u> </u>				
SAMPLING MEASUREMENTS								
Time	Sampling Depth (ft.)	Water Quality Data				Appearance		Remarks (debris, sheen, etc.)
		Temp. (°C)	pH	Specific Conductance (umhos/cm)		Color	Turbidity & Sediment	
8:49	N/A	17.3	4.71	2577	@ Field Temp	@ 25° C	brown cloudy	mg/L DB 1.38 Strong ammonia odor
Flow @ Sampling Point (units): <u> </u>				Total Depth @ Sampling Point (Ft.): <u> </u>				
SAMPLING INVENTORY								
Bottles Collected				Filtere d (Y/N)	Preser ved (type)	Analysis	Remarks (natural, dups, blanks, QC)	
Date/Time	Sample ID	Container (glass, plastic)	Quantity/ Vol.					
9/18/24	SL	Plastic	500 mL	N	none			
" 8:49	SL	Plastic	500 mL	N	none			
"	"	Plastic	250 mL	N	H2SO4			
"	"	Plastic	500 mL	N	HNO3			
SAMPLING LOCATION MAP								
(reference permanent landmarks, indicate scale, approx. North, direction of flow)								
Chain-of-Custody Record No. <u> </u>						NORTHWEST GROUNDWATER CONSULTANTS, LLC PO Box 2951 Coeur d'Alene, ID 83816 (208) 755-1094		
ABBREVIATIONS:								
ft. - feet			C - Celsius					
cfs - cubic feet per second			gal. - gallons					
gpm - gallons per minute								

SURFACE WATER SAMPLING RECORD					LOCATION NUMBER: <u>Large Lagoon</u>			
Project No: <u>01123-01</u>		Project Name: <u>Simplot Feeders</u>			Page <u>1</u> of <u>1</u>			
Sampled by: <u>TM/CT</u>				Date: <u>9/18/24</u>				
Weather (when sampling): _____				Weather (past 48 hrs.): _____				
Sampling Location (ID, description): <u>Large Lagoon</u>								
Water Body (describe type, flow): <u>NA</u>								
QUALITY ASSURANCE								
METHODS (describe):								
Cleaning Equipment: <u>Alconox detergent / distilled water rinse</u>								
Sampling: <u>Telescoping pole with sample jar</u>								
INSTRUMENTS (indicate make, model, i.d.):								
Flow Measurement: _____				Thermometer: <u>YSI flow cell</u>				
pH Meter: <u>YSI flow cell</u>				Field Calibration: <u>4.00, 7.00, & 10.00 pH buffers</u>				
Conductivity Meter: <u>YSI flow cell</u>				Field Calibration: <u>1413 umhos/cm std.</u>				
Filtration: <u>None</u>				Other: _____				
SAMPLING MEASUREMENTS								
Time	Sampling Depth (ft.)	Water Quality Data				Appearance		Remarks (debris, sheen, etc.)
		Temp. (°C)	pH	Specific Conductance (umhos/cm)		Color	Turbidity & Sediment	
				@ Field Temp	@ 25° C			
9:29	NA	15.9	5.28	2153		dk brown		DO 1.5 mg/L 2.41
Flow @ Sampling Point (units): _____					Total Depth @ Sampling Point (Ft.): _____			
SAMPLING INVENTORY								
Bottles Collected				Filtere d (Y/N)	Preser ved (type)	Analysis	Remarks (natural, dups, blanks, QC)	
Date/Time	Sample ID	Container (glass, plastic)	Quantity/ Vol.					
9:29	LL	Plastic	500 mL	N	none			
"	LL	Plastic	500 mL	N	none			
"	LL	Plastic	250 mL	N	H2SO4			
"	LL	Plastic	500 mL	N	HNO3			
SAMPLING LOCATION MAP								
(reference permanent landmarks, indicate scale, approx. North, direction of flow)								
Chain-of-Custody Record No. _____						NORTHWEST GROUNDWATER CONSULTANTS, LLC PO Box 2951 Coeur d'Alene, ID 83816 (208) 755-1094		
ABBREVIATIONS:								
ft. - feet			C - Celsius					
cfs - cubic feet per second			gal. - gallons					
gpm - gallons per minute								

SAMPLE RECEIPT/CHAIN-OF-CUSTODY CHECKLIST

The following items were checked for completeness, correctness, and compliance to project specifications using the Chain-of-Custody (COC) and other supporting information.

Date of acceptance: 9/18/24

By: MB

SVL Work No: X410307

Item	Description	V	NA	Comments
1	Client or project name	✓		Northwest Groundwater
2	Date and time of receipt at lab	✓		9/18/24 1530
3	Received by	✓		MB
4	Temperature blank or cooler temperature	✓		Temp 1.0 °C T098/T126
5	Were the sample(s) received on ice	✓		
6	Custody tape/bottle seals		✓	
7	Shipper's air bill	✓	✓	RD
8	Condition of samples upon receipt (leaking; bubbles in VOA vials)	✓		good
9	Analysis requested for each sample	✓		
10	Sample matrix description	✓		
11	The correct preservative for the analysis requested	✓		
12	Did an SVL employee preserve sample(s) upon receipt		✓	
13	Additional Information		✓	

V- Verified NA- Not Applicable

Comments:

SAMPLE RECEIPT/CHAIN-OF-CUSTODY CHECKLIST

The following items were checked for completeness, correctness, and compliance to project specifications using the Chain-of-Custody (COC) and other supporting information.

Date of acceptance: 10/9/24 By: MB

SVL Work No: X450203

Item	Description	V	NA	Comments
1	Client or project name	✓		NW GC
2	Date and time of receipt at lab	✓		10/9/24 1450
3	Received by	✓		MB
4	Temperature blank or cooler temperature	✓		Temp. 5.5°C T098/T126
5	Were the sample(s) received on ice	✓		
6	Custody tape/bottle seals		✓	
7	Shipper's air bill		✓	RD
8	Condition of samples upon receipt (leaking; bubbles in VOA vials)	✓		good
9	Analysis requested for each sample	✓		
10	Sample matrix description	✓		
11	The correct preservative for the analysis requested	✓		
12	Did an SVL employee preserve sample(s) upon receipt		✓	
13	Additional Information		✓	

V- Verified NA- Not Applicable

Comments:



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Kellogg, ID 83837-0929

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Northwest Groundwater Consulting
2660 E. Thomas Hill Road
Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023
Work Order: **X4I0307**
Reported: 08-Oct-24 17:55

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
MW-1	X4I0307-01	Ground Water	18-Sep-24 09:15	TM	18-Sep-2024	
MW-5	X4I0307-02	Ground Water	18-Sep-24 08:34	TM	18-Sep-2024	
Small Lagoon	X4I0307-03	Ground Water	18-Sep-24 08:49	TM	18-Sep-2024	
Large Lagoon	X4I0307-04	Ground Water	18-Sep-24 09:29	TM	18-Sep-2024	
Trip Blank	X4I0307-05	Trip Blank-Water	18-Sep-24 00:00	TM	18-Sep-2024	

Sample preparation is defined by the client as per their Data Quality Objectives.

