ENVIRONMENTAL ASSESSMENT

Nisqually Indian Tribe Medicine River Ranch and Fee-to-Trust Project

Thurston County, Washington | February 2025

Lead Agency:
Bureau of Indian Affairs
Northwest Regional Office
911 Northeast 11th Avenue
Portland, OR 97232-4169

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Section 1 | Introduction

1.1 SUMMARY OF THE PROPOSED ACTION AND ENVIRONMENTAL REVIEW PROCESS

This Environmental Assessment (EA) has been prepared to assess the anticipated environmental effects resulting from the acquisition by the U.S. Bureau of Indian Affairs (BIA) of a 72.22-acre property into federal trust status for the benefit of the Nisqually Indian Tribe (Tribe) (Proposed Action) and the subsequent development of an equestrian ranch providing equine therapy to tribal members and the surrounding community by the Tribe (Proposed Project). The approximately 72.22-acre property is comprised of three parcels and is referred to as the "Project Site" throughout this document. The Project Site is located adjacent to Lake Saint Clair in unincorporated Thurston County (County), Washington (State). **Figure 1** shows the regional location of the Project Site.

This document has been completed in accordance with and to satisfy the requirements set out in the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] Section 4321 et seq) and the BIA NEPA Handbook (59 Indian Affairs Manual 3-H). This document provides a detailed description of the Proposed Action and analysis of the potential environmental consequences associated with the Proposed Action and subsequent development of the Proposed Project. This document also includes a discussion of alternatives, impact avoidance, and mitigation measures.

The BIA is the Lead Agency for NEPA compliance and will use this EA to determine if the Proposed Action would result in an adverse effect to the environment. The EA will be released for a 30-day comment period. Comments will be considered by the BIA, and either a Finding of No Significant Impact will be prepared, or additional environmental analysis will be conducted in the form of an Environmental Impact Statement. After the NEPA process is complete, the BIA may issue a determination on the Proposed Action.

1.2 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of the Proposed Action is to: 1) further Tribal interests by protecting Tribal homelands; 2) allow the Tribe to conserve open space resources within the Subject Property; 3) consolidate land ownership; 4) protect the Tribe's rights associated with pasturing of horses, as well as the rights to fish, hunt, and gather as stated in Article 3 of the Medicine Creek Treaty; and 5) facilitate the Tribe's self-determination and economic development by enabling the Tribe to establish recreational and therapeutic facilities for tribal members and the surrounding community. These purposes are consistent with the Department of the Interior's (Department) land acquisition policy as articulated in the Department's trust land regulations at 25 CFR Part 151. The need for the Department to act on the Tribe's application is established by the Department's regulations at 25 CFR Section 151.3 and 151.11(b) for consideration of requests involving land non-contiguous to the boundaries of an Indian Reservation.

1.3 BACKGROUND

The Tribe is a federally recognized Indian tribe with approximately 834 enrolled members. The Nisqually Indian Reservation (Reservation) is located on the Nisqually River in rural Thurston County, approximately

15 miles east of Olympia, Washington and 1.1 miles east of the Project Site. In 1854, the Tribe signed the Medicine Creek Treaty that ceded all rights and title of the Tribe's Usual and Accustomed (U&A) 2.2-million-acre homeland to the United States (U.S.) government in exchange for federal recognition and all fiduciary duties associated with recognition, as well as the right to hunt, fish, and gather resources in the U&A territories. The Tribe's U&A territories encompassed parts of three Washington counties—Thurston, Pierce, and Lewis. Their 4,717-acre Reservation has been enormously diminished through allotment, and, more significantly, through the condemnation of 3,353 acres in 1917 for the Department of War (now the Department of Defense) as part of the creation of the Ft. Lewis military base.

The Tribe has made tremendous progress in a number of critical areas over the past 5 years. The Tribe has grown dramatically as an organization and has increased the level of services it provides to its members in the Thurston/Pierce County area. These services include education, social services, economic development, housing, substance abuse treatment, employment and training, and judicial services. The Tribe has increasingly taken a community-wide approach to addressing major social, health, educational, economic, and governance issues out of recognition that these problems are interconnected. The 5-year Vision Plan adopted by the Tribe in 2013 illustrates this approach. Included in this Vision Statement is a major priority to increase access to restorative and healing services for the tribal membership, including Equine Therapy.

A primary strategy of the Equine Therapy program will be to invoke the underlying cultural values and beliefs of tribal people as protective factors through a program service delivery model that can safeguard families at risk. The Equine Therapy model is ideally suited for this purpose as it brings to the forefront a part of the Tribe's history and legacy as a healing tool.

Historically the Nisqually Indian Tribe's culture and economy were closely linked to horses and horsemanship. Along with canoes, horses were the main means of travel within the Tribe's traditional area. The Nisqually were very accomplished at horsemanship, horse breeding, and horse trading. The Nisqually prairies of the south Puget Sound region were in particular the center of the Tribe's horse culture. This important link between the Tribe and horses is reflected in Article 3 of Medicine Creek Treaty that includes the right to pasture horses on open and unclaimed lands along with the Tribe's rights to fish, hunt, and gather.

1.4 LOCATION AND SETTING

1.4.1 Project Site Location

The approximately 72.22-acre Project Site is currently owned in fee by the Tribe and is located adjacent to Lake Saint Clair in unincorporated Thurston County, Washington (**Figure 1** and **Figure 2**). The parcels that make up the Project Site are listed in **Table 1.4-1** and shown in **Figure 3**. Access to the northern portion of the Property is provided by Saskatoon Lane SE, which connects to Yelm Highway SE east of the property. Access to the southern portion of the Property is provided via Todtkarle Road SE, which routes through a residential neighborhood and eventually connects to Yelm Highway SE southwest of the Property.

Table 1.4-1: Project Site Parcels

Assessor Parcel Number (APN)	Approximate Acreage
21832340002	0.76
21832340003	1.00
21832340000	70.46
Total	**72.22 Acres**

The Project Site is currently used as an equestrian center and small ranch complex, with multiple corrals, animal pens, and unpaved access roads. There are residential structures located in the southwest portion of the Project Site. A high-voltage transmission line crosses the Project Site.

1.5 REGULATORY REQUIREMENTS AND APPROVALS

The Proposed Project, as described in **Section 2.0**, may require the federal, State, and local permits and approvals, as identified in **Table 1.5-1**.

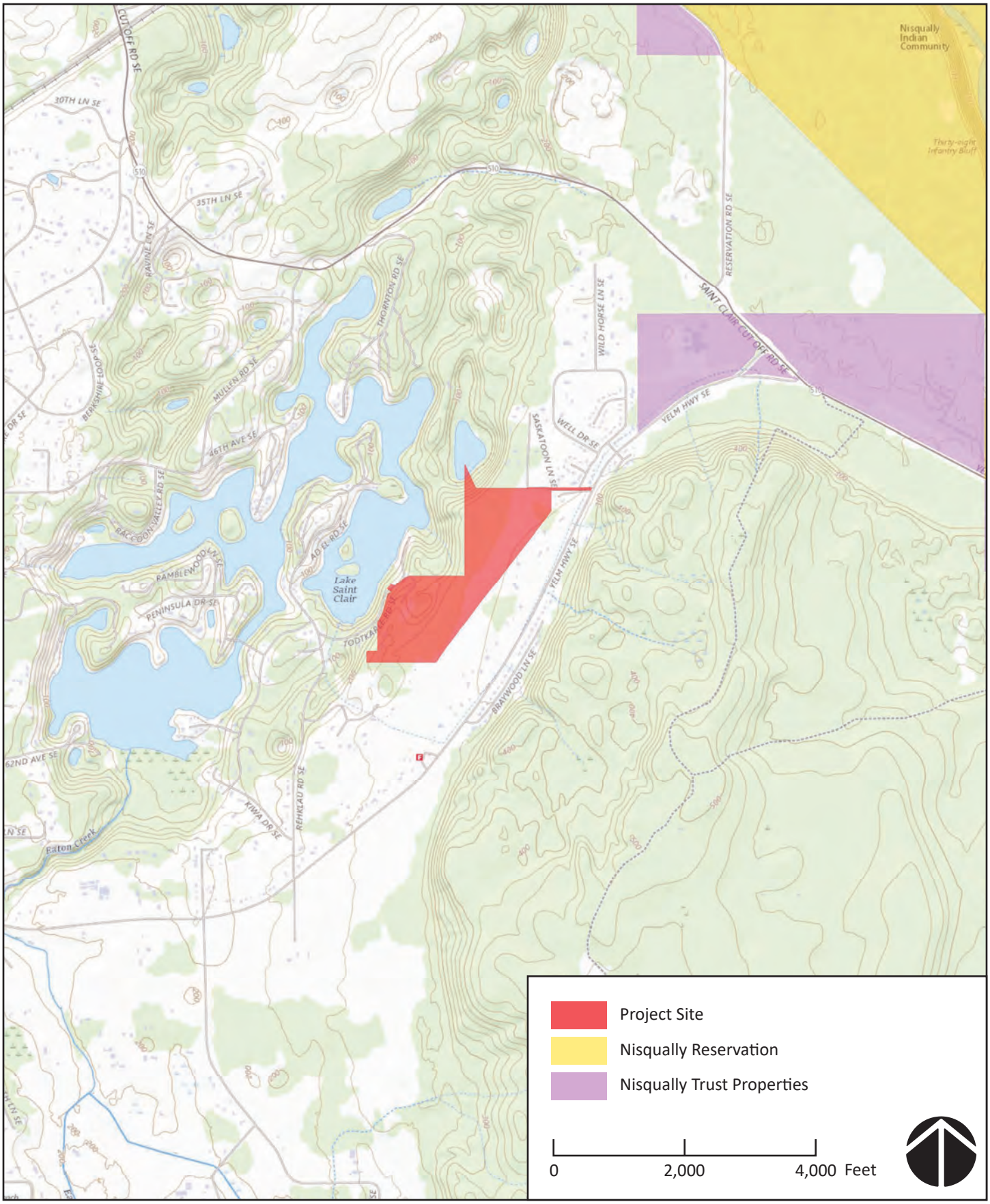
Table 1.5-1: Potential Permits and Approvals Required

Agency	Permit or Approval
Federal	
Bureau of Indian Affairs	Transfer of the 72.22-acre Project Site into federal trust status for the Tribe
U.S. Environmental Protection Agency (USEPA)	For site grading over one acre, verification of project coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit for Stormwater Discharges from Construction Activities as required by the Clean Water Act (CWA)
	Registration of the proposed leach field with the Underground Injection Control (UIC) program as a Class V injection well
U.S. Fish and Wildlife Service (USFWS)	Informal consultation under Section 7 of the federal Endangered Species Act regarding the potential for effects to endangered species.

Source: ESRI, USGS, NOAA

FIGURE 1

REGIONAL LOCATION



Source: USGS National Map (6/2020)

FIGURE 2

SITE AND VICINITY

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Maxar

FIGURE 3
PROPERTY LOCATION

Section 2 | Proposed Project and Alternatives

This section describes the alternatives that are analyzed within this EA, including the Proposed Project Alternative and the No Action Alternative as required by NEPA. **Section 2.3** summarizes and compares the potential environmental consequences, benefits, and/or detriments of the project alternatives, and **Section 2.4** describes alternatives considered but eliminated from detailed evaluation.

2.1 ALTERNATIVE A – PROPOSED PROJECT

Alternative A consists of placing the Project Site into federal trust status for the benefit of the Tribe and the ongoing development by the Tribe of an equestrian ranch, which at buildout will include an indoor arena, outdoor arena, stables, covered pen, uncovered pens, storage building and parking. The development components of Alternative A are described in more detail below.

2.1.1 Equestrian Ranch Development

Alternative A includes the development and operation of an equestrian ranch to provide equine therapy to tribal members and the surrounding community. The Tribe has constructed horse paddocks, an outdoor arena, covered pen and storage building. The Tribe is planning on building an indoor arena with stables, which would be approximately 20,000 square feet. The building is expected to be constructed of steel and would be approximately 100 feet by 200 feet with a height of approximately 29 feet. **Figure 4** shows the proposed site plan, including existing and proposed facilities.

Water and Wastewater Service

Water will be provided by an onsite domestic groundwater well. An onsite septic system will be developed to provide wastewater treatment for the restrooms provided within the indoor arena. This septic system would consist of a septic tank with inspections ports and effluent filters and leach field. The septic system would be constructed by a licensed contractor consistent with local regulations, including setback requirements from property boundaries.

Law Enforcement, Fire Protection, and Emergency Medical Services

Police services will be provided by the Nisqually Law Enforcement Program. The Tribe operates its own justice system, which includes a comprehensive public safety department. The Nisqually Tribal Police Department is responsible for enforcing the law on the Nisqually Reservation and tribal trust lands.

Fire protection and emergency medical services will be provided by the Lacey Fire District. The Tribe has an agreement with the Lacey Fire District to provide fire protection and EMS to the Nisqually Reservation and tribal trust lands.

Grading and Drainage

Site preparation would include establishing a building pad for the indoor arena, grading parking areas, and excavating for the installation of the septic system and utilities. All areas disturbed during construction would be revegetated and all cut slopes would have a slope ratio of 1.5 to 1 (horizontal to vertical) or flatter, and fill slopes would have a slope ratio of 2 to 1 or flatter. These standards would ensure that slopes are stable and would be revegetated, thereby minimizing long-term erosion potential.

Surface runoff from the proposed arena and parking areas would be directed through biofiltration swales (bioswales) to offset the added impervious area. The bioswales, planted with native grasses, would treat 100% of the runoff. The bioswales would tie into existing drainages to minimize erosion potential and to help maintain the current hydrology of the site.

Project Construction

Construction activities associated with Alternative A are anticipated to commence in November 2025 and occur over a period of approximately 6 months. The proposed facilities would conform to applicable Nisqually Tribal Building Codes, which are generally consistent with the IBC and related codes, including fire, electrical, energy, mechanical, plumbing, and safety.

Source: Google aerial (4/26/2023)

FIGURE 4

SITE PLAN

2.1.2 Protective Measures and Best Management Practices

Protective measures and BMPs, including regulatory requirements and voluntary measures that would be implemented by the Tribe, have been incorporated into the design of Alternative A. Where applicable, these measures would be incorporated into any design or construction contracts to eliminate or substantially reduce environmental consequences from Alternative A. These measures are discussed below in **Table 2.1-1**.

Table 2.1-1: Alternative A Protective Measures and Best Management Practices

Resource Area	Protective Measures and Best Management Practices
Air Quality	The following dust suppression measures shall be implemented during construction to control the production of fugitive dust (particulate matter 10 microns in size [PM_{10}]) and prevent wind erosion of bare and stockpiled soils. ▪ Exposed soil shall be sprayed with water or other suppressant twice a day or as needed to suppress dust. ▪ Dust emissions during transport of fill material or soil shall be minimized by wetting truckloads of soil, ensuring adequate freeboard (space from the top of the material to the top of the truck bed) on trucks, cleaning the interior of cargo compartments on emptied haul trucks before leaving a site, and/or covering loads. ▪ Spills of transported fill material on public roads shall be promptly cleaned. ▪ Traffic speeds on the Project Site shall be restricted to 15 miles per hour to reduce soil disturbance. ▪ Dirt, gravel, and debris piles shall be covered as needed to reduce dust and wind-blown debris. The following measures shall be implemented to reduce emissions of criteria air pollutants (CAP), greenhouse gases (GHG), and diesel particulate matter (DPM) from construction. ▪ The Tribe shall control criteria pollutants and GHG emissions from the facility by requiring all diesel-powered equipment be properly maintained and minimize idling time to five minutes when construction equipment is not in use, unless per engine manufacturer's specifications or for safety reasons more time is required. Since these emissions would be generated primarily by construction equipment, machinery engines shall be kept in good mechanical condition to minimize exhaust emissions. The Tribe shall employ periodic and unscheduled inspections on site to accomplish the above measures.
Land Resources	▪ Erosion control measures shall be implemented during construction as described further under the Water Resources BMPs. ▪ Vegetated swales would be incorporated to provide stormwater detention and treatment.
Water Resources	▪ Manure from paddocks, arenas and stalls will be collected and composted. The compost pile will be located at least 200 feet from any stormwater drainages. Composted manure will be removed from the Project Site for beneficial reuse. Drainage from paddocks, arenas and stalls will be managed to avoid discharge to Lake Saint Clair or other surface water bodies. ▪ Should ground disturbance to one acre or more occur, the Tribe shall apply for coverage under the NPDES General Construction Permit from the USEPA under the CWA. A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared, implemented, and maintained throughout the construction phase of the development, consistent with General Construction Permit requirements. The

Resource Area	Protective Measures and Best Management Practices
	SWPPP prepared for the Project Site would include, but would not be limited to, the following BMPs to minimize storm water effects to water quality during construction: ▪ To the extent feasible, grading activities shall be limited to the immediate area required for construction. ▪ Temporary erosion control measures (such as silt fences, fiber rolls, vegetated swales, a velocity dissipation structure, staked straw bales, temporary re-vegetation, rock bag dams, erosion control blankets, and sediment traps) shall be employed for disturbed areas. ▪ Construction activities shall be scheduled to minimize land disturbance during peak runoff periods. ▪ Disturbed areas shall be paved or re-vegetated following construction activities. ▪ Construction area entrances and exits shall be stabilized with large-diameter rock. ▪ A spill prevention control and countermeasure plan shall be developed which identifies proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used on site. ▪ Petroleum products shall be stored, handled, used, and disposed of properly in accordance with provisions of the CWA (33 USC Section 1251 to 1387). ▪ Construction materials, including topsoil and chemicals, shall be stored, covered, and isolated to prevent runoff losses and contamination of surface and groundwater. ▪ Fuel and vehicle maintenance areas shall be designed to control runoff. ▪ Sanitary facilities shall be provided for construction workers in accordance with OSHA Standard 1926.51 sanitation requirements for job sites. ▪ Disposal facilities shall be provided for soil wastes, including excess asphalt during construction. ▪ Solid waste storage containers will be stored in a roofed enclosure so that runoff cannot contact contents of waste storage containers. The storage area will be paved with the area's grading to prevent uncontaminated stormwater from flowing into the waste storage area. ▪ To minimize dust generation during construction, soil will be wetted down with water prior to ground disturbance. All generated waste must be properly disposed of. ▪ Loose aggregate chunks and dust will be swept or shoveled and collected (not hosed down a storm drain) for recycling or proper disposal. ▪ Wheel wash or rumble strips and sweeping of paved surfaces shall be used to remove all tracked soil. ▪ Low impact development (LID) methods (i.e., bioswales) shall be implemented that would help store, infiltrate, evaporate, and detain stormwater runoff.
Cultural Resources	The following BMPs are recommended to avoid or reduce potential impacts to previously unknown archaeological and historical resources that may exist on the Project Site: ▪ In the event of any inadvertent discovery of prehistoric or historic archaeological resources during construction-related earth-moving activities, all such finds shall be subject to Section 106 of the National Historic Preservation Act as amended (36 CFR 800). Specifically, procedures for post-review discoveries without prior planning pursuant to 36 CFR 800.13 shall be followed. Work within 50 feet of the find shall be halted until a professional archaeologist meeting the Secretary of the

Resource Area	Protective Measures and Best Management Practices
	Interior's qualifications (36 CFR 61), or paleontologist if the find is of a paleontological nature, can assess the significance of the find in consultation with the THPO), BIA, and/or other appropriate agencies. If any find is determined to be significant by the archaeologist or paleontologist, a THPO representative shall meet with the archaeologist or paleontologist to determine the appropriate course of action, including the development of a Treatment Plan and implementation of appropriate provisions, if necessary. All significant cultural or paleontological materials recovered shall be subject to scientific analysis, professional curation, and a report prepared by the professional archaeologist or paleontologist, according to current professional standards. ▪ If human remains are discovered during ground-disturbing activities on Tribal lands, the THPO and BIA shall be contacted immediately. No further disturbance shall occur until the THPO and BIA representative have made the necessary findings as to the origin and disposition. If the remains are determined to be of Native American origin, the provisions of the Native American Graves Protection and Repatriation Act shall apply.
Hazardous Materials	Personnel shall follow BMPs for filling and servicing construction equipment and vehicles. BMPs that are designed to reduce the potential for incidents/spills involving hazardous materials include the following. ▪ Fuel, oil, and hydraulic fluids shall be transferred directly from a service truck to construction equipment to reduce the potential for accidental release. ▪ Catch-pans shall be placed under equipment to catch potential spills during servicing. Servicing should take place off site when practical. ▪ Refueling shall be conducted only with approved pumps, hoses, and nozzles. ▪ All disconnected hoses shall be placed in containers to collect residual fuel from the hose. ▪ Vehicle engines shall be shut down during refueling. ▪ No smoking, open flames, or welding shall be allowed in refueling or service areas. ▪ Service trucks shall be provided with fire extinguishers and spill containment equipment, such as absorbents. ▪ Should a spill contaminate soil, the impacted soil shall be segregated, covered, and/or placed into containers not exposed to rainwater, the containers shall be disposed of in accordance with local, State, and federal regulations. All containers used to store hazardous materials shall be stored/equipped with secondary containment pans or structures capable of fully containing a potential lead and inspected at least once per week for signs of leaking or failure. Personnel shall implement the following BMPs to reduce the potential for fires during construction: ▪ Construction equipment shall contain spark arrestors, as provided by the manufacturer. ▪ Staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. ▪ Prior to initiating excavation at the work site, the Tribe shall contact the Utility Notification Center to notify the utility service providers to mark or stake the horizontal path of underground utilities, provide information about the utilities, and/or give clearance to dig. ▪ The site shall be cleaned daily of trash and debris to the maximum extent practicable.

Resource Area	Protective Measures and Best Management Practices
Noise	BMPs to be implemented during construction for noise: ▪ Construction activities shall be limited to daytime hours between 7:00 a.m. and 10:00 p.m. ▪ All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and acoustical shields or shrouds in accordance with manufacturers' specifications. ▪ Haul trucks shall be operated in accordance with posted speed limits. ▪ Maintenance of construction equipment and machinery, including noise reducing components such as mufflers, silencers, covers, guards, vibration isolators, etc., shall be performed regularly to reduce excess noise. ▪ Loud stationary construction equipment shall be located as far away from residential receptor areas as feasible. To the extent feasible, existing barrier features (structures) shall be used to block sound transmission between noise sources and noise sensitive land uses.
Visual Resources	BMPs to be implemented during operation for exterior lighting across the Project Site: ▪ Exterior lighting on buildings shall be designed to not cast significant light or glare into the public right-of-way or any surrounding residential areas. ▪ Outdoor light fixtures shall be fully or partially shielded. ▪ The exterior lighting of the development would be strategically positioned consistent with the International Dark-Sky Association's Model Lighting Ordinance to minimize light or glare off-site, and to minimize any direct site lines to the public.

2.2 ALTERNATIVE B- NO ACTION ALTERNATIVE

Under the No Action Alternative, the 72.22-acre Property would not be placed into trust for the benefit of the Tribe. Jurisdiction of the 72.22-acre Property would remain within unincorporated Thurston County. For the purposes of the environmental analysis in this EA, it is assumed that the property would remain as it is currently.

2.3 COMPARISON OF THE PROPOSED PROJECT AND ALTERNATIVES

As indicated above, Alternative A would result in the full build-out of the proposed equestrian ranch. Compared with the No-Action Alternative (Alternative B), impacts from developing the Proposed Project (Alternative A) would include temporary construction activities, increased impervious surfaces, and increased human activities on the site. Development of Alternative A would increase community activity and provide employment and income opportunities for area residents.

Alternative A meets the Tribe's objectives of an enlarged land base, improved facilities for the welfare of tribal members, and diversified economic development and employment opportunities compatible with the existing setting of the County. While the No-Action alternative would not result in any of the environmental effects identified for Alternative A, this alternative would not meet the Tribe's objectives. Despite the proportionately greater overall effects on the environment of Alternative A, none of the identified impacts would be significant and unavoidable, following implementation of protective measures and mitigation recommended in this document.

2.4 ALTERNATIVES ELIMINATED FROM CONSIDERATION

The intent of the analysis of alternatives in the EA is to present to decision-makers and the public a reasonable range of alternatives that are both feasible and sufficiently different from each other in critical aspects. Section 1502.14 of the CEQ's Regulations for Implementing NEPA states that lead agencies are required to evaluate all reasonable alternatives and discuss the reasoning as to why additional alternatives were eliminated from detailed study. Alternatives considered must include those that offer substantial environmental advantages over Alternative A, and which may be feasibly accomplished in a successful manner considering economic, environmental, social, technological, and legal factors.

Prior to formally submitting an application requesting the Project Site be taken into trust, the Tribe considered a number of other sites in the State of Washington for the Proposed Project. These sites were evaluated based on size, proximity to the Reservation, cost, availability for purchase, environmental constraints, and location within traditional homelands. There are no other known available lands either owned by the Tribe or that can feasibly be purchased by the Tribe that would fulfill the Tribe's purpose and need for the Proposed Action, and that would provide substantial environmental advantages over the Project Site. Therefore, alternative locations for the trust acquisition are not evaluated within the EA.

Section 3 | Affected Environment and Environmental Consequences

3.1 INTRODUCTION

This section presents relevant information about existing resources and other values that may be affected by the proposed alternatives. In accordance with NEPA and BIA implementing guidelines (59 IAM 3-H), this section describes the existing environment of the area affected by the proposed alternatives as well as the environmental consequences of each alternative. Resource areas or issues that are addressed in this section include the following:

3.2 Land Resources
3.3 Water Resources
3.4 Air Quality
3.5 Biological Resources
3.6 Cultural and Paleontological Resources
3.7 Socioeconomic Conditions
3.8 Transportation/Circulation
3.9 Land Use
3.10 Public Services
3.11 Noise
3.12 Hazardous Materials
3.13 Visual Resources
3.14 Cumulative Impacts
3.15 Indirect and Growth-Inducing Effects

3.2 LAND RESOURCES

3.2.1 Environmental Setting

The Project Site is located in the SW quarter of Section 32, Township 18, Range 01 East, Willamette Meridian, within Washington's Puget Lowland—a region of low-lying terrain between the Olympic Mountains and Cascade Range. The landscape consists of glacial drifts, volcanic rocks, and marine and nonmarine sediments. The site's topography varies, with undulating hills transitioning into a terrace that slopes toward the basins of Lake Saint Clair. Elevations range from approximately 84 to 250 feet above mean sea level (**Appendix A**). The on-site topography varies with the eastern portion being generally flat at around 250 feet, while the southwestern portion features steep slopes descending northwest to approximately 150 feet. The site is underlain by Puget Lowland recessional outwash and/or glacial till, as indicated by USGS topographic maps.

According to the United States Department of Agriculture – Natural Resources Conservation Service, soils on the Project Site are primarily Spana gravelly loam with 0-3 percent slopes, covering approximately 74% of the area. In total, the Project Site consists of five soil types (**Appendix A**):

- Indianola loamy sand (15 to 30 percent slopes)
- Nisqually loamy fine sand (0 to 3 percent slopes)
- Everett very gravelly sandy loam (8 to 15 percent slopes)
- Spana gravelly loam
- Spanaway gravelly sandy loam (0 to 3 percent slopes)

The soil types range from moderately well drained to excessively well drained due to their sandy and gravelly composition.

The Project Site is in a seismically active area (Thurston County, 2004). The nearest mapped fault, the Olympia Structure, is located approximately 2.8 miles southwest of the site and is considered moderately strained (USGS, 2025).

The Project Site does not contain County Designated Mineral Resource Land and is therefore not considered a source of mineral resources (Thurston County, 2020).

3.2.2 Impacts

Alternative A – Proposed Project

The Project Site is within a seismically active area; however, the onsite soils and topography are not indicative of landslides or liquefaction. The site is underlain by well-drained, coarse-grained soils, including gravelly loams and sandy loams, which are less susceptible to liquefaction due to their low clay content and ability to drain water efficiently. Additionally, the compact nature of glacial till and recessional outwash deposits provides structural stability, further reducing the likelihood of landslides. The Project Site could be exposed to seismic shaking due to active faults in the region. Alternative A would follow Tribal Building Codes aligned with IBC standards, which incorporate seismic protection measures. Construction activities would expose soil to erosion risks, and added impervious surfaces could increase stormwater runoff. However, the area of grading would be limited, and steep slopes will be avoided. Compliance with the NPDES General Construction Permit would require implementation of a SWPPP and BMPs (see **Table 2.1.7**). The Project Site and its vicinity have no known mineral resources or active mining operations. With compliance with the Tribal Building Codes and NPDES General Construction Permit, Alternative A would have less-than-significant impacts on site stability, seismic risk, soil erosion and mineral resources.

Alternative B – No Action Alternative

Under Alternative B, the land would not be taken into trust, and the current use of the Project Site would continue into the foreseeable future. No significant alterations to surface topography or soils would occur and thus there would be no impacts related to geology and soils.

3.3 WATER RESOURCES

3.3.1 Environmental Setting

The closest water source to the Project Site is Lake Saint Clair, a 268-acre (0.42-square-mile) lake with an irregular shape, steep sides, numerous narrow arms, and four islands (Thurston County Environmental Health, 2021). The lake is fed by groundwater and from Eaton Creek to the south. Lake Saint Clair is hydrologically connected to a broader groundwater system that contributes to McAllister Springs and

McAllister Creek to the north, with a contributing area of approximately 40 square miles. Groundwater enters the lake from the south and west, deep below the surface, and exits to the north, helping sustain McAllister Springs' flow (**Appendix B**; Thurston County Environmental Health, 2021).

Water quality monitoring has classified Lake Saint Clair as mesotrophic in 2021, based on the Trophic State Index, which evaluates chlorophyll, total phosphorus, and secchi depth (Thurston County Environmental Health, 2021). This classification indicates moderate productivity, with improved conditions in the southwest basin, which was eutrophic in 2019 and 2020. Water transparency in 2021 exceeded long-term averages in both basins. From 2019 to 2021, the lake experienced four cyanobacteria blooms, though none exceeded state recreational guidelines for toxin levels (Thurston County Environmental Health, 2021).

There are no channels, riverine wetlands, or isolated wetlands within the Project Site. Perched groundwater may be encountered within 30 feet of the ground surface, while regional groundwater is typically found at depths greater than 100 feet. Groundwater flow is inferred to move generally northwest based on local topography and proximity to surface water. No stormwater drainage features were observed on the Project Site (**Appendix C**).

The Federal Flood Risk Management Standard (FFRMS) Freeboard Value Approach Report indicates that the Project Site is located outside of the coastal and riverine FFRMS floodplain, meaning it is not subject to floodplain-related development restrictions or elevated flood risk (**Appendix D**).

3.3.2 Impacts

Alternative A – Proposed Project

Alternative A would result in an increase in groundwater pumping due to the proposed development. However, the Project Site is already developed as an equestrian center and small ranch complex, with existing groundwater use for residential and agricultural purposes. Given the relatively limited scale of the new development, the increase in groundwater demand is not expected to impact groundwater levels.

The onsite septic system would provide wastewater treatment for Alternative A and would be installed no deeper than 8 feet below ground surface, allowing for biological treatment before effluent percolates into the soil. The soils underlying the Project Site are well-drained gravelly loams and sandy loams, which facilitate percolation and reduce the likelihood of effluent surfacing or contaminating groundwater. Proper system design and maintenance would ensure that wastewater treatment meets applicable water quality standards and does not introduce pollutants into groundwater or surface water.

Runoff from the Project Site would continue to drain toward Lake Saint Clair, which is hydrologically connected to the regional groundwater system. The lake is classified as mesotrophic, and recent monitoring has shown improved water transparency and no exceedances of recreational toxin guidelines from cyanobacteria blooms. The proposed development would introduce impervious surfaces which could alter surface runoff patterns. During both construction and operation, measures would be implemented to reduce the potential for erosion and contaminants entering nearby water bodies. Construction would comply with the NPDES General Construction Permit through a SWPPP and BMPs, while operation would incorporate stormwater control components, such as bioswales, to manage runoff effectively. The operation of the equestrian ranch will also include manure management measures to avoid nutrients from entering Lake Saint Clair or other water bodies (see **Table 2.1-1**).

As the Project Site is located outside of a designated floodplain, no impacts related to flooding would occur.

With the implementation of protective measures identified in **Table 2.1-1**, groundwater and surface water impacts from Alternative A would be less than significant.

Alternative B – No Action Alternative

Under Alternative B, no change in land use would occur, and the Project Site would remain in its current state. The land would be subject to federal, State, and local regulations protective of water resources and thus no new significant impacts would occur.

3.4 AIR QUALITY

3.4.1 Environmental Setting

Air quality in Washington is regulated under RCW 70A.15 (Washington Clean Air Act) and Washington Administrative Code (WAC) Title 173. In Thurston County, the Olympic Region Clean Air Agency (ORCAA) is responsible for implementing and enforcing these regulations. Once the Project Site is taken into trust, air quality would be under the jurisdiction of US Environmental Protection Agency (USEPA). As shown in **Table 3.4-1**, Thurston County, where the Project Site is located, meets federal standards or is unclassifiable for all criteria air pollutants.

Table 3.4-1: Thurston County NAAQS Attainment Status

Pollutant	NAAQS
Ozone (8-hour)	Attainment
PM_{10} (24-hour, annual)	Attainment
$PM_{2.5}$ (annual)	Attainment
Carbon Monoxide (8-hour, 1-hour)	Attainment
Nitrogen Dioxide (annual, 1-hour)	Attainment
Sulfur Dioxide (24-hour,1-hour)	Attainment
Lead (30-day average)	Attainment

Source: USEPA, 2024

PM_{10}: Particulate matter with diameters that are generally 10 micrometers and smaller.

$PM_{2.5}$: Particulate matter with diameters that are generally 2.5 micrometers and smaller.

The nearest sensitive air quality receptors include residences along the eastern and northern boundaries of the Project Site, with additional rural residences located near the northwest and southern boundaries.

3.4.2 Impacts

Alternative A – Proposed Project

Construction Emissions

Construction of Alternative A would result in emissions of CAPs and HAPs (primarily in the form of DPM) from the use of construction equipment and grading activities. Construction emissions of CAPs from earth-moving, fine grading, and equipment due to diesel combustion and on-road vehicle operations were

calculated using the USEPA MOVES4 model, assuming construction begins in November 2025 and lasts 6 months. Details are in **Appendix E**.

The construction emission totals for Alternative A are shown in **Table 3.4-2** (see **Appendix E** model output files). The Project Site is in a region classified as being in attainment for all CAPs; therefore, in accordance with 40 CFR Part 93, there are no applicable *de minimis* levels or thresholds for a project's emissions. Due to the limited amount and duration of construction emissions, Alternative A does not present the potential to impede the State's ability to meet the NAAQS. However, construction of Alternative A may generate DPM and fugitive dust (PM_{10}) that could affect nearby sensitive receptors. BMPs identified in **Table 2.1-1** would minimize these emissions. With the implementation of BMPs identified in **Table 2.1-1**, construction of Alternative A would not result in significant adverse impacts associated with the regional air quality environment. There would be a less-than-significant impact.

Table 3.4-2: Construction Emissions of Criteria Pollutants – Alternative A (tons/year)

Construction Year	NOx	VOC	CO	SO_2	PM_{10}	$PM_{2.5}$
2025	0.73	0.32	0.93	0.00	2.85	1.44
Total Emissions	**0.73**	**0.32**	**0.93**	**0.00**	**2.85**	**1.44**
De minimis Level	N/A	N/A	N/A	N/A	100	N/A

Source: **Appendix E**

Notes: N/A = Not Applicable. *De minimis* levels are not applicable for projects in attainment areas.

Operation Emissions

Buildout and operation of Alternative A would result in the generation of mobile emissions from guest, employee, and delivery vehicles, as well as stationary-source emissions from combustion of natural gas in heating units and other equipment. Estimated mobile and stationary emissions from operation of Alternative A are provided in **Table 3.4-3**, with detailed calculations included in **Appendix E**. The number of guests is estimated to be up to 5,000 annually, which was used to estimate operational vehicle emissions. Emission factors were utilized from the MOVES4 model. State-specific input data and results are provided in **Appendix E.**[1] The Project Site is in a region classified as being in attainment for all CAPs; therefore, in accordance with 40 CFR Part 93, there are no applicable *de minimis* levels or thresholds for a project's emissions. Therefore, operation of Alternative A would not result in significant adverse impacts associated with the regional air quality environment. There would be a less than significant impact.

Table 3.4-3: Operation Emissions of Criteria Pollutants – Alternative A (tons/year)

Sources	NOx	VOC	CO	SO_2	PM_{10}	$PM_{2.5}$
Stationary	0.00	0.00	0.03	0.00	0.00	0.00
Mobile	0.05	0.01	0.37	0.00	0.00	0.00
Total Emissions	**0.05**	**0.01**	**0.40**	**0.00**	**0.00**	**0.00**
De minimis Levels	N/A	N/A	N/A	N/A	100	N/A

Source: **Appendix E**

Notes: N/A = Not Applicable. *De minimis* levels are not applicable for projects in attainment areas.

[1] While MOVES4 emission factors are state specific, they are not specific to Thurston County.