This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.

Analyses were performed in accordance with SVL standard operating procedures and calibrations were performed and met SVL internal QC criteria.

The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Case Narrative: X4I0307

The state of origin only accredits for drinking water analyses.



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Northwest Groundwater Consulting

2660 E. Thomas Hill Road

Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023

Work Order: **X410307**

Reported: 08-Oct-24 17:55

Client Sample ID: **MW-1**

SVL Sample ID: **X410307-01 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 18-Sep-24 09:15

Received: 18-Sep-24

Sampled By: TM

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
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Classical Chemistry Parameters

EPA 350.1	Ammonia as N	19.7	mg/L	0.600	0.254	20	X438186	DD	09/23/24 12:24	
EPA 351.2	TKN	21.8	mg/L	2.50	1.54	5	X439135	DD	10/02/24 12:48	M4
SM 2540 C	Total Diss. Solids	1170	mg/L	40			X438139	TJL	09/20/24 13:05	

Anions by Ion Chromatography

EPA 300.0	Chloride	188	mg/L	10.0	1.10	50	X438119	RS	09/19/24 01:12	
EPA 300.0	Nitrate as N	< 0.050	mg/L	0.050	0.013		X438119	RS	09/19/24 00:56	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X438119	RS	09/19/24 00:56	

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon
Project Manager



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Northwest Groundwater Consulting

2660 E. Thomas Hill Road

Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023

Work Order: **X410307**

Reported: 08-Oct-24 17:55

Client Sample ID: **MW-5**

SVL Sample ID: **X410307-02 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 18-Sep-24 08:34

Received: 18-Sep-24

Sampled By: TM

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
--------	---------	--------	-------	----	-----	----------	-------	---------	----------	-------

Classical Chemistry Parameters

EPA 350.1	Ammonia as N	0.170	mg/L	0.030	0.013		X438186	DD	09/23/24 12:26	
EPA 351.2	TKN	0.85	mg/L	0.50	0.31		X439135	DD	10/02/24 12:51	
SM 2540 C	Total Diss. Solids	1050	mg/L	10			X438139	TJL	09/20/24 13:05	

Anions by Ion Chromatography

EPA 300.0	Chloride	209	mg/L	10.0	1.10	50	X438119	RS	09/19/24 01:44	
EPA 300.0	Nitrate as N	0.188	mg/L	0.050	0.013		X438119	RS	09/19/24 01:28	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X438119	RS	09/19/24 01:28	

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon
Project Manager



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Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023

Work Order: **X410307**

Reported: 08-Oct-24 17:55

Client Sample ID: **Small Lagoon**

Sampled: 18-Sep-24 08:49

Received: 18-Sep-24

Sampled By: TM

SVL Sample ID: **X410307-03 (Ground Water)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable--reportable as Total per 40 CFR 136)										
EPA 200.7	Calcium	94.9	mg/L	1.00	0.690	10	X439103	SJN	09/30/24 12:39	D11
EPA 200.7	Magnesium	43.2	mg/L	5.00	0.900	10	X439103	SJN	09/30/24 12:39	D11
EPA 200.7	Potassium	260	mg/L	5.00	1.80	10	X439103	SJN	09/30/24 12:39	D11
EPA 200.7	Sodium	61.7	mg/L	5.00	1.20	10	X439103	SJN	09/30/24 12:39	D11

Classical Chemistry Parameters

EPA 350.1	Ammonia as N	112	mg/L	6.00	2.54	200	X438186	DD	09/23/24 12:29	
EPA 351.2	TKN	142	mg/L	5.00	3.07	10	X439135	DD	10/02/24 12:53	
SM 2540 C	Total Diss. Solids	1450	mg/L	40			X438139	TJL	09/20/24 13:05	
SM 4500-P-E	Phosphorus	68.4	mg/L	1.00	0.337	100	X440059	ORW	10/01/24 12:51	

Anions by Ion Chromatography

EPA 300.0	Chloride	86.7	mg/L	10.0	1.10	50	X438119	RS	09/19/24 02:47	
EPA 300.0	Nitrate as N	< 0.050	mg/L	0.050	0.013		X438119	RS	09/19/24 02:31	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X438119	RS	09/19/24 02:31	

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon
Project Manager



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Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023

Work Order: **X410307**

Reported: 08-Oct-24 17:55

Client Sample ID: **Large Lagoon**

SVL Sample ID: **X410307-04 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 18-Sep-24 09:29

Received: 18-Sep-24

Sampled By: TM

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
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Metals (Total Recoverable--reportable as Total per 40 CFR 136)

EPA 200.7	Calcium	122	mg/L	1.00	0.690	10	X439103	SJN	09/30/24 12:42	D11
EPA 200.7	Magnesium	41.2	mg/L	5.00	0.900	10	X439103	SJN	09/30/24 12:42	D11
EPA 200.7	Potassium	223	mg/L	5.00	1.80	10	X439103	SJN	09/30/24 12:42	D11
EPA 200.7	Sodium	57.8	mg/L	5.00	1.20	10	X439103	SJN	09/30/24 12:42	D11

Classical Chemistry Parameters

EPA 350.1	Ammonia as N	96.1	mg/L	6.00	2.54	200	X438186	DD	09/23/24 12:31	
EPA 351.2	TKN	111	mg/L	5.00	3.07	10	X439135	DD	10/02/24 12:55	
SM 2540 C	Total Diss. Solids	1650	mg/L	40			X438139	TJL	09/20/24 13:05	
SM 4500-P-E	Phosphorus	63.2	mg/L	1.00	0.337	100	X440059	ORW	10/01/24 12:52	