Greenhouse Gas Emissions

Development of Alternative A would result in an increase in GHG emissions from construction, mobile sources (trips generated), stationary and area sources (components that directly emit GHG), and indirect sources related to energy production. **Table 3.4-4** details the direct construction and stationary GHG emissions and annual indirect operation GHG emissions in metric tons (MT) of carbon dioxide equivalent (CO_2e) from Alternative A. Alternative A would not result in cumulatively considerable impacts associated with GHG emissions and climate change.

Table 3.4-4: Construction and Operational GHG Emissions (MT of CO2e)

Emission Categories	Alternative A
Construction Emissions (Total)	
Grading, Building, etc.	151
Annual Operational Emissions	
Direct	
Stationary	43
Indirect	
Energy	110
Mobile	48
Solid Waste	0.3
Water/Wastewater	55
Total Indirect	213.3
Total Annual Operational GHG Emissions	256.3

Source: **Appendix E**
Notes: CO_2e = carbon dioxide equivalent; MT = metric tons

Alternative B – No Action Alternative

Under the No-Action Alternative, the Project Site would remain as it is currently and none of the construction or operational air quality impacts identified for Alternative A would occur.

3.5 BIOLOGICAL RESOURCES

3.5.1 Environmental Setting

A biological field assessment was conducted in September 2024 to collect data on wildlife and plant species present, as well as habitat types and jurisdictional waters. Survey efforts emphasized the search for federally-listed species that had documented occurrences in Washington database queries within the vicinity of the Project Site. Habitat types occurring in the Project Site were mapped on aerial photographs and information on habitat conditions and the suitability of habitats to support listed species was also recorded. A desktop review targeting the Project Site was also performed, which included the review of previous biological resource studies, United States Geologic Service (USGS) 7.5 degree-minute topographic quadrangles, aerial photographs, the Washington Department of Natural Resources Natural Heritage database, the Washington Department of Fish and Wildlife (WDFW)'s Priority Habitats and Species Program database, the USFWS National Wetlands Inventory (NWI), and the USFWS species list (IPaC Trust Resources Report) (**Appendix A**).

Habitats

Terrestrial and Aquatic Habitats

The Project Site contains pasture, ruderal/developed, coniferous forest, oak woodland, forest scrub, and open water terrestrial communities. The National Wetland Inventory did not report water features within the Project Site, with the exception of palustrine wetland in the pond in the northwest edge of the Project Site, these mapped wetlands are shown in Figure 6 of **Appendix A**. There are no channels, riverine wetlands, or isolated wetlands located in the Project Site.

Critical Habitat

USFWS

There is no designated critical habitat for federally listed species within or adjacent to the Project Site. The nearest designated critical habitats are for Chinook salmon (*Oncorhynchus tshawytscha*) and killer whale (*Orcinus orca*), seven miles to the north in Puget Sound; and for Yelm pocket gopher (*Thomomys mazama yelmensis*), nine miles to the south near the city of Rainier.

NMFS

The Project Site is not located in critical habitat for any listed species under NFMS jurisdiction (NOAA, 2024a). The nearest NMFS critical habitat is for Steelhead [Puget Sound DPS] (*Oncorhynchus mykiss*), one and a half miles to the northeast in the Nisqually River.

Essential Fish Habitat

The Project Site is located in three essential fish habitats (EFH's) (pursuant to the Magnuson-Stevens Fishery Conservation and Management Act): Chinook Salmon EFH; Pink salmon EFH; and Coho Salmon EFH (NOAA, 2024b). This is because the Project Site is within a watershed that drains directly into the Nisqually Reach of Puget Sound.

Listed Species

An official USFWS species list and a NMFS species list were generated. The species that were identified are shown in **Table 3.5-1** below. In addition, Washington Department of Fish and Wildlife's Priority Habitats and Species Program database was queried for any reported occurrences of listed animals or at-risk species in the Project Site. These listed animals or at-risk species are shown in **Table 3.5-1** below. The Washington Department of Natural Resources Natural Heritage database was queried for any reported occurrences of listed plants or rare plants in the Project Site. This query reported no federally-listed plants or rare plants within the Project Site.

Table 3.5-1: Potentially Occurring Federal and State Special-Status Species

Category	Species Name	Potential to Occur on Project Site
Federal Special-Status Species		
Animal Species	▪ Yelm Pocket Gopher (*Thomomys mazama yelmensis*)	▪ Unlikely to occur. Suitable habitat is present, but Project Site is beyond the dispersal distance of known populations
Bird Species	▪ Marbled Murrelet (*Brachyramphus marmoratus*)	▪ Unlikely to occur
	▪ Streaked Horned Lark (*Eremophila alpestris strigata*)	▪ Very unlikely to occur
	▪ Yellow-billed cuckoo (*Coccyzus americanus*)	▪ Very unlikely to occur
Reptile Species	▪ Northwestern Pond Turtle (*Actinemys marmorata*)	▪ Unlikely to occur
Insect Species	▪ Monarch Butterfly (*Danaus Plexippus)*	▪ Unlikely to support this species due to lack of required plant species
	▪ Suckley's Cuckoo Bumble Bee *(Bombus suckleyi)*	▪ Unlikely to support this species due to lack of rich floral resources
Aquatic Species (within broader watershed)	▪ Bull Trout (*Salvelinus confluentus*)	▪ No potential to occur
	▪ Chinook Salmon (*Oncorhynchus tshawytscha*)	▪ No potential to occur
	▪ Steelhead Trout (*Oncorhynchus mykiss*)	▪ No potential to occur
	▪ Bocaccio (*Sebastes paucispinis*)[2]	▪ Limited to marine waters, no potential to occur
	▪ Yelloweye Rockfish (*Sebastes ruberrimus*)[2]	▪ Limited to marine waters, no potential to occur
	▪ Coho Salmon (*Oncorhynchus kisutch*)[1]	▪ Limited to marine waters, no potential to occur
	▪ Puget Sound Pink Salmon (*Oncorhynchus gorbuscha*)[1]	▪ Limited to marine waters, no potential to occur
State Special-Status Species		
Animal Species	▪ Little brown bat (*Myotis lucifugus*)[3]	▪ Not federally listed, will not be analyzed further
	▪ Western gray squirrel (*Sciurus griseus*)[3]	▪ Not federally listed, will not be analyzed further
	▪ Mazama pocket gopher (*Thomomys mazama*)[4]	▪ Discussed under Yelm Pocket Gopher
Amphibian Species	▪ Western toad (*Anaxyrus boreas*)[3]	▪ Not federally listed, will not be analyzed further
Bird Species	▪ Wood duck (*Aix sponsa*)[3]	▪ Not federally listed, will not be analyzed further
Aquatic Species	▪ Rainbow trout (*Oncorhynchus mykiss*)[3]	▪ Not federally listed, will not be analyzed further

Source: **Appendix A;** Notes: [1]Not federally listed but considered due to the presence of EFH; [2]Limited to marine waters, these habitats do not occur in the Project Site, were not analyzed further; [3]Not federally listed, will not be analyzed further; [4]discussed under Yelm pocket gopher in the Biological Assessment.

3.5.2 Impacts

Alternative A – Proposed Project

Habitats

There is no federally-designated critical habitat for any listed species within, or adjacent to, the Project Site. Implementation of Alternative A will have no Effect on designated critical habitat for any federally listed species.

The Project Site is located within EFH for pink salmon, Chinook salmon, and Coho salmon. However, there is no fishery habitat within the Project Site, therefore there are no direct impacts to EFH from Alternative A. The only potential adverse effects to EFH are indirect and consist of habitat degradation should polluted runoff exit the project areas into adjacent rivers. Protective measures identified in **Table 2.1-1** include the implementation of a SWPPP during construction, stormwater treatment facilities such as a bioswales, and manure management measures to avoid nutrients from entering Lake Saint Clair or other water bodies during operation of Alternative A. Therefore, with protective measures, there would be no effect to EFH or other sensitive habitat types.

Listed Species

As explained in more detail in **Appendix A**, due to the lack of habitat and known occurrences in the project area, there would be no effect to listed species. Mitigation measures, including pre-construction surveys, are identified in **Section 4** to ensure that listed species are not present in the development area prior to construction. Species accounts are detailed in the Biological Assessment (**Appendix A**).

Migratory Birds

Trees, shrubs, and poles within the Project Site may provide suitable nesting and perching habitat for raptors and/or migratory birds. If construction activities are conducted during the nesting season, nesting birds/raptors could be directly impacted by removal of trees and indirectly impacted by noise, vibration, and other construction-related disturbance. Avoidance and minimization measures are identified in **Section 4** to reduce potential impacts to migratory birds, and nesting birds in general, to a less than significant level.

Alternative B – No-Action Alternative

Under Alternative B, no additional development would occur on the Project Site; therefore, no biological impacts would occur.

3.6 CULTURAL RESOURCES

3.6.1 Environmental Setting

A Cultural Resource Investigation was conducted for the Proposed Project in accordance with Section 106 of the National Historic Preservation Act (NHPA). The investigation included an archival records search, a pedestrian survey, and an archaeological predictive model analysis and subsequent Subsurface Testing Plan (STP).

A records search from the Washington State Department of Archeology and Historic Preservation (DAHP) was conducted on October 4, 2024. The search revealed two previous studies conducted within the APE

and one previously recorded cultural resource, identified as the Olympia-Grand Coulee No. 1 Transmission Line, which was deemed eligible for the National Register of Historic Places (NRHP) in 2021. A review of historic maps showed a historic Trail within the Project Site; however, no site records exist for this resource.

An intensive-level pedestrian survey was conducted in October 2024. The survey documented that one of the existing ranch homes on the site is old enough to be classified as a historic resource. No new prehistoric sites, features, or ethnographic sites were recorded, and the historic trail (GLO 1853) could not be relocated.

The DAHP archaeological predictive model was applied to the Project Site to assess the likelihood of discovering previously unknown sites. The model classified most of the Project Site, including the areas designated for development, as "Moderately Low Risk," with areas near Lake Saint Clair designated as "Very High Risk" or "High Risk." The surface geology of the Project Site consists of Late Pleistocene glacial deposits with minimal subsequent deposition, suggesting that any archaeological materials would likely be near the surface. However, past disturbances from grading, road construction, and development reduce the likelihood of encountering subsurface resources. Given the location of ground-disturbing activities away from Lake Saint Clair, the presence of buried deposits of cultural resources are not expected. A STP survey was conducted in October 2024, which involved excavating thirty-five auger units. No cultural materials or features were encountered during the testing.

Additional details of the precontact, ethnographic, and historical setting of the Project Site, as well as the findings of the archival records search and field surveys are provided in **Appendix B.**

3.6.2 Impacts

Alternative A – Proposed Project

The cultural resources investigation for the Proposed Project identified one previously recorded site (transmission line) and one newly recorded resource (existing ranch home) within the Project Site. The transmission line was found eligible for listing on the NRHP in 2021; however, it will not be impacted by the Proposed Project. The existing ranch home was not found to be associated with significant historical events, individuals, or to possess unique architectural characteristics and was therefore deemed ineligible for NRHP listing. Additionally, the existing ranch home is outside the development area and will not be impacted by the Proposed Project. The archaeological predictive model indicated a low probability for subsurface resources, and subsequent STP investigations found no evidence of buried cultural deposits. As a result, the archaeological sensitivity of the Project Site for subsurface cultural resources is considered low. Therefore, Alternative A would not impact known historic properties, cultural resources, or paleontological resources.

It is possible to inadvertently uncover unknown cultural or paleontological resources during ground disturbing activities. Although the likelihood of discovery is low, development may adversely affect previously unknown subsurface prehistoric or historic archaeological resources, including human remains. If archaeological features are discovered, this could be a potentially significant impact. Protective measures for the protection and treatment of unanticipated discoveries of archaeological resources and/or human remains are identified in **Table 2.1-1.** Implementation of these mitigation measures would reduce impacts on archaeological resources to a less-than-significant level.

Alternative B – No Action Alternative

Under Alternative B, no development would occur within the Project Site. Therefore, there would be no impacts to cultural or paleontological resources.

3.7 HAZARDOUS MATERIALS

3.7.1 Environmental Setting

A Phase I Environmental Site Assessment (ESA) was prepared in October 2023 to evaluate potential hazardous material risks on the subject property (report attached as **Appendix C**). The Phase I ESA identified one recognized environmental condition (REC). A 425-gallon heating oil underground storage tank (UST) was removed from outside one of the homes on the Project Site in 2022. At the time of the UST removal, soil samples were taken from beneath the UST revealing diesel-range petroleum hydrocarbons (DRPH) contamination measured at 2,400 mg/kg, exceeding the State's Model Toxics Control Act (MTCA) cleanup threshold of 2,000 mg/kg. No excavation of the contaminated soil was undertaken at the time. Because the extent of residual contamination was not resolved, the Phase I ESA concluded that the contamination was a REC.

A Phase II ESA was conducted in November 2023 to evaluate the contamination at the former UST site (**Appendix C**). Subsurface investigations included eight borings to depths of approximately 15 feet below ground surface (bgs). Field screening of soil samples indicated slight to moderate petroleum hydrocarbon sheens in two borings. Chemical analysis confirmed that lube oil-range petroleum hydrocarbons were present at concentrations below the MTCA cleanup threshold for unrestricted land use. Gasoline-range and diesel-range petroleum hydrocarbons, as well as benzene, ethylbenzene, toluene, and xylenes (BETX), were not detected in any samples. The results indicate that residual petroleum contamination, if any, is localized and limited in extent, posing no significant risk to human health or the environment. Based on these findings, the Phase II ESA concluded that no further remediation or site investigations are warranted in connection with the former USTs. Details of the Phase II ESA findings, including boring locations and analytical results, are summarized in **Appendix C**.

The Phase I ESA also identified that the property is situated within the footprint of the Tacoma Smelter Plume (TSP), which is associated with a former copper smelter that caused arsenic and lead contamination in near-surface soils throughout a large area in the South Puget Sound area. The Phase I ESA reviewed available data that indicates that the highest likely contamination levels in the area of the Project Site are below the MTCA unrestricted land use cleanup threshold of 20 parts per million (ppm). Accordingly, the Phase I ESA did not identify this as a REC.

Wildfire History

No wildfires have been reported on or in the immediate vicinity of the Project Site. However, wildfires are a frequently occurring hazard in the County, with an average of 63 wildfires occurring annually (Thurston County Emergency Management, 2024).

3.7.2 Impacts

Alternative A – Proposed Project

Hazardous Materials Exposure and Handling During Construction

A Phase I ESA and Phase II ESA were conducted on the site. The only REC identified in the Phase I ESA was previously documented soil contamination under a former UST at one of the homes on the Project Site. The Phase II ESA conducted soil sampling and found that contamination, if any, is localized and limited in extent, posing no significant risk to human health or the environment. No development is proposed at this location and no other sources of contamination were identified on the Project Site.

Construction activities will involve the use of typical hazardous materials, including fuels, lubricants, and cleaning solvents. The accidental release of these materials could pose risks to workers and the environment. BMPs are identified in **Table 2.1-1** to reduce the potential for spills of hazardous materials. With these measures in place, hazardous material handling during construction is not expected to result in significant impacts.

Hazardous Materials Handling During Operation

The operation of the equestrian ranch will involve limited use of hazardous materials, primarily for equipment maintenance, landscaping, and facility cleaning. All hazardous materials will be stored, handled, and disposed of in accordance with OSHA regulations (29 CFR Part 1910) and manufacturer guidelines. No hazardous materials requiring special storage or disposal procedures are anticipated. As a result, operational impacts associated with hazardous materials are expected to remain less than significant.

Wildfire Risk During Construction

Construction activities could pose a minimal risk of wildfire ignition due to the operation of heavy machinery and potential fuel spills. BMPs are identified in **Table 2.1-1** to reduce the potential for fires during construction. Given the minimal fuel loads present onsite and the implementation of these measures, wildfire risk during construction is less than significant.

Wildfire Risk During Operation

The operation of the equestrian ranch will include compliance with applicable fire safety codes and guidelines, including ongoing vegetation management. Due to the nature of activities on the Project Site, the risk of wildfire ignition or spread during operation is expected to remain less than significant.

Alternative B – No Action Alternative

Under Alternative B, no development will occur, and the Project Site will remain in its current state. No hazardous material or wildfire impacts would occur under this alternative.

3.8 LAND USE

3.8.1 Environmental Setting

Land Use and Zoning

The Project Site is approximately five miles northwest of the City of Yelm and about three miles southeast of the City of Lacey. According to the Thurston County Official Zoning Map, the Project Site and surrounding properties are designated as McAllister Geologically Sensitive Area – MGSA (Thurston County Geodata Center, 2025). The MGSA zoning provides for single-family residential, agricultural uses, forest practices, and accessory uses (Thurston County Code Chapter 20.23). Land uses in the vicinity consist of equestrian facilities, rural residential properties, pastures, and forested open space. Adjacent to the site are the Lake Saint Clair Protected Area and Lake Saint Clair itself (**Appendix C**). The Project Site is outside any designated airport influence areas or noise zones.

As discussed in **Section 3.2.2**, the Project Site contains five soil types with the following farmland designations (Appendix Soil of **Appendix A**):

- Indianola loamy sand (15 to 30 percent slopes) - farmland of statewide importance
- Nisqually loamy fine sand (0 to 3 percent slopes) - prime farmland if irrigated
- Everett very gravelly sandy loam (8 to 15 percent slopes) - farmland of statewide importance
- Spana gravelly loam - prime farmland if drained
- Spanaway gravelly sandy loam (0 to 3 percent slopes) - prime farmland if irrigated

3.8.2 Impacts

Alternative A – Proposed Project

Alternative A would be compatible with surrounding land uses. The proposed equestrian arena would expand on the existing equestrian facilities. The two existing homes on the Project Site will remain in place. These uses are compatible with existing rural residential properties, pastures, and forested open space in the vicinity. The proposed equestrian facilities under Alternative A would be consistent with existing rural land uses and would not introduce incompatible development.

The Project Site is outside any designated airport influence areas or noise zones and would not conflict with any federal, tribal, or regional land use plans. Although the Project Site contains soils classified as prime farmland if irrigated or drained, and farmland of statewide importance, the site is not currently used for agricultural production. Further, the proposed equestrian arena would only convert a small portion of the overall site, and existing equestrian uses on the balance of the site would continue. Therefore, impacts to land use and agricultural resources would be less than significant.

Alternative B – No Action Alternative

Under Alternative B, the Project Site would remain under County jurisdiction and no development would occur on the Project Site. The No Action Alternative would not introduce development that would be inconsistent or incompatible with adopted land use plans or surrounding development, thus no impact to land use would occur.

3.9 NOISE

3.9.1 Environmental Setting

Ambient noise in the vicinity of the Project Site is primarily influenced by equestrian activities, rural residential uses, and traffic on Yelm Hwy SE, which is the primary roadway contributing to noise levels. Additional noise sources include traffic from other local roadways, such as Todtkarle Road SE and Saskatoon Lane SE, as well as intermittent agricultural activities and natural sounds from surrounding forested open space. Recreational activities at Lake Saint Clair, located directly west of the Project Site, also contribute to the noise environment, such as from boating, fishing, and other water-based activities. No commercial or industrial uses are present within or adjacent to the Project Site that would contribute to significant background noise levels.

The nearest sensitive noise receptors include residences along the eastern and northern boundaries of the Project Site, with additional rural residences located near the northwest and southern boundaries. The Lake Saint Clair Protected Area, located directly west of the Project Site, is also considered a sensitive noise receptor due to its designation as an outdoor recreation area.

3.9.2 Impacts

Construction Noise

Construction associated with Alternative A would temporarily increase noise levels due to the operation of construction equipment in the northern portion of the Project Site where development is proposed. In addition, noise would be generated from material hauling and worker vehicle trips within the Project Site and local roadways, but the number of additional vehicle trips is not expected to be substantial. Construction activities would occur during daytime hours in compliance with applicable noise regulations and would last approximately six months. Noise sources could include equipment such as excavators, backhoes, and loaders. Given the proximity of sensitive receptors to the proposed development areas directly north and east of the Project Site boundaries, temporary noise increases due to stationary construction equipment could cause adverse effects. However, under Thurston County Code 10.36.040, noise from temporary construction sites is exempt from noise regulations between the hours of 7:00 a.m. and 10:00 p.m. BMPs would be implemented to minimize noise impacts, including locating stationary equipment as far from sensitive receptors as feasible, limiting construction hours from 7 a.m. to 10 p.m., and ensuring proper equipment maintenance (see **Table 2.1-1**). Given the temporary nature of construction noise, compliance with noise regulations, and implementation of BMPs, construction-related noise impacts under Alternative A would be less than significant.

Operation Noise

Operation of Alternative A would result in some new noise sources, but overall, noise levels would remain consistent with the existing equestrian ranch and residential activities, which include animal care, equestrian training, and residential uses. Regular daily operations would generate minimal new noise, as activities would primarily consist of caretaking of the horses and facilities, which is already an existing noise source. Therapy sessions would occur on a small scale, with participants engaging in equestrian activities that would not generate significant noise beyond existing levels. Given the limited scale of new noise-generating activities and the absence of significant new traffic-related noise sources, operational noise impacts under Alternative A would be less than significant.

Alternative B – No Action Alternative

Under Alternative B, the Project Site would remain in its current state and would not be a source of construction or operational noise. No noise impacts would occur under Alternative B.

3.10 PUBLIC SERVICES AND UTILITIES

3.10.1 Environmental Setting

Public Services

The Thurston County Sheriff's Office provides law enforcement services to unincorporated Thurston County, Washington and is currently the primary agency responsible for law enforcement around the Project Site. The Tribe operates its own justice system, which includes a comprehensive Public Safety Department composed of three major divisions – Police, Corrections, and Fish and Wildlife. The Nisqually Police Department is responsible for enforcing the law on the Reservation and would be responsible for law enforcement on the Project Site.

In total, the Tribe's Public Safety Department employs over 92 full-time equivalent employees. In addition to the Public Safety Department, the Tribe maintains its own Emergency Management Services program. The Emergency Management Services program employs nearly 24 full-time equivalent employees.

The Thurston County Fire Marshal Office serves 15 fire districts in unincorporated Thurston County. The Project Site is within the service area of Thurston County Fire District #3 - Lacey Fire Department, which provides fire protection and emergency services in the vicinity of the Project Site (Thurston County, 2024a) and to the Nisqually Indian Reservation. Fire Station 03-2 is located approximately 0.32 miles southeast of the Project Site (Lacey Fire District #3, 2024a). A memorandum of agreement between the Tribe and Lacey Fire District #3 to provide fire protection and related emergency services was signed on January 19, 2017, and amended on July 24, 2019 (**Appendix F**). The Tribe intends to meet with Lacey Fire District #3 per the conditions of the agreement to address development on the Project Site.

In 2023, Lacey Fire District #3 received 17,053 calls for service; at a population of approximately 107,310 people within the Fire District boundaries, this equates to a call rate of approximately 0.16 calls per person (Lacey Fire District #3, 2024b).

Utilities

The Project Site will have its own well for water supply and septic system for wastewater. Puget Sound Energy (PSE) provides electricity and natural gas to the County and City. The Project Site will continue to use its current provider for electricity and natural gas.

3.10.2 Impacts

Alternative A – Proposed Project

Alternative A does not include the development of new facilities that would result in substantial changes to the local population or increase calls for public services. The Tribe has an existing agreement with Lacey Fire District #3 to provide fire protection and related emergency services. Law enforcement will be provided by the Tribe's own Public Safety Department. Similarly, the Tribe will provide water and wastewater services to the Project Site and Alternative A would not increase demands on public water

and wastewater utilities. There would be a slight increase in gas and electric, but not enough to have a significant impact on utility demands. Therefore, there would be a less-than-significant impact on public services and utilities.

Alternative B – No Action Alternative

Under Alternative B, the Project Site would remain in its current state. Alternative B would not increase demands on public services and utilities and no impacts would occur.

3.11 SOCIOECONOMIC CONDITIONS

3.11.1 Environmental Setting

The Project Site is within unincorporated Thurston County, Washington, within the Tribe's traditional homelands, approximately 1,100 feet from land held in trust for the Tribe that is adjacent to the Reservation, and 1.1 miles from the exterior boundary of the Nisqually Reservation.

Demographics

In 2024, the average unemployment rate was 4.8% for the County and 4.5% statewide (U.S. Bureau of Labor Statistics, 2024). The largest industries in the County are State and local government; trade, transportation, warehousing, and utilities; professional and business services; leisure and hospitality; mining, logging, and construction; and manufacturing (Employment Security Department, 2022).

According to U.S. Census data, the annual mean household income in 2023 dollars was $110,438 in the County compared with $129,161 in the State as a whole (U.S. Census Bureau, 2023a). The Project Site is located in Census Tract 124.20 as designated by the U.S. Census Bureau (U.S. Census Bureau, 2020). The annual mean household income in 2023 dollars was $150,560 for Census Tract 124.20 (U.S. Census Bureau, 2023a, 2023b). According to the U.S. Department of Health and Human Services, the 2023 poverty guideline is $19,720 for a household of two persons and $24,860 for a household of three persons (Office of the Assistant Secretary for Planning and Evaluation, 2023). The Census Tract, County and the State's median household income are all well above the poverty threshold. The minority population for the Project Site census tract and all but one of the adjacent census tracts is below 50%.

Property Taxes

Table 3.11-1 below illustrates the 2024 Thurston County property tax payments for the Project Site parcels. As shown therein, the 2024 property taxes for the Project Site parcels totaled $11,681.93. In fiscal year (FY) 2024, Thurston County billed approximately $580,604,188 in property taxes (Thurston County, 2024b). Consequently, the property taxes collected on the parcels comprise approximately 0.002% of the Thurston County property tax collections for FY 2024.

Table 3.11-1: Subject Property Tax

Thurston County APN	Acreage within Subject Property	Approximate 2024 Property Tax Payment
21832340002	0.76	$2,445.87
21832340003	1.00	$1,239.83
21832340000	70.46	$7,996.23
Total	**72.22**	**$11,681.93**

Source: Thurston County, 2024c.

3.11.2 Impacts

Economy and Employment

Alternative A would result in some benefits to the regional economy, including residents of the County and Nisqually Reservation. These effects include increases in overall economic output and employment opportunities. The equine therapy center will employee a few residents to assist with classes and taking care of the ranch and horses. Average salaries offered are expected to be consistent with other opportunities in the local labor market. These small increases in employment in the context of the regional labor market would be a less-than-significant beneficial impact.

Fiscal Impacts

Potential effects on state and federal tax revenues resulting from the operation of Alternative A are expected to be positive as a result of increased local, state, and federal tax revenues resulting from operation of Alternative A. The loss of property tax revenue to the County would be minor and is not expected to impact the ability of the County to provide services. As described in Section 3.10, the Tribe will provide public services or contract with service providers for services. Therefore, the fiscal impacts of Alternative A would be less than significant.

Housing

Alternative A, as described above, is projected to generate a few jobs. Since there are likely to only be a few full-time employees, there would be no significant effect on housing in the area. Local residents would be hired to work at the equestrian ranch.

Schools

Alternative A is not expected to increase the local population or require additional schools to be developed or to result in overburdening of existing schools.

Alternative B – No Action Alternative

Under Alternative B, the Tribe would not receive any of the benefits associated with development on the Project Site. No additional development would occur on the Project Site; therefore, no socioeconomic impacts would occur.

3.12 TRANSPORTATION AND CIRCULATION

3.12.1 Environmental Setting

The Project Site is located within a residential area south of State Route 510 and west of Yelm Highway SE and is accessible from Saskatoon Lane SE, a dead-end dirt road serving a number of single-family residences. The Thurston County Comprehensive Plan identifies State Route 510 as a State Highway, Yelm Highway SE as a County Arterial, and Saskatoon Lane SE as an unclassified roadway (Thurston County, 2019). There are no sidewalks or designated bicycle facilities on any of the roadways providing access to the Project Site. Intercity Transit Route 94 provides transit service along Yelm Highway SE with the nearest stops located approximately 0.3 miles from the Project Site at the intersection of Gallup Drive SE/Johnson Road SE. Route 94 operates every 30 minutes on weekdays between the Olympia Transit Center and the Yelm Walmart between 5:45 am and 7:45 pm; weekend service operates with the same frequency as weekday service, but doesn't begin operating until 6:45 am (Intercity Transit, 2025).

3.12.2 Impacts

Alternative A – Proposed Project

Alternative A consists of internal Project Site access improvements and parking areas to serve the proposed indoor arena and other existing equestrian ranch facilities. The Project Site would continue to be accessed via an existing driveway on Saskatoon Lane SE, and no changes would be made to this driveway or any other roadways used to access the Project Site. Based on the operation plan for Alternative A, the proposed equestrian ranch would employee up to six staff and would attract between 4,000 to 5,000 visitors annually (Iyall, undated). Staff would generate up to 12 daily one-way trips to/from the Project Site, assuming no carpooling. Visitors would average about 14 per day, although it is likely that visits would not occur on a daily basis and would likely peak on weekends. Based on the above discussion, operation of Alternative A would not generate a substantial number of new vehicle, pedestrian, bicycle, or transit trips and would, therefore, result in a less-than-significant impact to transportation and circulation facilities serving the Project Site.[2]

Construction activities associated with Alternative A are anticipated to commence in November 2025 and occur over a period of approximately 6 months. Construction worker parking and staging areas for equipment and materials would occur wholly within the Project Site boundaries. Construction would result in a maximum of approximately 18 one-way construction worker vehicle trips (i.e., nine workers traveling to the Project Site in the morning and departing the Project Site in the afternoon) during the site preparation phase, which would occur over a two-week period. Vehicle trips generated during other phases of construction would be lower and would include a mix of employee trips and vendor trips. Grading activities would be minimal and are not expected to require significant import/export of soil, so few truck hauling trips would be generated by Alternative A construction. In summary, Alternative A would generate a minimal number of construction worker, vendor, and truck hauling trips, as the facilities proposed for construction would not require a substantial amount of material to be removed from or imported to the Project Site, nor would they require a substantial effort to construct the new building due to the building type and size. Furthermore, any increase in vehicle trips generated during project

[2] Some vehicle trips are already occurring as part of existing conditions, as some of the facilities included in Alternative A have already been constructed and are operational.

construction would be temporary. There would be a less-than-significant impact.

Alternative B – No Action Alternative

Under Alternative B, there would be no development constructed on the Project Site, and consequently no increase in vehicular traffic on roadways in the vicinity of the Project Site. There would be no change in pedestrian, bicycle, or transit circumstances. Therefore, no impacts would occur under Alternative B.

3.13 VISUAL RESOURCES

3.13.1 Environmental Setting

The terrain of the Project Site is characterized by a terrace surrounded by undulating hills descending to the basins of Lake Saint Clair to the west and the higher rolling hills to the east. Elevations range from 84 feet to 260 in elevation. There are no designated scenic highways or roadways that occur within viewing range of the Project Site (WSDOT, 2025).

Views of the Project Site from the surrounding vicinity consist of forested land, undeveloped property, open space, pasture, and residential and commercial developments. Yelm Highway SE is located east of the project site and includes some residences and local businesses. To the west of the project site includes forested areas and Lake Saint Clair along with a few residences. To the north of the project site includes views of local roads, residences, and business. To the south of the project site includes views of open agricultural space, forested areas, local roads, and residences. Existing views of the Project Site from nearby sensitive residential receptors (notably the residential areas) are somewhat obstructed by large trees. Multiple residences are located less than 250 feet from the Project Site. The closest school to the Project Site is We He Lut Indian School which is over four miles north. The closest church (Capital Christian Center) is over six miles northwest, with the Church of Living Water and New Bridge Community Church over eight miles west from the Project Site.

3.13.2 Impacts

Alternative A – Proposed Project

Alternative A would alter the visual character of the Project Site by adding an indoor arena and parking areas. The 20,000 square foot arena would be the largest change in the visual character. The arena would be screened from Yelm Highway SE and most of the surrounding homes due to distance and intervening vegetation. The arena would be fully or partially visible from one or more homes located off Saskatoon Lane SE. Alternative A would not impede or obstruct scenic views because no scenic highways, roadways, or resources occur within viewing range of the Project Site.

Alternative A would introduce new sources of light to the Project Site for safety and security purposes at the indoor arena. Exterior lighting would be strategically positioned to minimize off-site lighting. The lighting associated with Alternative A would constitute an increase over the existing ambient light levels on the Project Site; however, the lighting would be consistent with the surroundings, and exterior lighting would be shielded as described in the protective measures listed in **Table 2.1-1**.

With the implementation of protective measures identified in **Table 2.1-1**, Alternative A would not result in adverse effects associated with visual resources.

Alternative B– No Action Alternative

Under Alternative B, the Project Site would not undergo additional development. Therefore, visual resource impacts would not occur under this alternative.

3.14 CUMULATIVE IMPACTS

There are no known development projects in the vicinity of the Project Site. Thurston County zoning designation the lands in the vicinity of the Project Site is McAllister Geologically Sensitive Area which provides for single-family residential, agricultural uses, forest practices, and accessory uses. Most of the properties immediately surrounding the Project Site have been built out with homes, and additional development is expected to be minimal. However, it is reasonable to assume that residential and commercial development will continue in the region. While such growth has the potential to affect the environment by converting habitat, and increasing traffic and air pollution, the development of Alternative A would not significantly contribute to these impacts. As discussed in **Sections 3.2 to 3.13**, Alternative A would result in the expansion of an existing equestrian center that would have limited impacts on the environment. The project would not generate a substantial increase in traffic or air pollution. The limited water and wastewater service required to support the development would be provided by the Tribe. The development would occur on land that was previously cleared, and no sensitive habitat would be impacted. With the implementation of protective measures and BMPs identified in **Table 2.1-1**, the potential impacts from Alternative A would be minimized or avoided. Under Alternative B, no development would occur within the Project Site and there would be no environmental impacts. The alternatives would not result in cumulatively significant impacts.

3.15 INDIRECT AND GROWTH-INDUCING EFFECTS

Under NEPA, indirect and growth-inducing effects are specific types of environmental impact that require consideration. Indirect effects are effects that are caused by the action and are later in time or further removed in distance but are still reasonably foreseeable. Growth-inducing effects are effects that foster economic or population growth, either directly or indirectly.

The Project Site is already used as an equestrian facility, and existing off-site infrastructure is either sufficient for Alternative A or would require limited off-site improvements. Alternative A would not require major roadway expansions or utility extensions, and no new infrastructure would be introduced that could facilitate additional development in the surrounding area. Furthermore, the small number of employees and visitors would not generate sustained demand for new housing or businesses in the vicinity.

Because the proposed development is consistent with existing land uses, does not introduce significant new infrastructure, and would not increase regional population or economic activity in a way that spurs additional growth, indirect and growth-inducing effects under Alternative A would be less than significant.

Section 4 | Mitigation Measures

NEPA requires that, if a project would have significant adverse effects on the environment, mitigation for those impacts must be identified. Mitigation consists of the following:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments (40 CFR Section 1508.20).

Mitigation measures to be implemented during construction and operation of the Proposed Project are summarized below. All mitigation is enforceable because it is (1) inherent to the project design; and/or (2) required by federal or tribal regulations.

Resource Area	Proposed Mitigation
Biological Resources (BIO)	BIO-1. The following measures will be implemented to avoid or reduce potential impacts to listed species, migratory birds, and aquatic habitat: A. To ensure that listed species are not present in construction areas, pre-construction clearance surveys shall be conducted by a qualified biologist. The survey should include a survey for gopher mounds to ensure that Yelm pocket gopher is not present. The survey should also focus on northwestern pond turtle. If any of these species are discovered during the survey, project construction activities shall not begin until the species have voluntarily vacated the construction area or USFWS has been consulted, and avoidance and minimization measures established and then implemented. B. All construction personnel shall receive worker environmental awareness training before they enter the construction site. The training program shall include, at a minimum, descriptions of the focal species (Yelm pocket gopher and northwestern pond turtle), and how to identify and avoid these focal species. Personnel shall be trained to halt work in the event that one of these focal species is observed within the work area and allow the individual to leave the work site on its own. Personnel shall be instructed to limit work activities to the designated construction areas and to properly store equipment and materials in the designated laydown area. C. If construction activities occur during the general nesting season (February 15 to September 1), a preconstruction nest survey shall be conducted by a qualified biologist within 500 feet of proposed construction areas within 5 days of initiating ground disturbance. If active nests are identified, the qualified biologist shall determine a suitable avoidance buffer based on the needs of the species observed. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged. Avoidance buffers may vary in

Resource Area	Proposed Mitigation
	size depending on habitat characteristics, project-related activities, and disturbance levels. Should work activity cease for 14 days or more during the nesting season, surveys shall be repeated to ensure birds and raptors have not established nests during inactivity.

Section 5 | Consultation and Coordination

This section lists agencies and organizations consulted during the preparation of this EA.