Anions by Ion Chromatography

EPA 300.0	Chloride	80.7	mg/L	10.0	1.10	50	X438119	RS	09/19/24 03:19	
EPA 300.0	Nitrate as N	< 0.050	mg/L	0.050	0.013		X438119	RS	09/19/24 03:03	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X438119	RS	09/19/24 03:03	

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon
Project Manager



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Project Name: Simplot Feeders 2023

Work Order: **X410307**

Reported: 08-Oct-24 17:55

Client Sample ID: **Trip Blank**

Sampled: 18-Sep-24 00:00

Received: 18-Sep-24

Sampled By: TM

SVL Sample ID: **X410307-05 (Trip Blank-Water)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
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Classical Chemistry Parameters

SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X438139	TJL	09/20/24 13:05	
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Anions by Ion Chromatography

EPA 300.0	Chloride	< 0.20	mg/L	0.20	0.02		X438119	RS	09/19/24 03:35	
EPA 300.0	Nitrate as N	< 0.050	mg/L	0.050	0.013		X438119	RS	09/19/24 03:35	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X438119	RS	09/19/24 03:35	

This data has been reviewed for accuracy and has been authorized for release.

Dave Tryon
Project Manager

**Northwest Groundwater Consulting**

2660 E. Thomas Hill Road

Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023Work Order: **X410307**

Reported: 08-Oct-24 17:55

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
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Metals (Total Recoverable--reportable as Total per 40 CFR 136)

EPA 200.7	Calcium	mg/L	<0.100	0.069	0.100	X439103	30-Sep-24	
EPA 200.7	Magnesium	mg/L	<0.500	0.090	0.500	X439103	30-Sep-24	
EPA 200.7	Potassium	mg/L	<0.50	0.18	0.50	X439103	30-Sep-24	
EPA 200.7	Sodium	mg/L	<0.50	0.12	0.50	X439103	30-Sep-24	

Classical Chemistry Parameters

EPA 350.1	Ammonia as N	mg/L	<0.030	0.013	0.030	X438186	23-Sep-24	
EPA 351.2	TKN	mg/L	<0.50	0.31	0.50	X439135	02-Oct-24	
SM 2540 C	Total Diss. Solids	mg/L	<10		10	X438139	20-Sep-24	
SM 4500-P-E	Phosphorus	mg/L	<0.0100	0.0034	0.0100	X440059	01-Oct-24	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	<0.20	0.02	0.20	X438119	18-Sep-24	
EPA 300.0	Nitrate as N	mg/L	<0.050	0.013	0.050	X438119	18-Sep-24	
EPA 300.0	Nitrite as N	mg/L	<0.050	0.031	0.050	X438119	18-Sep-24	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
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Metals (Total Recoverable--reportable as Total per 40 CFR 136)

EPA 200.7	Calcium	mg/L	19.2	20.0	96	85 - 115	X439103	30-Sep-24	
EPA 200.7	Magnesium	mg/L	19.6	20.0	97.9	85 - 115	X439103	30-Sep-24	
EPA 200.7	Potassium	mg/L	19.4	20.0	97.0	85 - 115	X439103	30-Sep-24	
EPA 200.7	Sodium	mg/L	18.4	19.0	96.7	85 - 115	X439103	30-Sep-24	

Classical Chemistry Parameters

EPA 350.1	Ammonia as N	mg/L	0.968	1.00	96.8	90 - 110	X438186	23-Sep-24	
EPA 351.2	TKN	mg/L	7.92	8.00	99.0	90 - 110	X439135	02-Oct-24	
SM 4500-P-E	Phosphorus	mg/L	0.525	0.500	105	90 - 110	X440059	01-Oct-24	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	2.98	3.00	99.5	90 - 110	X438119	18-Sep-24	
EPA 300.0	Nitrate as N	mg/L	1.96	2.00	97.8	90 - 110	X438119	18-Sep-24	
EPA 300.0	Nitrite as N	mg/L	2.49	2.50	99.7	90 - 110	X438119	18-Sep-24	

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch and Source ID	Analyzed	Notes
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Classical Chemistry Parameters

SM 2540 C	Total Diss. Solids	mg/L	230	233	1.3	10	X438139 - X410278-01	20-Sep-24	
SM 2540 C	Total Diss. Solids	mg/L	357	358	0.3	10	X438139 - X410288-01	20-Sep-24	

**Northwest Groundwater Consulting**

2660 E. Thomas Hill Road

Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023Work Order: **X4I0307**

Reported: 08-Oct-24 17:55

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch and Source ID	Analyzed	Notes
Metals (Total Recoverable--reportable as Total per 40 CFR 136)										
EPA 200.7	Calcium	mg/L	36.7	17.2	20.0	98	70 - 130	X439103 - X4I0274-01	30-Sep-24	
EPA 200.7	Calcium	mg/L	24.5	4.69	20.0	99	70 - 130	X439103 - X4I0330-01	30-Sep-24	
EPA 200.7	Magnesium	mg/L	21.7	1.82	20.0	99.3	70 - 130	X439103 - X4I0274-01	30-Sep-24	
EPA 200.7	Magnesium	mg/L	20.4	<0.500	20.0	100	70 - 130	X439103 - X4I0330-01	30-Sep-24	
EPA 200.7	Potassium	mg/L	21.9	2.42	20.0	97.4	70 - 130	X439103 - X4I0274-01	30-Sep-24	
EPA 200.7	Potassium	mg/L	20.3	<0.50	20.0	99.5	70 - 130	X439103 - X4I0330-01	30-Sep-24	
EPA 200.7	Sodium	mg/L	22.4	3.94	19.0	97.4	70 - 130	X439103 - X4I0274-01	30-Sep-24	
EPA 200.7	Sodium	mg/L	19.5	0.65	19.0	99.2	70 - 130	X439103 - X4I0330-01	30-Sep-24	