Agencies, Organizations, and Individuals Consulted	Summary of Consultation and Coordination
U.S. Fish and Wildlife Service	The USFWS was consulted to obtain a list of federally listed special-status species with the potential to occur in the vicinity of the Project Site. Additionally, the USFWS NWI was consulted to identify potential wetlands and waters in the vicinity of the Project Site.
U.S. Army Corps of Engineers	USACE manuals and guidance were reviewed during preparation of the Biological Assessment (included in **Appendix A**).
National Oceanic and Atmosphere Administration Fisheries Service	The NOAA Fisheries Service website was reviewed for information concerning special-status fish species and EFH.
U.S. Environmental Protection Agency	The USEPA website was reviewed for information regarding NAAQS Attainment status. Additionally, the USEPA's MOVES4 model was used to calculate emissions. Regarding the proposed leach field, the USEPA will be consulted regarding the registration of the sub-surface drainage system with the UIC program as a Class V injection well.
U.S. Geological Survey	The USGS website was reviewed for information concerning geological and hydrological information in addition to geological hazards.
U.S. Census Bureau	The U.S. Census Bureau website was reviewed for information concerning demographical data.
U.S. Department of Health and Human Services	The U.S. Department of Health and Human Services website was reviewed for information concerning federal poverty guidelines to determining poverty.
U.S. Department of Agriculture Natural Resources Conservation Service	The NRCS website was consulted for data concerning farmland and soil characteristics information.
U.S. Bureau of Labor Statistics	The U.S. Bureau of Labor Statistics website was reviewed to obtain labor statistics.
Washington Department of Archaeology and Historic Preservation Information System for Architectural and Archaeological Records Data (WISAARD)	WISAARD was consulted in order to obtain a list of previous archaeological surveys and identified cultural resources.
Nisqually Indian Tribe, Tribal Historic Preservation Office	The THPO office was contacted for information regarding known cultural resources within the property and to monitoring field investigations.
Washington Department of Fish and Wildlife	The WDFW online database was reviewed to obtain a list of threatened, endangered, and sensitive species with the potential to occur in the vicinity of the Project Site.
Washington State Department of Ecology	The WDOE website was reviewed for toxics information.
Lacey Fire District #3	Lacey FD#3 website was consulted regarding the existing fire district facilities.
Thurston County	The County's website and reports were reviewed for information concerning taxes, zoning, and public services.

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Kelli Raymond	BS; 10 years of experience	Senior Environmental Analyst
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Natural Investigations Company – Cultural Resources Report (Appendix B)		
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Appendices

Appendix A
Biological Assessment

BIOLOGICAL ASSESSMENT

Nisqually Indian Tribe Medicine River Ranch and Fee-to-Trust Project
Thurston County, Washington

February 2025

acorn environmental

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Section 1 | Introduction

1.1 PURPOSE OF ASSESSMENT

This biological assessment (BA) has been prepared to assess the anticipated environmental effects resulting from the acquisition by the U.S. Bureau of Indian Affairs (BIA) of a 72.22-acre property into federal trust status for the benefit of the Nisqually Indian Tribe (Tribe) for the proposed Medicine River Ranch and Fee-to-Trust Project (Proposed Action).

This BA in intended to facilitate consultation with the U.S. Fish and Wildlife Service (USFWS) and the U.S. National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) and has been prepared in accordance with legal requirements set forth under Section 7 of the Endangered Species Act (ESA; 16 U.S.C. 1536 (c)) and the Magnuson-Stevens Act (Section 305) concerning the effects of the Proposed Action. The purpose of this BA is to evaluate the Proposed Action in sufficient detail to determine the extent to which it may affect any federally-listed species, critical habitat, and/or Essential Fish Habitat (EFH). For the purposes of this BA, federally-listed species include those plant and animal species that are federally listed as endangered or threatened, species that are formally proposed for listing, and species that are listed as candidate species under the ESA.

1.2 DESCRIPTION OF PROPOSED ACTION AND ACTION AREA

The Action Area consists of an approximately 72.22-acre area currently owned in fee by the Tribe and is located adjacent to Lake Saint Clair in unincorporated Thurston County, Washington. **Figure 1** shows the location of the Action Area and **Figure 2** presents the topography of the Action Area and the immediate vicinity.

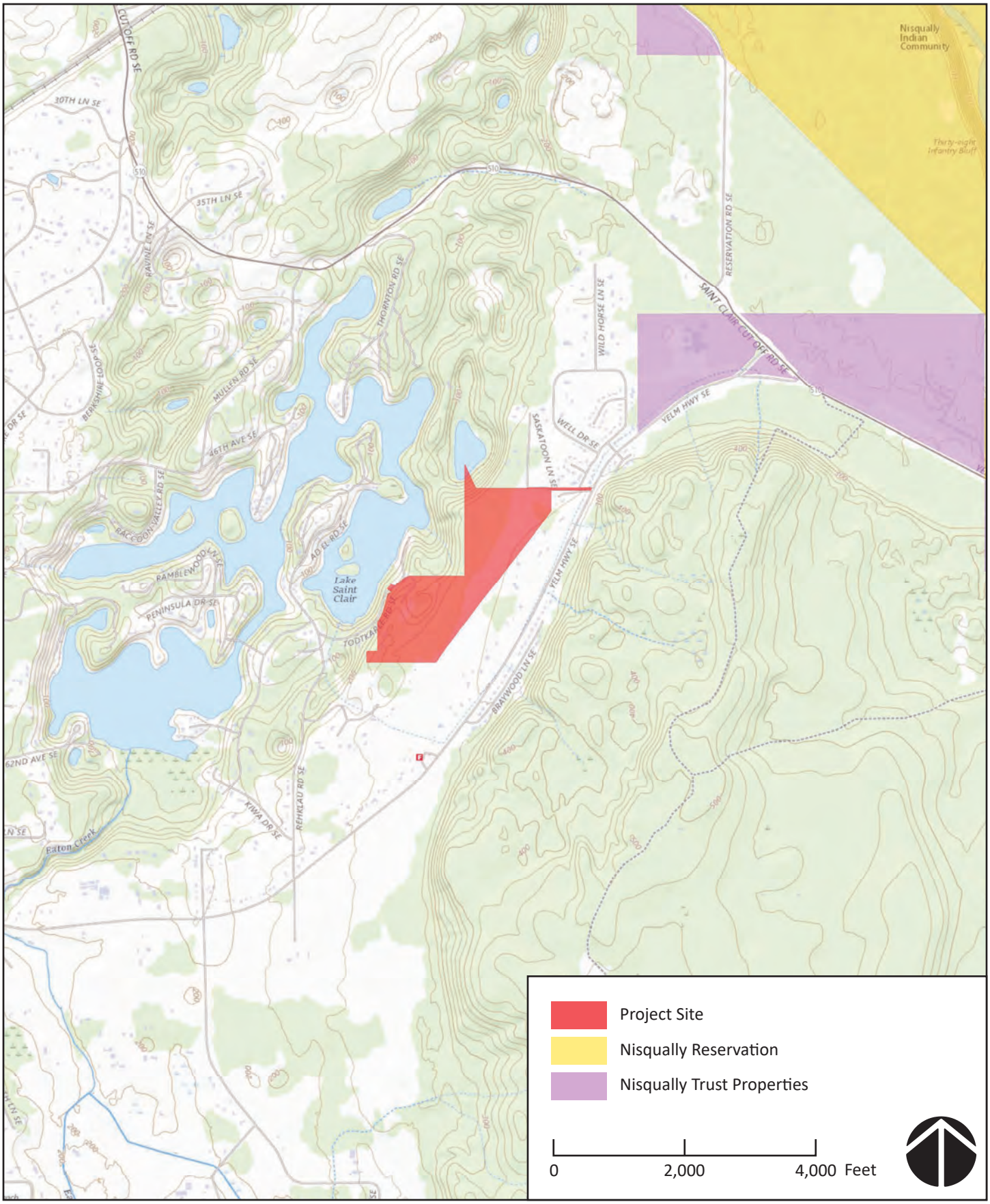
The Tribe is proposing to place the Project Site into federal trust status for the benefit of the Tribe and the subsequent development by the Tribe of an equestrian ranch, which includes parking, an indoor and outdoor arena, stables, round pen, and storage building. A site plan is provided in **Figure 3.**

For purposes of this assessment, the sum of the development footprints was designated as the Project Area; this area totals 72.22 acres. The Action Area was defined as the entire property. The Action Area is defined to identify biological resources adjacent to the Project Area and is the area subject to potential indirect effects from development.

Source: ESRI, USGS, NOAA

FIGURE 1

REGIONAL LOCATION



Source: USGS National Map (6/2020)

FIGURE 2

SITE AND VICINITY

Source: Google aerial (4/26/2023)

FIGURE 3

SITE PLAN

1.3 LISTED SPECIES AND CRITICAL HABITAT

1.3.1 USFWS Critical Habitat

There is no designated critical habitat within, or adjacent to, the Action Area. The nearest designated critical habitats are: for Chinook salmon (*Oncorhynchus tshawytscha*) and killer whale (*Orcinus orca*), seven miles to the north in Puget Sound; and for Yelm pocket gopher (*Thomomys mazama yelmensis*), nine miles to the south near the city of Rainier.

1.3.2 NMFS CRITICAL HABITAT AND ESSENTIAL FISH HABITAT

The Action Area is not located in critical habitat for any listed species under NFMS jurisdiction (NOAA, 2024a). The nearest NMFS critical habitat is for Steelhead [Puget Sound DPS] (*Oncorhynchus mykiss*), one and a half miles to the northeast in the Nisqually River. The Action Area is located in three EFH's (pursuant to the Magnuson-Stevens Fishery Conservation and Management Act): Chinook Salmon EFH; Pink salmon EFH; and Coho Salmon EFH (NOAA, 2024b). This is because the Action Area is within a watershed that drains directly into the Nisqually Reach of Puget Sound.

1.3.3 USFWS Species List

An official USFWS species list was generated online using the USFWS' IPaC Trust Resource Report System (see **Attachment A**). The following protected resources were identified:

Mammals

- Yelm Pocket Gopher (*Thomomys mazama yelmensis*) Threatened

Birds

- Marbled Murrelet (*Brachyramphus marmoratus*) Threatened
- Streaked Horned Lark (*Eremophila alpestris strigata*) Threatened
- Yellow-billed cuckoo (*Coccyzus americanus*) Threatened

Reptiles

- Northwestern Pond Turtle (*Actinemys marmorata*) Proposed Threatened

Fishes

- Bull Trout (*Salvelinus confluentus*) Threatened

Insects

- Monarch Butterfly (*Danaus plexippus*) Candidate
- Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*) Proposed Endangered

Plants

- None

Additionally, under the Migratory Bird Treaty Act of 1918 (16 USC §703-711), migratory bird species and their nests and eggs that are on the federal list (50 CFR §10.13) are protected from injury or death, and project-related disturbances must be reduced or eliminated during the nesting cycle.

1.3.4 NMFS Species List

A NMFS species list was generated online (see **Attachment A**), and two species were identified as occurring near the Action Area: Chinook Salmon (*Oncorhynchus tshawytscha*) Puget Sound Evolutionarily-significant Unit (ESU) (listed as threatened); and Steelhead Trout (*Oncorhynchus mykiss*) Puget Sound Distinct Population Segment (DPS) (listed as threatened)(NOAA, 2024c). Two other listed species occur in the vicinity—Bocaccio (*Sebastes paucispinis*) Puget Sound/Georgia Basin DPS (endangered) and Yelloweye Rockfish (*Sebastes ruberrimus*) Puget Sound/Georgia Basin DPS (threatened)—but these fishes are limited to marine waters, and such habitats do not occur in the Action Area and were not analyzed further (NOAA, 2024c).

1.3.5 Historical Occurrences of Listed Species

The Washington Department of Natural Resources Natural Heritage database was queried for any reported occurrences of listed plants or rare plants in the Action Area (**Attachment A**). The Natural Heritage database reported no federally-listed plants or rare plants within the Action Area.

The Washington Department of Fish and Wildlife's Priority Habitats and Species Program database was queried for any reported occurrences of listed animals or at-risk species in the Action Area (**Attachment A**), and the following species were reported within a 1-mile radius of the Action Area: little brown bat (*Myotis lucifugus*); wood duck (*Aix sponsa*); western toad (*Anaxyrus boreas*); and western gray squirrel (*Sciurus griseus*). These species are not federally listed, and thus will not be analyzed further. There are records for Mazama pocket gopher in the vicinity of the Action Area, and these records are discussed in the section on Yelm pocket gopher. The Priority Habitats and Species Program database also reports rainbow trout (*Oncorhynchus mykiss*) in Eaton Creek (which feeds into Lake Saint Clair); however, this population of *Oncorhynchus mykiss* is not federally listed, and thus will not be analyzed further.

1.4 HABITAT CONSERVATION PLANS

The Action Area is located within the covered area of the Thurston County Habitat Conservation Plan (Thurston County, 2022). The only covered species that is applicable to the Action Area is Yelm Pocket Gopher.

Section 2 | Methods

2.1 PRELIMINARY DATA GATHERING AND RESEARCH

Prior to conducting the field survey, the following information sources were reviewed:

- Previous biological resource studies pertaining to the Action Area or vicinity
- United States Geologic Service (USGS) 7.5 degree-minute topographic quadrangles of the Action Area and vicinity
- Aerial photography of the Action Area
- Washington Department of Natural Resources Natural Heritage database (**Attachment A**)
- Washington Department of Fish and Wildlife (WDFW)'s Priority Habitats and Species Program database (**Attachment A**)
- USFWS National Wetlands Inventory (NWI) (USFWS 2024a)
- USFWS species list (IPaC Trust Resources Report)(**Attachment A**)

2.2 FIELD SURVEYS

Consulting biologist Geo Graening, PhD, conducted a biological field assessment on September 5, 2024, and collected data on wildlife and plant species present, as well as habitat types and jurisdictional waters. Variable-intensity pedestrian surveys were performed. Fauna and flora observed were recorded in a field notebook and identified to the lowest possible taxon. Survey efforts emphasized the search for federally-listed species that had documented occurrences in Washington database queries within the vicinity of the Action Area. Habitat types occurring in the Action Area were mapped on aerial photographs and information on habitat conditions and the suitability of habitats to support listed species was also recorded. The Action Area was also assessed for the presence of potentially-jurisdictional water features, including riparian zones, isolated wetlands and vernal pools, and other biologically-sensitive aquatic habitats.

2.3 MAPPING AND OTHER ANALYSES

Locations of species' occurrences and habitat boundaries within the Action Area were recorded on color aerial photographs and then digitized to produce the habitat maps. The boundaries of potentially jurisdictional water resources within the Action Area were identified and measured in the field and similarly digitized to calculate acreage and to produce informal delineation maps. Geographic analyses were performed using geographical information system software (ArcGIS 10, ESRI, Inc.). Wetlands and other aquatic habitats were classified using USFWS National Wetlands Inventory Classification System for Wetland and Deepwater Habitats, or "Cowardin class" (Cowardin et al., 1979). Informal wetland delineation methods consisted of an abbreviated, visual assessment of the three requisite wetland parameters (hydrophytic vegetation, hydric soils, hydrologic regime) defined in the U.S. Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987).

Section 3 | Results of Surveys

3.1 ENVIRONMENTAL SETTING

The physiographic setting of the Action Area is the Puget Trough, part of the Pacific Border province in the Pacific Mountain System. The Action Area is in Climate Zone 4 "*Cold-winter areas of the north coast and mild-winter areas of Alaska and British Columbia*" (Sunset, 2024). Temperate climate, considerable influence from the Pacific Ocean, but also from the continental air mass, higher elevation; more snow, and a shorter growing season. The ecosystems present in the Action Area are a mixture of the Lowlands Prairie and the Puget Lowlands Forest (NRCS, 2024). The topography is variable: undulating hills terminate at a terrace, which then slopes down to the basins of Lake Saint Clair. Elevations range from approximately 84 feet to 260 above mean sea level. The Action Area is comprised of five soil types (NRCS, 2024) (**Figure 4; Attachment B**):

- 48: Indianola loamy sand, 15 to 30 percent slopes
- 73: Nisqually loamy fine sand, 0 to 3 percent slopes
- 33: Everett very gravelly sandy loam, 8 to 15 percent slopes
- 109: Spana gravelly loam
- 110: Spanaway gravelly sandy loam, 0 to 3 percent slopes

The land use of the Action Area consists of equestrian facilities, rural residential, pasture, and forested open space. Photos of the Action Area are provided in Attachment C. Adjacent to the Action Area is a preserve (Lake Saint Clair Protected Area) and Lake Saint Clair itself.

3.2 INVENTORY OF FLORA AND FAUNA

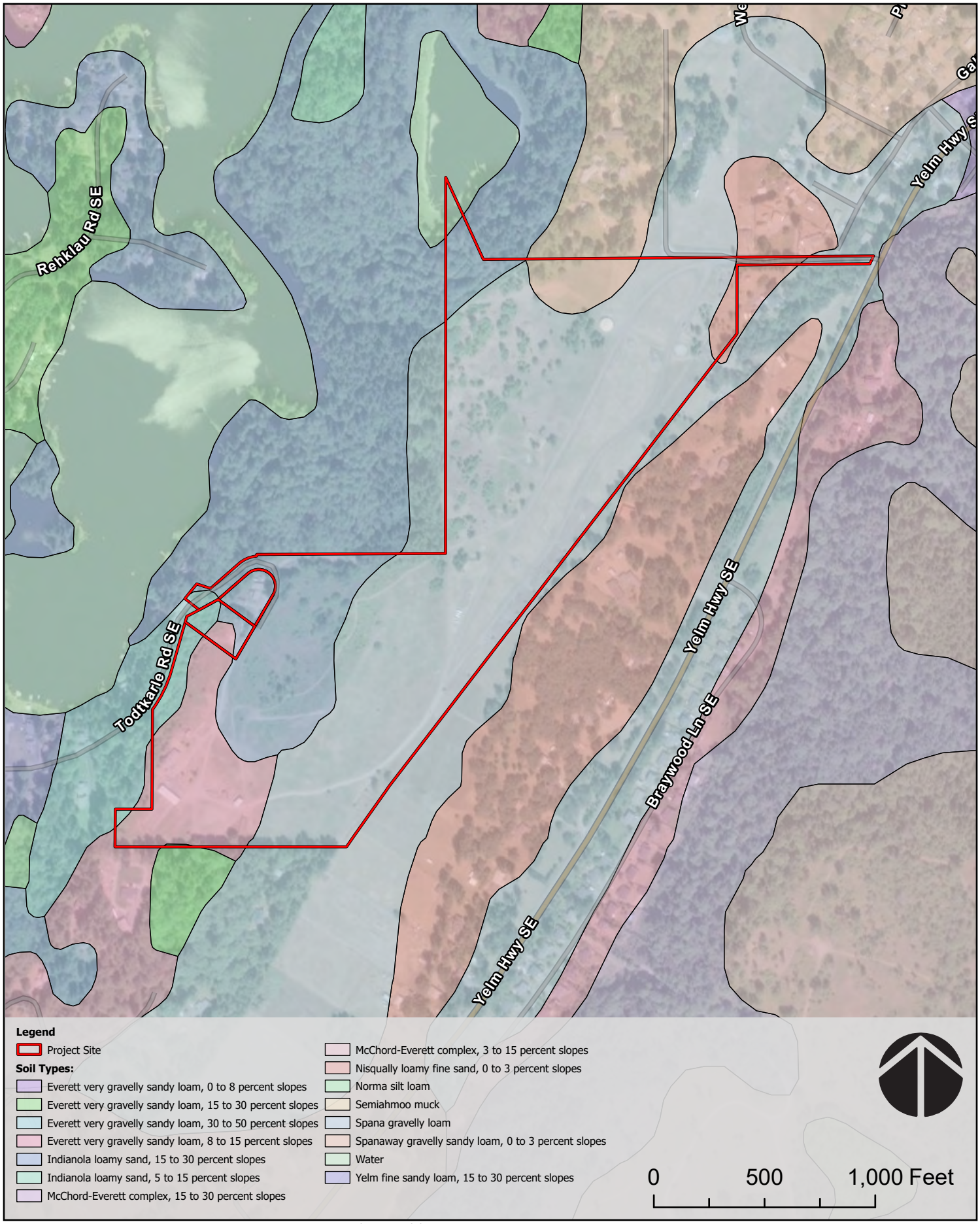
Animals observed during the surveys of the Action Area consist of the following: dog (*Canis familiaris*), horse (*Equus ferus*), cow (*Bos taurus*), pig (*Sus scrofa domesticus*), goat (*Capra aegagrus hircus*), American crow (*Corvus brachyrhynchos*); deer (*Odocoileus hemionus columbianus*); California quail (*Callipepla californica*); barn swallow (*Hirundo rustica*); white-crowned sparrow (*Zonotrichia leucophrys*); Bewick's wren (*Thryomanes bewickii*); brown creeper (*Certhia americana*); black-capped chickadee (*Poecile atricapillus*); chestnut-backed chickadee (*Poecile rufescens*); and hairy woodpecker (*Dryobates villosus*). Plants observed during surveys are listed in **Attachment D**.