Classical Chemistry Parameters

EPA 350.1	Ammonia as N	mg/L	1.16	0.063	1.00	110	90 - 110	X438186 - X4I0277-01	23-Sep-24	
EPA 350.1	Ammonia as N	mg/L	1.14	<0.030	1.00	112	90 - 110	X438186 - X4I0278-01	23-Sep-24	M1
EPA 351.2	TKN	mg/L	25.5	21.8	8.00	46.4	90 - 110	X439135 - X4I0307-01	02-Oct-24	M4
EPA 351.2	TKN	mg/L	8.63	0.85	8.00	97.3	90 - 110	X439135 - X4I0307-02	02-Oct-24	
SM 4500-P-E	Phosphorus	mg/L	0.527	0.0138	0.500	103	75 - 125	X440059 - X4I0358-01	01-Oct-24	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	8.17	5.10	3.00	102	90 - 110	X438119 - X4I0280-01	18-Sep-24	
EPA 300.0	Chloride	mg/L	3.39	0.40	3.00	99.5	90 - 110	X438119 - X4I0306-01	19-Sep-24	
EPA 300.0	Nitrate as N	mg/L	2.59	0.622	2.00	98.4	90 - 110	X438119 - X4I0280-01	18-Sep-24	
EPA 300.0	Nitrate as N	mg/L	1.96	<0.050	2.00	98.0	90 - 110	X438119 - X4I0306-01	19-Sep-24	
EPA 300.0	Nitrite as N	mg/L	2.01	<0.050	2.00	100	90 - 110	X438119 - X4I0280-01	18-Sep-24	
EPA 300.0	Nitrite as N	mg/L	2.04	<0.050	2.00	102	90 - 110	X438119 - X4I0306-01	19-Sep-24	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	RPD	RPD Limit	% Recovery	Batch and Source ID	Notes
Metals (Total Recoverable--reportable as Total per 40 CFR 136)										
EPA 200.7	Calcium	mg/L	36.3	36.7	20.0	1.0	20	96	X439103 - X4I0274-01	
EPA 200.7	Magnesium	mg/L	21.6	21.7	20.0	0.2	20	99.1	X439103 - X4I0274-01	
EPA 200.7	Potassium	mg/L	21.8	21.9	20.0	0.6	20	96.8	X439103 - X4I0274-01	
EPA 200.7	Sodium	mg/L	22.3	22.4	19.0	0.7	20	96.7	X439103 - X4I0274-01	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	mg/L	1.14	1.16	1.00	2.4	20	107	X438186 - X4I0277-01	
EPA 351.2	TKN	mg/L	29.4	25.5	8.00	13.9	20	94.1	X439135 - X4I0307-01	
SM 4500-P-E	Phosphorus	mg/L	0.533	0.527	0.500	1.1	20	104	X440059 - X4I0358-01	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	8.21	8.17	3.00	0.5	20	104	X438119 - X4I0280-01	
EPA 300.0	Nitrate as N	mg/L	2.61	2.59	2.00	0.9	20	99.6	X438119 - X4I0280-01	
EPA 300.0	Nitrite as N	mg/L	2.04	2.01	2.00	1.6	20	102	X438119 - X4I0280-01	



Northwest Groundwater Consulting

2660 E. Thomas Hill Road

Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023

Work Order: **X410307**

Reported: 08-Oct-24 17:55

Notes and Definitions

D11	Due to sample color, a sample dilution was performed to minimize spectral interference.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M4	The analysis of the spiked sample required a dilution such that the spike recovery calculation does not provide useful information. The LCS recovery was acceptable.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
0.30R>S	% recovery not applicable; spike level is less than 30% of the sample concentration
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable



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Northwest Groundwater Consulting
2660 E. Thomas Hill Road
Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023
Work Order: **X4J0203**
Reported: 23-Oct-24 12:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
MW-4A	X4J0203-01	Ground Water	09-Oct-24 09:07	TM	09-Oct-2024	
MW-4B	X4J0203-02	Ground Water	09-Oct-24 08:49	TM	09-Oct-2024	
DUP-1	X4J0203-03	Ground Water	09-Oct-24 12:00	TM	09-Oct-2024	

Sample preparation is defined by the client as per their Data Quality Objectives.

This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.

Analyses were performed in accordance with SVL standard operating procedures and calibrations were performed and met SVL internal QC criteria.

The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of SVL Analytical, Inc.

Case Narrative: X4J0203

The state of origin only accredits for drinking water analyses.



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Northwest Groundwater Consulting
2660 E. Thomas Hill Road
Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023

Work Order: **X4J0203**

Reported: 23-Oct-24 12:49

Client Sample ID: **MW-4A**

Sampled: 09-Oct-24 09:07

Received: 09-Oct-24

Sampled By: TM

SVL Sample ID: **X4J0203-01 (Ground Water)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
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Classical Chemistry Parameters

EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X441162	JPM	10/11/24 12:58	
EPA 351.2	TKN	< 0.50	mg/L	0.50	0.31		X441150	JPM	10/15/24 12:06	
SM 2540 C	Total Diss. Solids	372	mg/L	10			X441159	TJL	10/14/24 13:30	

Anions by Ion Chromatography

EPA 300.0	Chloride	26.4	mg/L	2.00	0.22	10	X441135	RS	10/10/24 00:19	
EPA 300.0	Nitrate as N	6.25	mg/L	0.050	0.013		X441135	RS	10/10/24 00:03	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X441135	RS	10/10/24 00:03	

This data has been reviewed for accuracy and has been authorized for release.

Tawnya M. Hall
Project Manager Assistant



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2660 E. Thomas Hill Road

Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023

Work Order: **X4J0203**

Reported: 23-Oct-24 12:49

Client Sample ID: **MW-4B**

Sampled: 09-Oct-24 08:49

Received: 09-Oct-24

Sampled By: TM

SVL Sample ID: **X4J0203-02 (Ground Water)**

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
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Classical Chemistry Parameters

EPA 350.1	Ammonia as N	0.047	mg/L	0.030	0.013		X441162	JPM	10/11/24 13:01	
EPA 351.2	TKN	< 0.50	mg/L	0.50	0.31		X441150	JPM	10/15/24 12:18	
SM 2540 C	Total Diss. Solids	636	mg/L	10			X441159	TJL	10/14/24 13:30	

Anions by Ion Chromatography

EPA 300.0	Chloride	120	mg/L	2.00	0.22	10	X441135	RS	10/10/24 00:51	
EPA 300.0	Nitrate as N	27.6	mg/L	0.500	0.130	10	X441135	RS	10/10/24 00:51	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X441135	RS	10/10/24 00:35	

This data has been reviewed for accuracy and has been authorized for release.