3.3 LISTED SPECIES OBSERVED DURING SURVEYS

No federally-listed plant or animal species were observed during surveys conducted within the Action Area.

3.4 TERRESTRIAL HABITATS

The following terrestrial natural communities occur in the Action Area (**Figure 5**).



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Maxar

FIGURE 4
SOIL TYPES

3.4.1 Pasture

This habitat exists on coniferous forest that was cleared many years ago. Non-native annual grassland vegetation communities have been simplified by agricultural conditioning , and these areas are now either harvested for hay or grazed by livestock. The dominant grasses are wild oats (*Avena* spp.) and bromes (including *Bromus carinatus*). Other grasses present were rat-tail fescue (*Vulpia myuros*), Colonial bentgrass (*Agrostis capillaris*), barnyard grass (*Echinocloa crus-galli*), purple lovegrass (*Eragrostis spectabilis*) In the herbaceous stratum, yarrow (*Achillea millefolium*) was the most common.

3.4.2 Ruderal/Developed

Habitats in this portion are either landscaped or open areas that are highly maintained by various mechanical and chemical means (e.g., trimming, mowing, spraying). Much of this area consists of driveways that are armored with gravel and kept free of vegetation. In ruderal fields, the following plants are common: thistles (*Cirsium*, *Carduus*); scotch broom (*Cytisus* sp.); English ivy (*Hedera helix*); nightshade (*Solanum americanum*); and narrow leaf plantain (*Plantago lanceolata*).

3.4.3 Coniferous Forest

This habitat consist of The dominant upper canopy species are western red cedar (*Thuja plicata*) and Douglas fir (*Pseudotsuga menziesii*). Other tree species were occasionally present, such as western hemlock (*Tsuga heterophylla*) and balsam poplar (*Populus balsamifera*). The understory contained Oregon grape (*Berberis* spp.), madrone (*Arbutus menziesii*), big leaf maple (*Acer macrophyllum*), red elderberry (*Sambucus racemosa*), beaked hazelnut (*Corylus cornuta*) and several fern species, especially bracken fern (*Pteridium aquilinum*). In wetter areas, Pacific willow (*Salix lasiandra*) formed small stands. In the area near the pond, red alder (*Alnus rubra*) was the dominant tree.

3.4.4 Oak Woodland

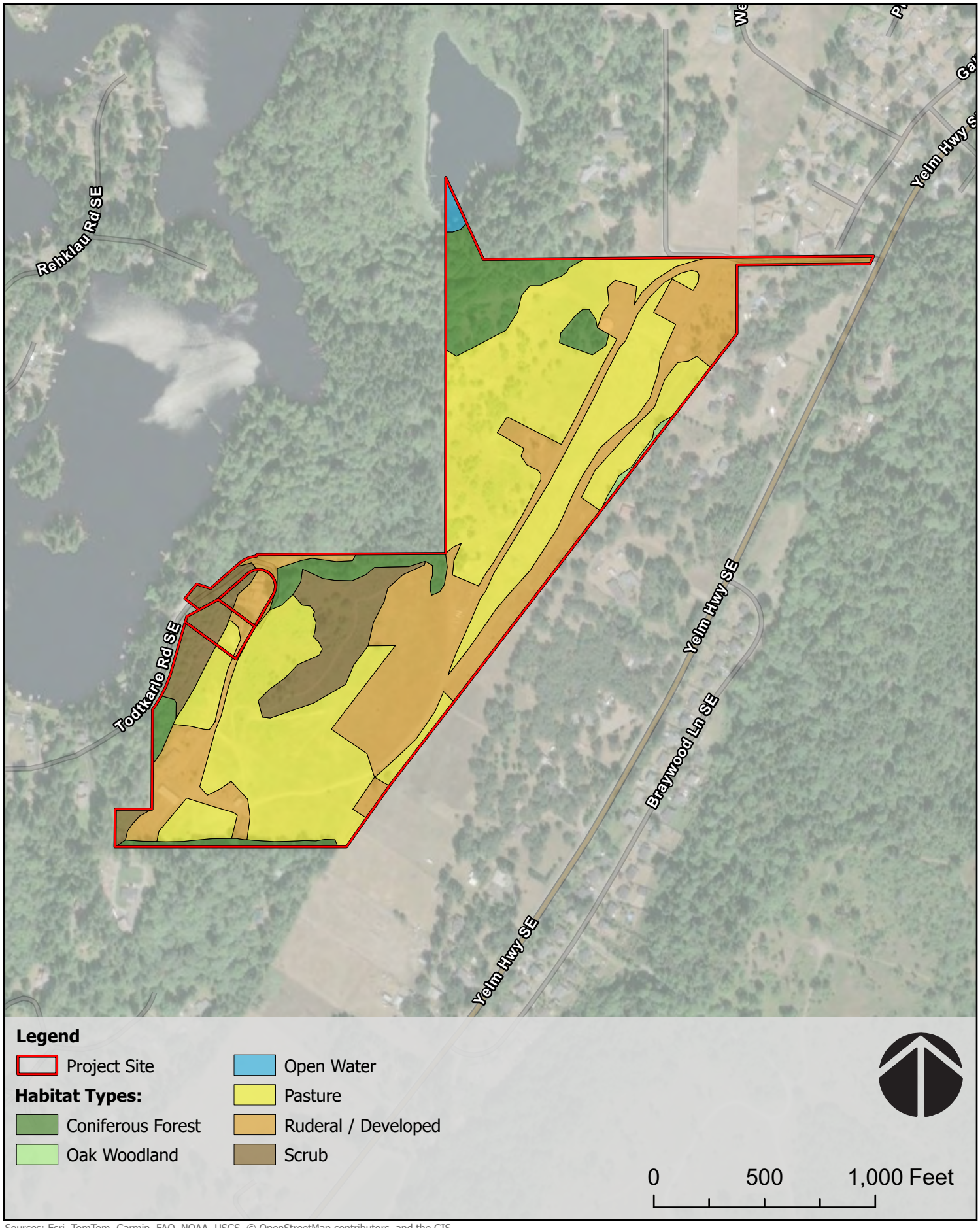
In the eastern edge of the Action Area, oak woodland was present, and consisted of Oregon oak (*Quercus garryana*) and valley oak (*Quercus lobata*); other tree species were occasionally present, such as Indian plum (*Oemleria cerasiformis*). Open areas contained non-native annual grassland species.

3.4.5 Forest Scrub

These portions of the Action Area consisted of regenerating coniferous forest, which had been previously cut for various reasons, including electric powerline maintenance. This community consists of blackberry briars (*Rubus armeniacus* and *R. ursinus*), salal (*Gaultheria shallon*), dwarf rose (*Rosa gymnocarpa*), snowberry (*Symphoricarpos albus*), and dock (*Rumex* spp.). A few saplings were also present, and consisted of tree species described in the section on coniferous forest.

3.4.6 Open Water

The northern edge of the Action Area contains a pond, which is one of the natural basins associated with Lake Saint Clair. Yellow water-lily (*Nuphar* sp.) floats on the surface, and the pond's edge is ringed with wetland plants, primarily sedges (*Carex* spp.), Pacific willow, stinging nettle (*Urtica dioica*), and cattail (*Typha* sp.). Red alder forms a closed canopy above.



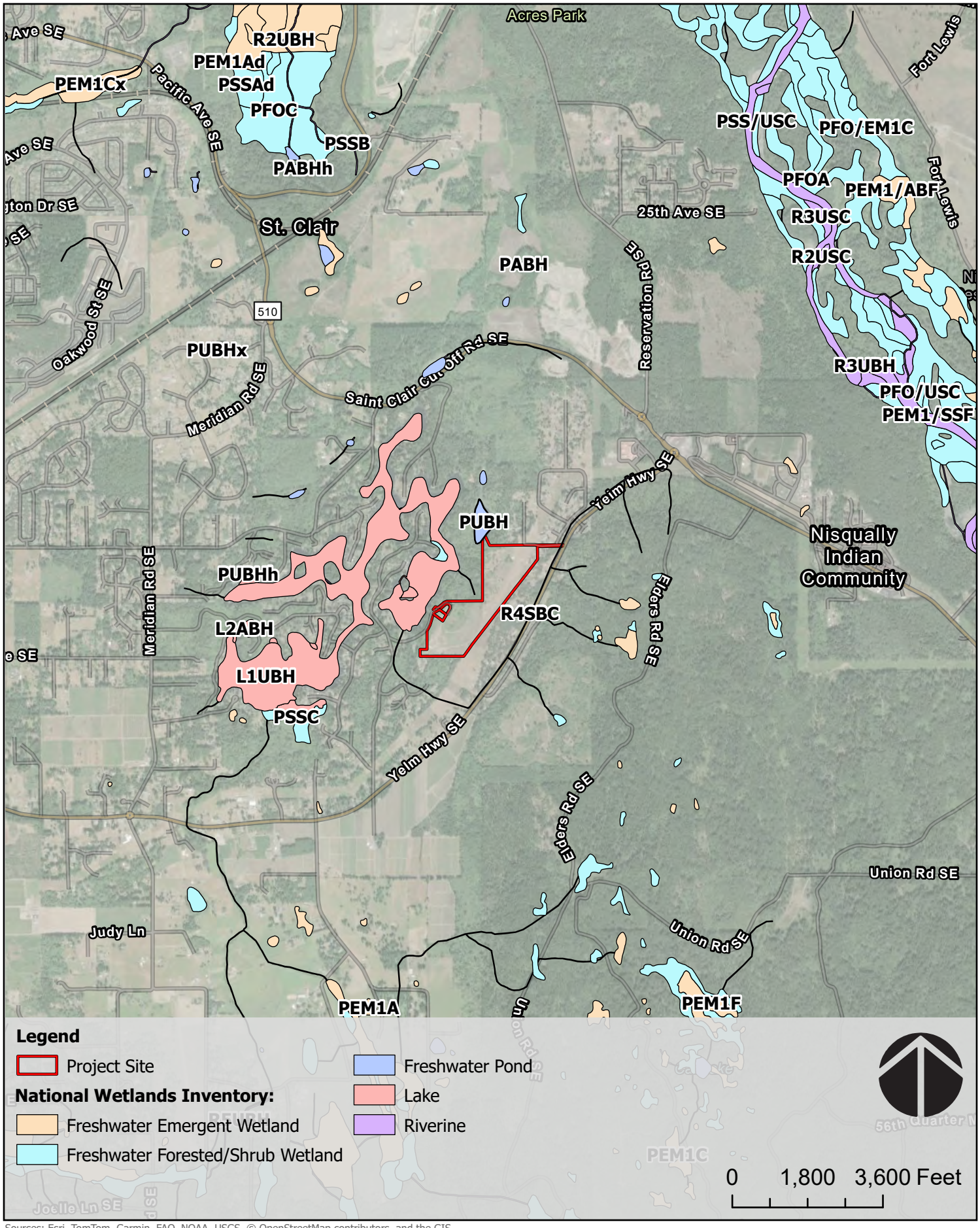
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Maxar

FIGURE 5
HABITAT TYPES

3.5 AQUATIC HABITATS

Regional mapped wetland features from the USFWS National Wetland Inventory are shown in **Figure 6**. The NWI did not report water features within the Action Area, with the exception of palustrine wetland (PUBH) in the pond in the northwest edge of the Action Area. Water resource mapping was also conducted during the field survey, and confirmed that the only water resource present is the pond (which fringed with emergent wetlands) in the northwest edge of the Action Area. There are no channels, riverine wetlands, or isolated wetlands in the Action Area.

The WDFW PHS program identified the pond as having the priority habitat "Freshwater Emergent Wetland"



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Maxar

FIGURE 6

NATIONAL WETLANDS INVENTORY

Section 4 | Species Accounts

4.1 YELM POCKET GOPHER (*THOMOMYS MAZAMA YELMENSIS*)

The Yelm pocket gopher is one of four federally listed subspecies of Mazama pocket gopher in the State of Washington. It was listed on April 9, 2014. There is critical habitat for Yelm pocket gopher nine miles to the south of the Action Area near the city of Rainier. This species is only found in Thurston County, west of the Cascades. These animals live the majority of their lives underground, are active all year long, and prefer grassland and prairie type ecosystems. They are small mammals, only eight to nine inches in length, with short tubular bodies and blackish brown fur. Their fur can change depending on soil types. They live one to two years with sexual maturity reached at one year of age. This territorial species lives alone, except during mating season. Pups are with their mothers for spring and summer months, but then disperse on their own (USFWS, 2024b). Dispersal distance is estimated at 656 ft (200m)(Thurston County, 2022). They forage from below-ground, feeding on roots or pulling entire plants into foraging tunnels (USFWS, 2024b).

Their habitat preference is well-drained and easily crumbled soil types in prairie-like habitats that are relatively open, with few woody plants and small vegetation. The presence of the specific prairie soil types is a strong factor in determining whether an area is suitable for Mazama Pocket Gophers (Thurston County, 2022).

The WDFW PHS program lists three occurrences of *Thomomys mazama* [the subspecies was not specified] within a mile radius of the Action Area:

- Meridian Seed Orchard: "*Western Pocket Gopher mound system; trapped from nursery where seedling damage occurs; still present in 2001 per K. McCallister – WDFW. Site location updated 2009 from PHS feature; mounds present in 2008 and 2012*."
- Lake St. Clair – Casa Bella: "*Mazama pocket gopher mound concentration area along powerline R.O.W. in Peterson large lot dvlpt.; dense woody brush on either side of access road; 76 mounds recorded in 2008. Location is standard buffer at center of mound distribution*."
- Lake St. Clair Drive SE: "*Site delineated by parcel boundary; Holy Theophany Monastery Property*."

There is also a population of Yelm pocket gopher on Joint Base Lewis-McChord (Thurston County, 2022).

The Action Area is within the "Yelm Pocket Gopher North" Service Area of the Thurston County Habitat Conservation Plan, but is in Category 3: Suitable, Connected, but Less Close to Occupancy). The Action Area has five soil types, three of which are identified by Thurston County (2022) as having documented use by Mazama Pocket Gopher subspecies:

- 73: Nisqually loamy fine sand, 0 to 3 percent slopes (more preferred)
- 109: Spana gravelly loam (less preferred)
- 110: Spanaway gravelly sandy loam, 0 to 3 percent slopes (more preferred)

Thus, the Action Area contains suitable habitat for Yelm Pocket Gopher where these three soil types occur (**Figure 4**). A mound survey was conducted during the protocol survey period (June 1 through October 31) during the biological survey on September 5, 2024; no gopher or rodent mounds of any kind were detected.

4.2 MARBLED MURRELET (*BRACHYRAMPHUS MARMORATUS*)

The marbled murrelet is a seabird that forages in marine waters but nests in forests. The populations in Washington are low and declining, due to their need for old, mature, forest habitats. They prefer to nest in mature old-growth trees. This species is small with an overall brownish "marbled" look plumage during breeding. Non-breeding plumage is mostly black with white patches, underside, and scapulars on the wings (WDFW, 2024a).

Their preferred habitat is old-growth conifer forests, and sometimes younger forests with residual old-growth trees. They forage in marine waters usually located within one to three miles from shore, in waters less than 100 feet deep. Marbled murrelets are most abundant in northern Puget Sound and the Strait of Juan de Fuca. Surveys show the highest nesting presence of this species is on the Olympia Peninsula, the northern Cascades and in limited habitats in southwest Washington. The 2015 population estimate for Washington is about 7,500 birds (WDFW, 2024a).

The Action Area does not contain any old-growth conifer forest; the forest that is present is relatively young and is relegated to the edges of the Action Area. Marbled murrelet has no potential to occur in the Action Area.

4.3 STREAKED HORNED LARK (*EREMOPHILA ALPESTRIS STRIGATA*)

The streaked horned lark is a coastal subspecies only found in southwest Washington and western Oregon and was listed as threatened in 2013. They have a known range from Oregon to Washington and have been locally extinct in British Columbia (USFWS, 2024c). This species is a slender, long-winged passerine about 7 inches long. Adults are marked with a dark facial mask and breast band that contrasts with a pale face and throat. These features are especially clear and distinctive in adult males, which have a yellow throat. The "horns" for which the species is named are tiny, black feather tufts on the sides of the head in adult males. Adult females are similar to males, but duller, smaller, and lack horns. Streaked horned larks nest on the ground, usually next to a tuft of vegetation or other small object. They may rear two to three broods per season, clutching three to five eggs at a time. Nest building in southern Puget Sound generally begins in mid-April to early May, and concludes by mid-August (WDFW, 2024b).

Their habitat preference is fields and prairies and similar areas with sparse grassy vegetation (WDFW, 2024b). They forage in areas containing a large percentage of bare ground. Streaked horned lark can be found in prairies and grasslands south of Puget Sound, coastal beaches, dredge spoil islands, and sparsely vegetated shorelines on the lower Columbia River. The streaked horned lark is known to occupy the Joint Base Lewis-McChord, and a multiple other isolated sites throughout their range. They are known to breed at up to 17 locations in Washington, 8 in the southern Puget Sound region, 6 on the outer coast, and 4 on islands and shore sites along the lower Columbia River. The range wide population is estimated at 1,170

to 1,610 individuals, including fewer than 150 pairs in Washington (Stinson, 2016).

The Action Area does contain fields with sparse grassy vegetation, but these fields are regularly mowed for hay crop or vegetation control, and the entire Action Area is subject to regular human use, including outdoor counseling, equestrian, animal husbandry, rural residential, and tribal ceremonies. Thus, streaked horned lark is unlikely to forage or nest in the open areas of the Action Area.

4.4 YELLOW-BILLED CUCKOO (*COCCYZUS AMERICANUS*)

Yellow-billed cuckoo is a riparian-dwelling bird that requires wooded habitat with dense cover and a vegetated understory of thickets, shrubs, or the like (USFWS, 2024d). Common nest trees include oaks, beech, hawthorn, and ash, typically alongside rivers. Yellow-billed cuckoos feed on insects- notably caterpillars- in addition to berries, seeds, and the opportunistic frog or lizard (USFWS, 2024d). It has not been known to breed within Washington since 1940 (WDFW, 2024c).

According to the WDFW, yellow-billed cuckoo is a rare occurrence within Washington, with only 20 known occurrences within the state since 1950 and 16 of these occurrences within eastern Washington (WDFW, 2024c). The WDFW considers presence of this species to be limited to non-breeding vagrants or migrants, with the species functionally extirpated in the state.

Yellow-billed cuckoo is not known to occur within western Washington. Therefore, potential for this species to occur in the region is nominal. This species does not breed within Washington, and riparian habitat within the Action Area is limited to a small area at the edge of the pond at the northern edge of the Action Area. Given the lack of habitat within the Action Area and the extant range of this species, yellow-billed cuckoo is very unlikely to occur in the Action Area.

4.5 NORTHWESTERN POND TURTLE (*ACTINEMYS MARMORATA*)

The species is known to occur in a wide variety of aquatic habitats including rivers and streams, lakes, ponds, reservoirs, permanent and ephemeral shallow wetlands, stock ponds, and sewage treatment lagoons (Holland, 1994). Optimal habitat seems to be characterized by the presence of adequate emergent basking sites, emergent vegetation, and the presence of suitable refugia in the form of undercut banks, submerged vegetation, mud, rocks, and logs. In-stream dispersal distances have been recorded of over 0.12 miles. Long distance overland dispersal between waterbodies has been recorded at up to approximately 1.0 miles in California and 3.1 miles in Oregon (NatureServe, 2024). It is assumed that suitable upland habitat within 500 meters of suitable aquatic habitat may be used for nesting or aestivation. Suitable aquatic habitat for northwestern pond turtle occurs only in the extreme northern edge of the Action Area in the pond.

In Washington, northwestern pond turtles occur in open upland habitats that receive extensive sun exposure such as prairies in the Puget Sound region, oak-pine savanna and other more open forest types in the Columbia Gorge, and pasture. The turtles utilize a variety of flowing and still water habitats in other parts of their range, but in Washington they are only known to inhabit ponds and lakes. These turtles spend a great deal of time basking on logs at the surface of ponds (WDFW, 2024d).

WDFW maintains records of northwestern pond turtle across the state. The Action Area is not within the vicinity of the known extant populations, and there are no documented occurrences of northwestern pond turtle in all of Thurston County since year 2016 (WDFW, 2024d). For these reasons, northwestern pond turtle is unlikely to occur in the Action Area.

4.6 BULL TROUT (*SALVELINUS CONFLUENTUS*)

Bull trout generally inhabit freshwater bodies, with migratory movements limited to movements from natal streams and rivers to larger lakes and reservoirs; however, an anadromous form of bull trout does occur within the Puget Sound (WDFW, 2024e; USFWS, 2024e). Anadromous bull trout generally stay in estuarine areas, or in near-shore ocean waters. Bull trout require waters that are cold, clean, complex, and connected (USFWS, 2024e). The Nisqually River supports populations of bull trout (WDFW 2024e). The only surface water in the Action Area is a small pond, which is isolated from adjacent rivers that could sustain bull trout. Thus, bull trout has no potential to occur in the Action Area.

4.7 MONARCH BUTTERFLY (*DANAUS PLEXIPPUS*)

The monarch is a candidate species and not yet formerly proposed for listing. During the breeding season, monarchs lay their eggs on their obligatory milkweed host plant (primarily *Asclepias* species), and larvae emerge after two to five days (USFWS, 2024f). Larvae develop through five molts over a period of 9 to 18 days, feeding on milkweed and sequestering toxic chemicals (cardenolides) as a defense against predators. The larva then pupates into a chrysalis before emerging 6 to 14 days later as an adult butterfly. There are multiple generations of monarchs produced during the breeding season, with most adult butterflies living approximately two to five weeks; overwintering adults enter into reproductive diapause (suspended reproduction) and live six to nine months (USFWS, 2024f). In the fall, monarchs begin migrating to their overwintering sites. This migration can take monarchs distances of over 3,000 km and last for over two months. In early spring (February-March), surviving monarchs break diapause and mate at the overwintering sites before dispersing. The same individuals that undertook the initial southward migration begin flying back through the breeding grounds and their offspring start the cycle of generational migration over again (USFWS 2024xx).

Within the state of Washington, Monarch butterfly is present during the breeding season, but does not overwinter within the State (WDFW, 2024f). Therefore, this species may be present throughout the state during the spring, summer, and fall months. Although this species can occur throughout the state, it is more commonly found east of the Cascades where milkweed is more abundant (WDFW, 2024f).

The Action Area is unlikely to support monarch butterfly because to the lack of required plant species; host plants, such as milkweeds, were not detected during surveys and nectar sources are not abundant, as fields are managed for hay crop and not for wildflower diversity.

4.8 SUCKLEY'S CUCKOO BUMBLE BEE (*BOMBUS SUCKLEYI*)

Suckley's cuckoo bumble bee is an obligate social parasite of other bumble bee species (WDFW, 2024h). *Bombus* bumble bees depend on habitats with rich floral resources throughout the nesting season, and many species select specific suites of plants for obtaining nectar and pollen (WDFW, 2024h). They also

select flowers based on their structure and the bee's tongue length; the short to medium length-tongued Suckley's cuckoo bumble bee uses shallow to medium-depth flowers (WDFW, 2024h). Bumble bees require above and below-ground micro-sites for overwintering and nesting, including logs, stumps, and abandoned rodent and ground-nesting bird nests. Suckley's cuckoo bumble bee historically was found throughout Washington; recent surveys reveal significant declines in their numbers, distribution, and range (WDFW, 2024h). Recent surveys in Washington detected this species in only six localities (WDFW, 2024h). The Action Area is unlikely to support Suckley's cuckoo bumble bee because to the lack of rich floral resources; the pastures are heavily grazed and grasslands are managed for hay crop and not for wildflower diversity.

4.9 CHINOOK SALMON PUGET SOUND ESU (*ONCORHYNCHUS TSHAWYTSCHA*)

Most chinook spawn in large rivers such as the Columbia and Snake, although they will also use smaller streams with sufficient water flow. They tend to spawn in the mainstem of streams, where the water flow is high. Because of their size they are able to spawn in larger gravel than most other salmon (WDFW 2024g). Chinook spawn on both sides of the Cascade Range, and some fish travel hundreds of miles upstream before they reach their spawning grounds. Because of the distance, these fish enter streams early and comprise the spring and summer runs. Fall runs spawn closer to the ocean and more often use small coastal streams. All chinook reach their spawning grounds by fall, in time to spawn (WDFW 2024g).

The Nisqually River supports populations of chinook salmon that are managed by the Nisqually Indian Tribe's Clear Creek Hatchery. However, the Action Area does not contain any streams and is not hydrologically connected to the Nisqually River or to Puget Sound.

4.10 STEELHEAD TROUT PUGET SOUND DPS (*ONCORHYNCHUS MYKISS*)

This distinct population segment consists of naturally spawned anadromous steelhead that migrate between the ocean and rivers flowing into Puget Sound. There is NMFS critical habitat for Steelhead [Puget Sound DPS] one and a half miles to the northeast of the Action Area in the Nisqually River. The Action Area does not contain any streams and is not hydrologically connected to the Nisqually River or to Puget Sound.

Section 5 | Effects of the Action

Based on guidance provided by the ESA Section 7 Effects Determination Guidance, possible effects determinations for the Proposed Action are:

- **No effect:** The proposed action will not affect the listed species or critical habitat.
- **May affect but is not likely to adversely affect:** The proposed action will affect a listed species in a way that is discountable, insignificant, or completely beneficial. Discountable effects are extremely unlikely to occur; insignificant effects are impacts small enough that they never reach the scale where a take occurs, and completely beneficial effects are positive effects without any adverse effects to the species.
- **May affect and is likely to adversely affect:** The proposed action will either directly or indirectly, or through its interrelated and interdependent actions, adversely affect a listed species.

These guidelines were used in determining conclusions of this BA and are discussed for the critical habitat, listed species, and migratory birds below.

5.1 POTENTIAL ADVERSE EFFECTS ON CRITICAL HABITAT AND EFH

There is no federally-designated critical habitat for any listed species within, or adjacent to, the Action Area. Implementation of the Proposed Action will have No Effect on designated critical habitat for any federally listed species.

The Action Area is located within EFH for pink salmon, Chinook salmon, and Coho salmon. However, there is no fishery habitat within the Action Area at all, so there cannot be any direct impacts to EFH from the proposed action. The only potential adverse effects to EFH are indirect and consist of habitat degradation should polluted runoff exit the project areas into adjacent rivers. As discussed in **Section 5.5**, conservation measures have been prescribed to ensure that receiving waterbodies are not polluted during construction or operation of the proposed action. Therefore, the Proposed Action would have no adverse effects on EFH.

5.2 POTENTIAL ADVERSE EFFECTS ON LISTED SPECIES

5.2.1 Yelm pocket gopher

Suitable habitat for Yelm pocket gopher occurs in the eastern half of the Action Area where these soils occur: soil unit 73 - Nisqually loamy fine sand, 0 to 3 percent slopes (more preferred); 109 - Spana gravelly loam (less preferred); and 110 - Spanaway gravelly sandy loam, 0 to 3 percent slopes (more preferred). Proposed developments would occur in these areas, especially in the less preferred soil unit 109 - Spana gravelly loam. However, Yelm Pocket Gopher is probably not present in the Action Area and the Action Area is beyond the dispersal distance of known populations. The Action Area is within the habitat category of Category 3: Suitable, Connected, but Less Close to Occupancy) for Yelm Pocket Gopher, according to the Thurston County Habitat Conservation Plan. The mound survey conducted in September 2024 did not detect any gopher or rodent mounds of any kind. Current land management and land use in the Action

Area, including equestrian activities, animal husbandry, tribal ceremonies, and hay harvest, discourage use of the Action Area for wildlife. Conservation measures prescribed for the project, including a pre-construction wildlife survey, will ensure that Yelm Pocket Gopher is not present in project areas. The Proposed Action will have No Effect on Yelm Pocket Gopher.

5.2.2 Marbled murrelet

The Action Area does not contain any old-growth conifer forest; the forest that is present is relatively young and is relegated to the edges of the Action Area. Marbled murrelet has no potential to occur in the Action Area. While extremely unlikely to occur within the Action Area, avoidance and minimization measures in **Section 5.5** include pre-construction surveys for nesting birds that would ensure there are no impacts to nesting bird species, including marbled murrelet. The Proposed Action will have No Effect on marbled murrelet.

5.2.3 Streaked horned lark

The Action Area does contain fields with sparse grassy vegetation, but these fields are regularly mowed for hay crop or vegetation control, and the entire Action Area is subject to regular human use, including outdoor counseling, equestrian, animal husbandry, rural residential, and tribal ceremonies. Thus, streaked horned lark is unlikely to forage or nest in the open areas of the Action Area. While extremely unlikely to occur within the Action Area, avoidance and minimization measures in **Section 5.5** include pre-construction surveys for nesting birds that would ensure there are no impacts to nesting bird species, including streaked horned lark. The Proposed Action will have No Effect on streaked horned lark.

5.2.4 Yellow-billed cuckoo

Yellow-billed cuckoo is not known to occur in the vicinity of the Action Area. Therefore, potential for this species to occur in the region is nominal. This species does not breed within Washington, and riparian habitat within the Action Area is limited to a small area at the edge of the pond at the northern edge of the Action Area. The riparian habitat in the Action Area will not be disturbed by project implementation. Given the lack of habitat within the Action Area and the extant range of this species, yellow-billed cuckoo is very unlikely to occur in the Action Area. While extremely unlikely to occur within the Action Area, avoidance and minimization measures in **Section 5.5** include pre-construction surveys for nesting birds that would ensure there are no impacts to nesting bird species, including yellow-billed cuckoo. The Proposed Action will have No Effect on yellow-billed cuckoo.

5.2.5 Northwestern Pond Turtle

Suitable aquatic habitat for northwestern pond turtle occurs only in the extreme northern edge of the Action Area in the pond. The pond will not be disturbed by project implementation. The Action Area is not within the vicinity of the known extant populations, and there are no documented occurrences of northwestern pond turtle in all of Thurston County since year 2016 (WDFW, 2024a). For these reasons, northwestern pond turtle is unlikely to occur in the Action Area. Conservation measures prescribed for the project, including a pre-construction wildlife survey, will ensure that northwestern pond turtle is not present in project areas. Conservation measures have also been prescribed to ensure that receiving waterbodies are not polluted during construction or operation of the proposed action. The Proposed Action will have No Effect on northwestern pond turtle.

5.2.6 Bull Trout

Bull trout generally inhabit freshwater bodies, with migratory movements limited to movements from natal streams and rivers to larger lakes and reservoirs. Bull trout require waters that are cold, clean, complex, and connected. The only surface water in the Action Area is a small pond, which is isolated from adjacent rivers that could sustain bull trout. Thus, bull trout has no potential to occur in the Action Area. Conservation measures have also been prescribed to ensure that receiving waterbodies are not polluted during construction or operation of the proposed action. The Proposed Action will have No Effect on bull trout.

5.2.7 Monarch Butterfly

Within the state of Washington, monarch butterfly is present during the breeding season, but it does not overwinter within the State. Although this species can occur throughout the state, it is more commonly found east of the Cascades where milkweed is more abundant. The Action Area is unlikely to support monarch butterfly because to the lack of required plant species; host plants, such as milkweeds, were not detected during surveys and nectar sources are not abundant, as fields are managed for hay crop and not for wildflower diversity. The Proposed Action will have No Effect on monarch butterfly.

5.2.8 Suckley's Cuckoo Bumble Bee

Suckley's cuckoo bumble bee is now reported from only six localities in Washington (WDFW, 2024h). Suckley's cuckoo bumble bee is dependent not only upon rich floral resources, but the presence of an active colony of another Bombus bumble bee to which in can parasitize. The Action Area is unlikely to support Suckley's cuckoo bumble bee because to the lack of rich floral resources; the pastures are heavily grazed and grasslands are managed for hay crop and not for wildflower diversity. The Proposed Action will have No Effect on Suckley's cuckoo bumble bee.

5.2.9 Chinook Salmon Puget Sound ESU

The nearest populations of chinook salmon are in the Nisqually River, which are managed by the Nisqually Indian Tribe's Clear Creek Hatchery. However, the Action Area does not contain any streams and is not hydrologically connected to the Nisqually River or to Puget Sound; thus, there will be no direct adverse effects to chinook salmon from the proposed action. For potential indirect effects, conservation measures have also been prescribed to ensure that receiving waterbodies are not polluted during construction or operation of the proposed action. The Proposed Action will have No Effect on chinook salmon Puget Sound ESU.

5.2.10 Steelhead Trout Puget Sound DPS

The nearest populations of steelhead are in the Nisqually River; however, the Action Area does not contain any streams and is not hydrologically connected to the Nisqually River or to Puget Sound. Thus, there will be no direct adverse effects to steelhead from the proposed action. For potential indirect effects, conservation measures have also been prescribed to ensure that receiving waterbodies are not polluted during construction or operation of the proposed action. The Proposed Action will have No Effect on steelhead trout Puget Sound DPS.

5.3 INDIRECT EFFECTS AND CUMULATIVE EFFECTS

For the purposes of this assessment, indirect effects consist primarily of the off-site degradation of natural habitats, such as the increase in noise or lighting or by the discharge of sediment to receiving waterbodies during construction. The Project Areas are already subject to noise and lighting impacts from the existing built environment: the rural residences, the equestrian facilities and ranching activities, and vehicular traffic on local highways. The Proposed Action may contribute incrementally to the existing noise and light environment, but it is not expected to significantly change the natural environment, which is already somewhat urbanized.

During construction, surface water quality has the potential to be degraded from storm water transport of sediment from disturbed soils or by accidental release of hazardous materials or petroleum products from sources such as heavy equipment servicing or refueling. This is a potentially adverse effect for projects that disturb at least 1 acre of ground. However, on tribal trust land, the Tribe must enroll in the USEPA's 2022 Construction General Permit. On non-federal land, the landowner must enroll under the Washington Department of Ecology's 2015 Construction Stormwater General Permit prior to the initiation of construction. In conjunction with enrollment under either of these permit programs, a Storm Water Pollution Prevention Plan, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan must be created and implemented during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. Implementation of these measures mandated by law would reduce potential construction-related impacts to water quality greatly.

For the purposes of this assessment, cumulative effects consist primarily of the degradation or destruction of suitable habitat for listed species that might expand their range in the future. Especially important is the destruction or removal of aquatic habitat for development. However, the Project Areas are devoid of natural channels and wetlands and riparian habitat. No listed species are likely to colonize the Project Areas because of disturbance and human presence, as well as ground disturbance associated with rural residences, ranching, and equestrian activities.

5.4 POTENTIAL ADVERSE EFFECTS ON MIGRATORY BIRDS

Trees, shrubs, and poles within the Action Area may provide suitable nesting and perching habitat for raptors and/or migratory birds. If construction activities are conducted during the nesting season, nesting birds/raptors could be directly impacted by removal of trees and indirectly impacted by noise, vibration, and other construction-related disturbance.

Avoidance and minimization measures were identified to reduce potential impacts to migratory birds, and nesting birds in general, to a less than significant level.

Migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 United States Code [USC] §§ 703 712). The MBTA makes it unlawful to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, buy, sell, purchase, or barter any migratory bird listed under 50 Code of Federal Regulations (CFR) §10. This includes feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR § 21). Trees and shrubs within 500 feet of the Action Area may provide habitat for migratory birds during the general nesting season (February 15 – September 15)

Although unlikely, if migratory birds were to be present in the area of impact at the time of construction of the Proposed Action, construction-related activities have the potential to cause mortality or nest abandonment. With the implementation of avoidance and minimization measures, there will be no measurable negative effects on migratory bird populations.