Tawnya M. Hall

Project Manager Assistant



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Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023

Work Order: **X4J0203**

Reported: 23-Oct-24 12:49

Client Sample ID: **DUP-1**

SVL Sample ID: **X4J0203-03 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 09-Oct-24 12:00

Received: 09-Oct-24

Sampled By: TM

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
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Classical Chemistry Parameters

EPA 350.1	Ammonia as N	0.059	mg/L	0.030	0.013		X441162	JPM	10/11/24 13:13	
EPA 351.2	TKN	< 0.50	mg/L	0.50	0.31		X441150	JPM	10/15/24 12:20	
SM 2540 C	Total Diss. Solids	647	mg/L	10			X441159	TJL	10/14/24 13:30	

Anions by Ion Chromatography

EPA 300.0	Chloride	118	mg/L	5.00	0.55	25	X441135	RS	10/10/24 01:22	
EPA 300.0	Nitrate as N	27.2	mg/L	1.25	0.325	25	X441135	RS	10/10/24 01:22	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X441135	RS	10/10/24 01:07	

This data has been reviewed for accuracy and has been authorized for release.

Tawnya M. Hall

Project Manager Assistant

**Northwest Groundwater Consulting**

2660 E. Thomas Hill Road

Coeur d Alene, ID 83815

Project Name: Simplot Feeders 2023Work Order: **X4J0203**

Reported: 23-Oct-24 12:49

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
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Classical Chemistry Parameters

EPA 350.1	Ammonia as N	mg/L	<0.030	0.013	0.030	X441162	11-Oct-24	
EPA 351.2	TKN	mg/L	<0.50	0.31	0.50	X441150	15-Oct-24	
SM 2540 C	Total Diss. Solids	mg/L	<10		10	X441159	14-Oct-24	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	<0.20	0.02	0.20	X441135	09-Oct-24	
EPA 300.0	Nitrate as N	mg/L	<0.050	0.013	0.050	X441135	09-Oct-24	
EPA 300.0	Nitrite as N	mg/L	<0.050	0.031	0.050	X441135	09-Oct-24	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
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Classical Chemistry Parameters

EPA 350.1	Ammonia as N	mg/L	1.01	1.00	101	90 - 110	X441162	11-Oct-24	
EPA 351.2	TKN	mg/L	8.08	8.00	101	90 - 110	X441150	15-Oct-24	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	2.91	3.00	97.2	90 - 110	X441135	09-Oct-24	
EPA 300.0	Nitrate as N	mg/L	1.96	2.00	98.0	90 - 110	X441135	09-Oct-24	
EPA 300.0	Nitrite as N	mg/L	2.48	2.50	99.4	90 - 110	X441135	09-Oct-24	

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch and Source ID	Analyzed	Notes
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Classical Chemistry Parameters

SM 2540 C	Total Diss. Solids	mg/L	258	274	6.0	10	X441159 - X4J0217-02	14-Oct-24	
SM 2540 C	Total Diss. Solids	mg/L	296	289	2.4	10	X441159 - X4J0210-01	14-Oct-24	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch and Source ID	Analyzed	Notes
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Classical Chemistry Parameters

EPA 350.1	Ammonia as N	mg/L	1.01	<0.030	1.00	101	90 - 110	X441162 - X4J0203-01	11-Oct-24	
EPA 350.1	Ammonia as N	mg/L	1.06	0.047	1.00	102	90 - 110	X441162 - X4J0203-02	11-Oct-24	
EPA 351.2	TKN	mg/L	8.20	<0.50	8.00	103	90 - 110	X441150 - X4J0113-01	15-Oct-24	
EPA 351.2	TKN	mg/L	7.49	<0.50	8.00	93.7	90 - 110	X441150 - X4J0113-02	15-Oct-24	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	3.00	<0.20	3.00	96.6	90 - 110	X441135 - X4J0180-01	09-Oct-24	
EPA 300.0	Chloride	mg/L	3.55	0.66	3.00	96.6	90 - 110	X441135 - X4J0194-01	09-Oct-24	
EPA 300.0	Nitrate as N	mg/L	1.93	<0.050	2.00	96.7	90 - 110	X441135 - X4J0180-01	09-Oct-24	
EPA 300.0	Nitrate as N	mg/L	2.11	0.188	2.00	96.0	90 - 110	X441135 - X4J0194-01	09-Oct-24	
EPA 300.0	Nitrite as N	mg/L	2.01	<0.050	2.00	100	90 - 110	X441135 - X4J0180-01	09-Oct-24	
EPA 300.0	Nitrite as N	mg/L	2.01	<0.050	2.00	101	90 - 110	X441135 - X4J0194-01	09-Oct-24	



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Project Name: Simplot Feeders 2023

Work Order: **X4J0203**

Reported: 23-Oct-24 12:49

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	RPD	RPD Limit	% Recovery	Batch and Source ID	Notes
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	mg/L	1.01	1.01	1.00	0.7	20	101	X441162 - X4J0203-01	
EPA 351.2	TKN	mg/L	7.94	8.20	8.00	3.2	20	99.3	X441150 - X4J0113-01	
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	3.03	3.00	3.00	1.0	20	97.6	X441135 - X4J0180-01	
EPA 300.0	Nitrate as N	mg/L	1.96	1.93	2.00	1.2	20	97.9	X441135 - X4J0180-01	
EPA 300.0	Nitrite as N	mg/L	2.04	2.01	2.00	1.7	20	102	X441135 - X4J0180-01	



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Project Name: Simplot Feeders 2023

Work Order: **X4J0203**

Reported: 23-Oct-24 12:49

Notes and Definitions

LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
0.30R>S	% recovery not applicable; spike level is less than 30% of the sample concentration
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable



Analytical Results Report For:

Northwest Groundwater Consulting

Project Number:

X4I0307

Anatek Work Order:

WEI0930

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Client: Northwest Groundwater Consulting
Address: One Government Gulch
Kellogg, ID 83837
Attn: Dave Tryon

Work Order: WEI0930
Project: X4I0307
Reported: 9/30/2024 21:35

Analytical Results Report

Sample Location: X4I0307-01 (MW-1)
Lab/Sample Number: WEI0930-01 **Collect Date:** 09/18/24 09:15
Date Received: 09/19/24 15:33 **Collected By:** TM
Matrix: Ground Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
BOD	<2	mg/L	2.00	9/24/24 11:42	SCD	SM 5210 B	

Anatek Labs, Inc.

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504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Sample Location: X4I0307-02 (MW-5)
Lab/Sample Number: WEI0930-02 Collect Date: 09/18/24 08:34
Date Received: 09/19/24 15:33 Collected By: TM
Matrix: Ground Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
BOD	<2	mg/L	2.00	9/24/24 11:46	SCD	SM 5210 B	

Anatek Labs, Inc.

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Sample Location: X4I0307-03 (Small Lagoon)
Lab/Sample Number: WEI0930-03 Collect Date: 09/18/24 08:49
Date Received: 09/19/24 15:33 Collected By: TM
Matrix: Ground Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
BOD	2160	mg/L	2.00	9/24/24 13:36	SCD	SM 5210 B	

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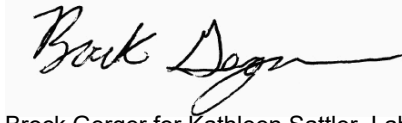
Sample Location: X4I0307-04 (Large Lagoon)
Lab/Sample Number: WEI0930-04 Collect Date: 09/18/24 09:29
Date Received: 09/19/24 15:33 Collected By: TM
Matrix: Ground Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
BOD	2120	mg/L	2.00	9/24/24 11:52	SCD	SM 5210 B	

Anatek Labs, Inc.

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504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Authorized Signature,



Brock Gerger for Kathleen Sattler, Lab Manager

PQL	Practical Quantitation Limit
ND	Not Detected
MCL	EPA's Maximum Contaminant Level
Dry	Sample results reported on a dry weight basis
*	Not a state-certified analyte

This report shall not be reproduced except in full, without the written approval of the laboratory
The results reported related only to the samples indicated.

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Quality Control Data

Inorganics

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
---------	--------	------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------

Batch: BEI0855 - W BOD

Blank (BEI0855-BLK1)					Prepared: 09/19/24 10:06- Analyzed: 09/24/24 09:04				
BOD	ND		2.00	mg/L					

LCS (BEI0855-BS1)					Prepared: 09/19/24 10:12- Analyzed: 09/24/24 09:08				
BOD	221			mg/L	198		112	84.4-116	



Subcontract Order

WEI0930



Due: 10/04/24

X4I0307**Sending Laboratory:**

SVL Analytical, Inc.
One Government Gulch
PO Box 929
Kellogg, ID 83837-0929
Phone: 208-784-1258
Project Manager: Dave Tryon

Client:

Northwest Groundwater Consulting

Project Name:

Simplot Feeders 2023

Project State of Origin:

Washington

Receiving Laboratory:

Anatek Labs (WA)
504 E Sprague Street, Suite D
Spokane, WA 99202
Phone: 509-838-3999

Report and Invoice to SVL Analytical, Inc.

Analysis	Due	HT Expires		
SVL ID: X4I0307-01 Client ID: MW-1 Sub BOD SM 5210B Containers Supplied: Raw HDPE (C)	02-Oct-24	20-Sep-24 09:15	Ground Water	Sampled: 18-Sep-24 09:15
SVL ID: X4I0307-02 Client ID: MW-5 Sub BOD SM 5210B Containers Supplied: Raw HDPE (C)	02-Oct-24	20-Sep-24 08:34	Ground Water	Sampled: 18-Sep-24 08:34
SVL ID: X4I0307-03 Client ID: Small Lagoon Sub BOD SM 5210B Containers Supplied: Raw HDPE (C)	02-Oct-24	20-Sep-24 08:49	Ground Water	Sampled: 18-Sep-24 08:49
SVL ID: X4I0307-04 Client ID: Large Lagoon Sub BOD SM 5210B Containers Supplied: Raw HDPE (C)	02-Oct-24	20-Sep-24 09:29	Ground Water	Sampled: 18-Sep-24 09:29

Relinquished by: [Signature] Date/Time: 9/19/24 Received by: [Signature] Date/Time: 9/19/24 1533
Relinquished by: _____ Date/Time: _____ Received by: _____ Date/Time: _____



Analytical Results Report For:

Northwest Groundwater Consulting

Project Number:

X4J0203

Anatek Work Order:

WEJ0547

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Client: Northwest Groundwater Consulting
Address: One Government Gulch
Kellogg, ID 83837
Attn: Dave Tryon

Work Order: WEJ0547
Project: X4J0203
Reported: 10/22/2024 14:06

Analytical Results Report

Sample Location: X4J0203-01 (MW-4A)
Lab/Sample Number: WEJ0547-01 **Collect Date:** 10/09/24 09:07
Date Received: 10/09/24 16:05 **Collected By:** TM
Matrix: Ground Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
BOD	<2	mg/L	2.00	10/15/24 10:02	SCD	SM 5210 B	

Anatek Labs, Inc.

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504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Sample Location: X4J0203-02 (MW-4B)
Lab/Sample Number: WEJ0547-02 Collect Date: 10/09/24 08:49
Date Received: 10/09/24 16:05 Collected By: TM
Matrix: Ground Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
BOD	<2	mg/L	2.00	10/15/24 10:05	SCD	SM 5210 B	

Anatek Labs, Inc.

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504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

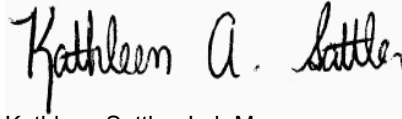
Sample Location: X4J0203-03 (DUP-1)
Lab/Sample Number: WEJ0547-03 Collect Date: 10/09/24 12:00
Date Received: 10/09/24 16:05 Collected By: TM
Matrix: Ground Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Inorganics							
BOD	<2	mg/L	2.00	10/15/24 10:05	SCD	SM 5210 B	

Anatek Labs, Inc.

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504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Authorized Signature,



Kathleen Sattler, Lab Manager

PQL	Practical Quantitation Limit
ND	Not Detected
MCL	EPA's Maximum Contaminant Level
Dry	Sample results reported on a dry weight basis
*	Not a state-certified analyte

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The results reported related only to the samples indicated.

Anatek Labs, Inc.

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504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Quality Control Data

Inorganics

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
---------	--------	------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------

Batch: BEJ0482 - W BOD

Blank (BEJ0482-BLK1)

BOD ND 2.00 mg/L Prepared: 10/10/24 10:29- Analyzed: 10/15/24 08:56

LCS (BEJ0482-BS1)

BOD 174 mg/L 198 87.9 84.4-116 Prepared: 10/10/24 10:32- Analyzed: 10/15/24 09:00



Due: 10/24/24



Subcontract Order

X4J0203

Sending Laboratory:

SVL Analytical, Inc.
One Government Gulch
PO Box 929
Kellogg, ID 83837-0929
Phone: 208-784-1258
Project Manager: Dave Tryon

Client:

Northwest Groundwater Consulting

Project Name:

Simplot Feeders 2023

Project State of Origin:

Washington

Receiving Laboratory:

Anatek Labs (WA)
504 E Sprague Street, Suite D
Spokane, WA 99202
Phone: 509-838-3999

Report and Invoice to SVL Analytical, Inc.

Analysis	Due	HT Expires		
SVL ID: X4J0203-01 Client ID: MW-4A			Ground Water	Sampled: 09-Oct-24 09:07
Sub BOD SM 5210B	23-Oct-24	11-Oct-24 09:07		
Containers Supplied: Raw HDPE (C)				
SVL ID: X4J0203-02 Client ID: MW-4B			Ground Water	Sampled: 09-Oct-24 08:49
Sub BOD SM 5210B	23-Oct-24	11-Oct-24 08:49		
Containers Supplied: Raw HDPE (C)				
SVL ID: X4J0203-03 Client ID: DUP-1			Ground Water	Sampled: 09-Oct-24 12:00
Sub BOD SM 5210B	23-Oct-24	11-Oct-24 12:00		
Containers Supplied: Raw HDPE (C)				

Relinquished by: [Signature]Date/Time: 10/9/24Received by: [Signature]

3.7126 C/X

RUSH

Date/Time: 10/9/24 16:05

Relinquished by: _____

Date/Time: _____

Received by: _____

Date/Time: _____

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. O1123-01 | NOVEMBER 22, 2024 | SIMPLOT FEEDERS
LIMITED PARTNERSHIP

This report reviews the analytical results for surface water and groundwater samples collected on the Simplot Land & Livestock Co. feedlot in Wallula, Washington. The samples were collected on September 18 and October 9, 2024.

SVL Analytical (SVL) in Kellogg, Idaho performed the analyses. SVL report numbers X4I0307 and X4J0203 were reviewed. Not all analyses were performed on all samples submitted to the laboratory. The analyses reviewed and samples analyzed are listed below.

Analysis	Reference
Anions	USEPA 300.0
Ammonia as Nitrogen	USEPA 350.1
Nitrate/Nitrite as Nitrogen	USEPA 353.2
Total Kjeldahl Nitrogen (TKN)	USEPA 351.2
Total Metals	USEPA 200.7
Total Dissolved Solids (TDS)	SM 2540C
Biochemical Oxygen Demand (BOD)	SM 5210B
Phosphate as Phosphorus	SM 4500-P-E

SM = Standard Methods for the Examination of Water and Wastewater
USEPA = U.S. Environmental Protection Agency.

Samples Analyzed
Report # X4I0307
MW-1
MW-5
Small Lagoon
Large Lagoon
Trip Blank
Report # X4J0203
MW-4A
MW-4B
DUP-1

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA; 2014) and appropriate laboratory and method-specific guidelines (SVL, 2014; USEPA, 1986).

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the functional guidelines (e.g., SM 5210B).

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately by SVL. Samples arrived at SVL at 1.0° (X4I0307) and at 5.5°C (X4J0203).

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. All laboratory method blanks results were non-detect.

Continuing Calibration Blanks

CCB results were not reported for this sampling event.

Equipment Rinsate Blanks

Equipment rinsate blanks were not collected for this sampling event.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. One field duplicate associated with report X4J0203 was submitted and analyzed (MW-4B/DUP-1). Results were within acceptance limits for RPD.

LABORATORY CONTROL SAMPLE RESULTS

An LCS is spiked with target analytes to provide information on laboratory precision and accuracy. The LCS sample was extracted and analyzed at the required frequency. All recoveries were within acceptance limits for percent recovery.

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. Laboratory duplicate results were reported for some analytes. Reported results were within acceptable limits for RPD.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

MS/MSD results are used to evaluate laboratory precision and accuracy. All MS/MSD samples were extracted and analyzed at the required frequency.

MS results for ammonia and TKN (X4I0307) were flagged appropriately by the laboratory as the spiked sample required a dilution such that the spike recovery calculation does not provide useful information. As a result of the LCSs being within acceptance limits, no qualifications were made.

All other recoveries were within acceptance limits for percent recovery and relative percent differences (RPDs) or exceedances were associated with sample dilutions or sample concentration greatly exceeding matrix spike amount.

REPORTING LIMITS

SVL used routine reporting limits (RLs) for non-detect results, except when samples required dilutions because of high analyte concentration and/or matrix interferences.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. No other issues were found.

REFERENCES

SVL, 2014. Quality assurance manual. SVL Analytical, Kellogg, Idaho.

USEPA, 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

USEPA, 2014. USEPA contract laboratory program, national functional guidelines for inorganic superfund data review. EPA 540/R-013/001. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. August.

Attachment E



Transaction code		NPDES								yr/mo/day						Inspection Type		Inspector		Fac Type								
1	N	2	5	3	W	A	0	0	4	5	4	2	0	11	12	9	4	1	0	2	5	17	18	R	19	S	20	I
Remarks																												

21	Reserved			Facility Evaluation Rating			BI		QA			Reserved					66
67				69	70			71		72		73			74	75	80

Name and Location of Facility Inspected SIMPLOT FEEDERS P.O. BOX 1306 PASCO, WA 99301 (509)547-6801		Entry Time 11:00 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		Permit Effective Date
		Exit Time/Date 3:25P.M. 10/25/94		Permit Expiration Date
Name(s) of On-Site Representative(s) RON PARKS		Title(s) SPECIAL PROJECTS MANAGER		Phone No(s) (208)834-2231
Name, Address of Responsible Official RON PARKS, SIMPLOT LIVESTOCK CO. HC85, BOX 275 GRAND VIEW, ID 83624		Title SPECIAL PROJECTS MANAGER		
		Phone No. (208)834-2231		Contacted <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

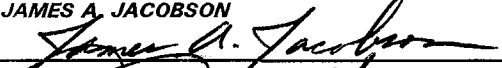

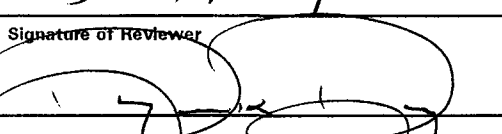
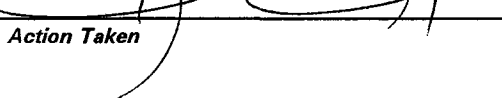
<i>N</i>	Permit	<i>N</i>	Flow Measurement	<i>N</i>	Pretreatment	<i>N</i>	Operations & Maintenance
<i>N</i>	Records/Reports	<i>N</i>	Laboratory	<i>N</i>	Compliance Schedules	<i>N</i>	Sludge Disposal
<i>M</i>	Facility Site Review	<i>N</i>	Effluent/Receiving Waters	<i>N</i>	Self-Monitoring Program	<i>N</i>	Other:

INSPECTED FACILITY TO GATHER INFORMATION ON WASTE HANDLING OPERATIONS TO BE INCORPORATED INTO UPCOMING PERMIT TROUGH WATER OVERFLOW FLOWS INTO POND, WHICH WAS OVERFLOWING INTO WASTE LAGOON, CAUSING LAGOON TO OVERFLOW ONTO RAILROAD RIGHT-OF-WAY, AND INTO CULVERT WHICH IS LOCATED UNDER THE RAILROAD BED AND EXITS ON NEIGHBORS LAND. TROUGH WATER OVERFLOW AVERAGES ABOUT 240,000 GALLONS PER DAY.

INSPECTED POTATAO WASTE STORAGE, SILAGE STORAGE, GRAIN STORAGE AND FEED MILL OPERATION. STORAGE PITS ARE CONCRETE BOTTOM W/18" SIDES AND THE REMAINING WALLS ARE DIRT.

INSPECTED LAGOONS AND STORMWATER DETENTION PONDS. NO OVERFLOW STRUCTURES BETWEEN LAGOONS.

SPRINKLER SYSTEM INSTALLED FOR DUST SUPPRESSION.

Name(s) and Signature(s) of Inspector(s) JAMES A. JACOBSON 	Agency/Office/Telephone Ecology/ERO/ (509)456-3287	Date 10/25/94
DAVID T. KNIGHT 	Ecology/ERO/(509)625-5191	10/25/94
Signature of Reviewer 	Agency/Office ECOLOGY/ERO	Date 11/01/94
Action Taken 	Date	Compliance <input type="checkbox"/> Noncompliance <input type="checkbox"/> Compliance

EPA

United States Environmental Protection Agency
Washington, D.C. 20460

NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

Section A: National Data System Coding

Transaction code			NPDES										yr/mo/day			Inspection Type		Inspector		Fac Type										
1	N		2	5		3	W	A	0	0	4	5	4	2	0	11	12	9	3	0	2	2	3	17	18	R	19	S	20	2
Remarks																														

S	I	M	P	L	O	T		F	E	E	D	E	R	S																												
Reserved										Facility Evaluation Rating										BI		QA		Reserved																		
67										69										71	N	72	N	73						74						75						80

Section B: Facility Data

Name and Location of Facility Inspected SIMPLOT LIVESTOCK COMPANY WALLULA FEEDLOT P.O. BOX 1306 PASCO, WA 99301												Entry Time 11:00 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM				Permit Effective Date HAS NOT BEEN ISSUED			
												Exit Time/Date 1:00 PM/ 02/23/1993				Permit Expiration Date HAS NOT BEEN ISSUED			
Name(s) of On-Site Representative(s) RON PARKS												Title(s) SPECIAL PROJECTS MANAGER				Phone No(s) (208) 834-2231			
Name, Address of Responsible Official RON PARKS HC85, BOX 275 GRANDVIEW, ID 83624												Title SPECIAL PROJECTS MANAGER							
												Phone No. (208) 834-2231				Contacted <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

Section C: Areas Evaluated During Inspection

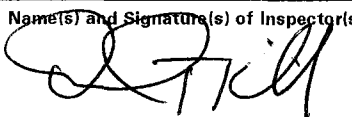
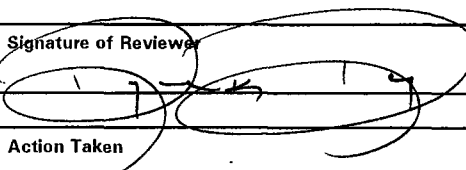
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

N	Permit	N	Flow Measurement	N	Pretreatment	S	Operations & Maintenance
S	Records/Reports	N	Laboratory	N	Compliance Schedules	N	Sludge Disposal
S	Facility Site Review	S	Effluent/Receiving Waters	N	Self-Monitoring Program	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

Visited the facility and met with Ron Parks who handles environmental issues for the JR Simplot Company's Cattle Division. Simplot is trying to determine whether or not to apply for an NPDES Permit or a State Waste Discharge Permit. We inspected the facility, to include the large lagoon which recently breached. The breach resulted from overtopping of wastewater from the Iowa Beef Products (IBP) cattle slaughtering facility which is next door to the feedlot and was at the time using the lagoon to hold its wastewater. The question to be answered is whether or not Ecology will permit the continued use of the lagoon by either facility. We observed the small spray field which the feedlot currently uses to land apply a small amount of wastewater from the lot. We observed the topography of the feedlot and the ponds used to retain runoff from the site. We also looked at the feed mill facility and the concrete lined potato waste storage sites. We then met with Mr. Parks to discuss the engineer report which will be required.

4/13/95
SIMPLOT HAS APPLIED FOR A NPDES PERMIT SINCE THIS INSPECTION. FACT SHEET AND PERMIT HAVE BEEN PREPARED AND SHARED WITH APPLICANT.

Name(s) and Signature(s) of Inspector(s)  David T. Knight		Agency/Office/Telephone Ecology/ ERO/ 509-625-5191		Date 13 Apr 95	
Signature of Reviewer 		Agency/Office ECOLGY/ERO		Date 4/13/95	
Regulatory Office Use Only					
Action Taken				Date	
				Compliance <input type="checkbox"/> Noncompliance <input type="checkbox"/> Compliance	