5.5 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

The following measures will be implemented:

- To ensure that listed species are not present in construction areas, pre-construction clearance surveys shall be conducted by a qualified biologist. The survey should include a survey for gopher mounds to ensure that Yelm pocket gopher is not present. The survey should also focus on northwestern pond turtle. A qualified biologist is defined as a person who has the educational background, training, and work experience (handling experience and/or permits) required to perform a specific biological task and have been approved by the USFWS. If any of these species are discovered during the survey, project construction activities shall not begin until the species have voluntarily vacated the construction area or USFWS has been consulted and avoidance and minimization measures established and then implemented.
- All construction personnel shall receive worker environmental awareness training before they enter the construction site. The training program shall include, at a minimum, descriptions of the focal species (Yelm pocket gopher and northwestern pond turtle), and how to identify and avoid these focal species. Personnel shall be trained to halt work in the event that one of these focal species is observed within the work area and allow the individual to leave the work site on its own. Personnel shall be instructed to limit work activities to the designated construction areas and to properly store equipment and materials in the designated laydown area. A qualified biologist shall make regular inspections during the construction periods when grading and other ground disturbance activities are occurring to ensure best management practices are being adequately followed.
- To protect water quality and aquatic habitats, an erosion and sediment control plan will be implemented. If the Proposed Action disturbs at least 1 acre of soil, the Tribe will enroll in the USEPA's Construction General Permit and a Storm Water Pollution Prevention Plan, Erosion Control subplan, and a Hazardous Materials Management/Spill Response subplan will be implemented. These measures will minimize the potential for erosion, sedimentation, or accidental release of hazardous materials.
- If construction activities occur during the general nesting season (February 15 to September 1), a preconstruction nest survey shall be conducted by a qualified biologist within 500 feet of proposed construction areas within 5 days of initiating ground disturbance. If active nests are identified, the qualified biologist shall determine a suitable avoidance buffer based on the needs of the species observed. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged. Avoidance buffers may vary in size depending on habitat characteristics, project-related activities, and disturbance levels. Should work activity cease for 14 days or more during the nesting season, surveys shall be repeated to ensure birds and raptors have not established nests during inactivity.

Section 6 | References

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Section 7 | Qualifications of Preparers

G.O. Graening, Ph.D., M.S.E.

G. O. Graening holds a Doctorate in Biological Sciences and a Master of Science in Biological Engineering, and is a certified arborist (International Society of Arboriculture). Dr. Graening has 28 years of experience in environmental assessment and research, including the performance of numerous wetland delineations and aquatic restoration projects. Dr. Graening also served as an adjunct professor of biology at California State University Sacramento for 10 years and was an active researcher in the area of conservation biology and groundwater ecology.

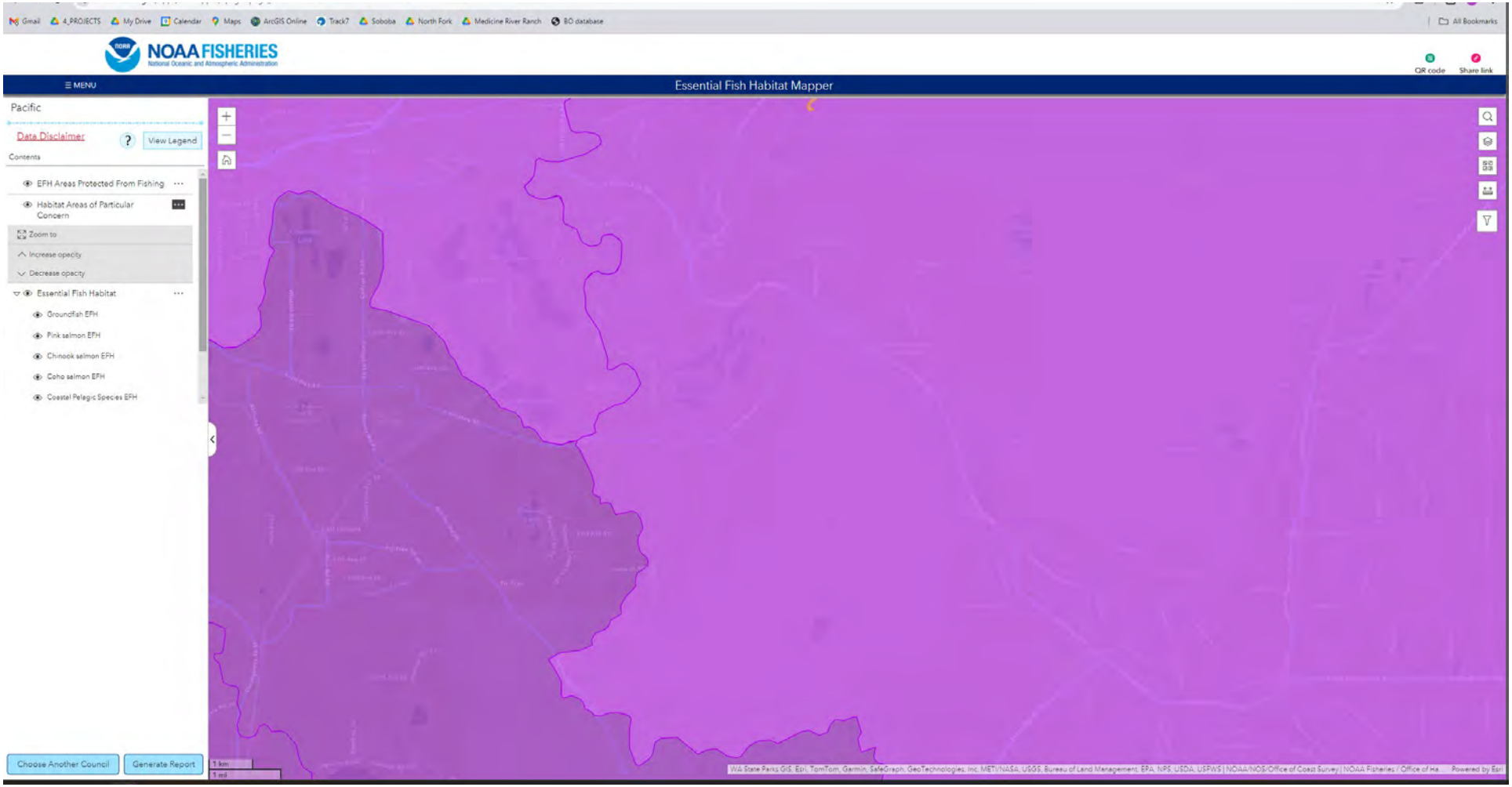
Kelli Raymond, B.S.

Ms. Raymond holds a B.S. in Animal Biology with a focus on Wildlife Ecology. She has approximately 10 years of experience collecting field data and preparing environmental assessments. Ms. Raymond has worked in several states across the U.S. performing biological resources surveys, including plant surveys, bat acoustic and flyout monitoring, and wildlife utilization monitoring. She also has experience live handling numerous wildlife species, including fish, migratory birds, and big game. Ms. Raymond is experienced in the preparation of Biological Assessments and Section 7 consultation with both the USFWS and NMFS under the federal Endangered Species Act.

Attachments

Attachment A

Species Lists and Queries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Data Disclaimer
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EFH Areas Protected From Fishing
Habitat Areas of Particular Concern
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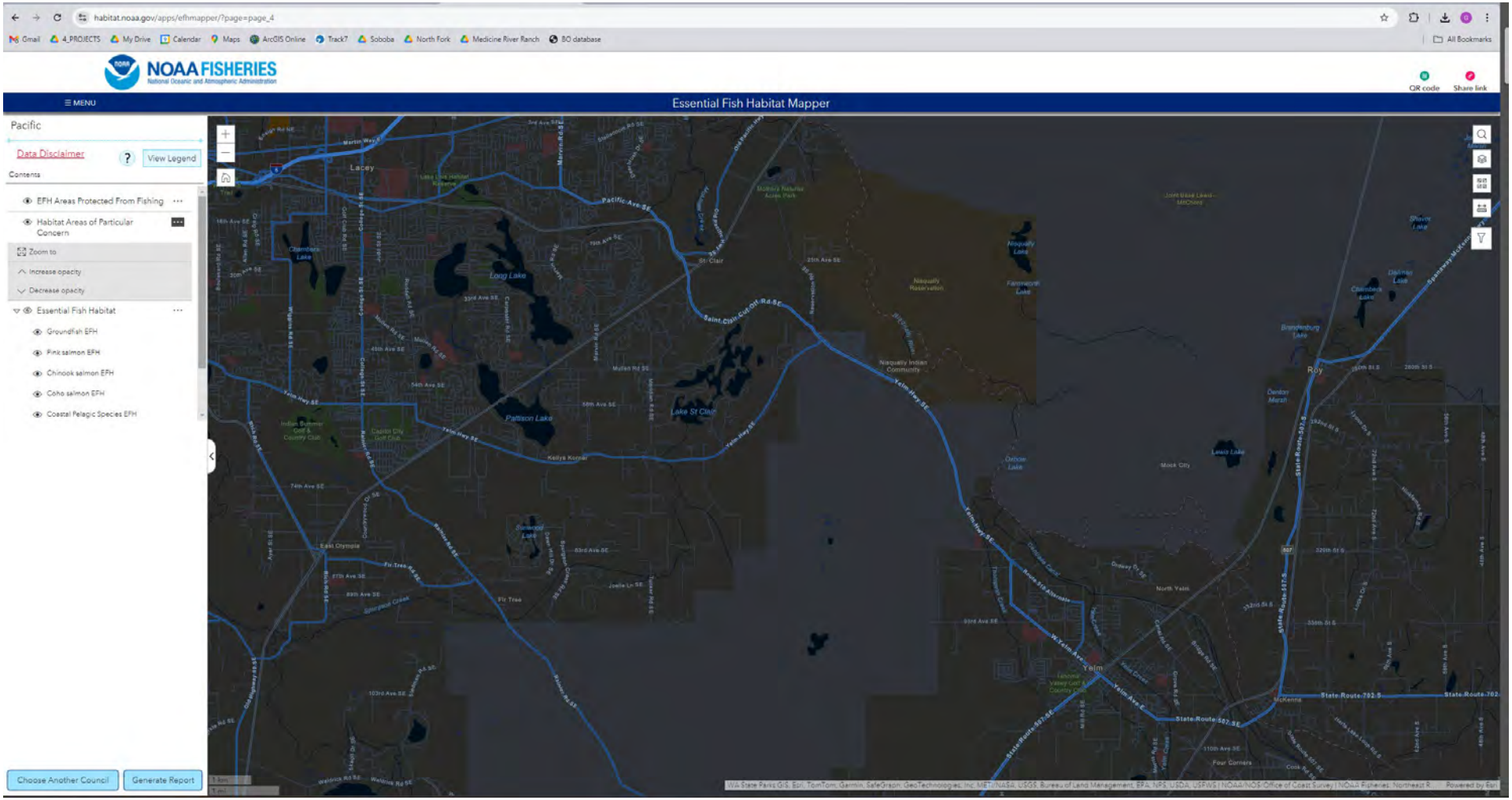
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Decrease opacity
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Chinook salmon EFH
Coho salmon EFH
Coastal Pelagic Species EFH
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Pattison Lake
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Saint Clair Cut Off Rd SE
Yelm Hwy SE
Niqually Indian Community
Roy
Yelm
State Route 507 SE
State Route 702 S
East Olympia
Fir Tree
McKenna
Four Corners
WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS | NOAA/NOS/Office of Coast Survey | NOAA Fisheries, Northeast R...
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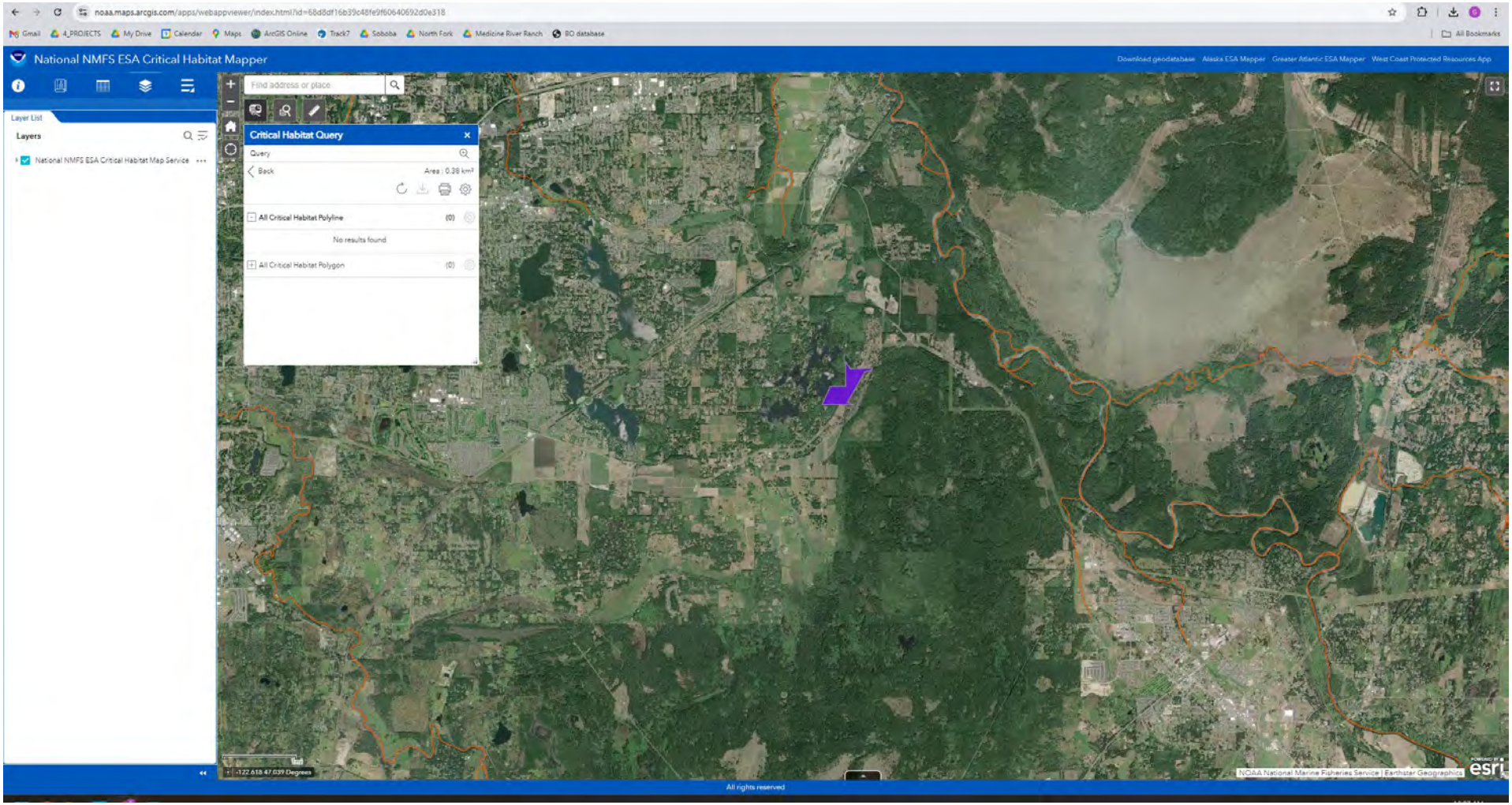
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National NMFS ESA Critical Habitat Mapper
Download geodatabase
Alaska ESA Mapper
Greater Atlantic ESA Mapper
West Coast Protected Resources App
Layer List
Layers
National NMFS ESA Critical Habitat Map Service
Find address or place
Critical Habitat Query
Query
Back
Area : 0.38 km²
All Critical Habitat Polyline (0)
No results found
All Critical Habitat Polygon (0)
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NOAA National Marine Fisheries Service | Earthstar Geographics
esri
All rights reserved

Critical Habitat Report

Area of Interest (AOI) Information

Area : 0.38 km²

Sep 13 2024 10:06:10 Pacific Daylight Time

Summary

Name	Count	Area(km²)	Length(m)
All Critical Habitat Polyline	0	N/A	0
All Critical Habitat Polygon	0	0	N/A

Species Directory

All Species | ESA Threatened & Endangered | Marine Mammals | Sustainable Seafood

ESA Threatened & Endangered

NOAA Fisheries has jurisdiction over 165 endangered and threatened marine species (80 endangered; 85 threatened), including 66 foreign species (40 endangered; 26 threatened).

Additional species are currently under review or have been proposed for Endangered Species Act listing: 1 petitioned species awaiting a 90-day finding, 9 candidate species for ESA listing, 11 proposed species for ESA listing.

In the table below, the Region column shows if the species can be found in a NOAA Fisheries region. If the species occurs only in areas beyond the U.S. exclusive economic zone and territorial waters, the region is labeled as Foreign.

Species Name

Species Category

All

Protected Status

All

Region

West Coast

Display

25 Display All

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
Black Abalone *Haliotis cracherodii*	**SPECIES CATEGORY** Invertebrates - Abalone	Species	ESA Endangered	2009	Final	Final	West Coast
Blue Whale *Balaenoptera musculus*	**SPECIES CATEGORY** Whales	Species	ESA Endangered	1970	Final	---	Alaska New England/Mid-Atlantic Pacific Islands Southeast West Coast
Bocaccio (Protected) *Sebastes paucispinis* **Also Known As** Bocaccio, Rock Salmon, Salmon Rockfish, Pacific Red Snapper, Pacific Snapper, Oregon Red Snapper, Oregon Snapper, Longjaw, Merou, Jack, Snapper, Rock Cod, Rockfish	**SPECIES CATEGORY** Fish - Groundfish - Protected Fish	Puget Sound/Georgia Basin DPS	ESA Endangered	2010	Final	FInal	Alaska West Coast
Chinook Salmon (Protected) *Oncorhynchus tshawytscha*	**SPECIES CATEGORY** Fish - Protected Fish	Sacramento River winter-run	ESA Endangered	1994	Final	Final	Alaska West Coast
		Upper Columbia River spring-run	ESA Endangered	1999	Final	Final	Alaska West Coast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
		California coastal	ESA Threatened	1999	Final	Final	Alaska West Coast
		Central Valley spring-run	ESA Threatened	1999	Final	Final	Alaska West Coast
		Lower Columbia River	ESA Threatened	1999	Final	Final	Alaska West Coast
		Puget Sound	ESA Threatened	1999	Final	Final	Alaska West Coast
		Snake River fall-run	ESA Threatened	1992	Final	Final	Alaska West Coast
		Snake River spring/summer-run	ESA Threatened	1992	Final	Final	Alaska West Coast
		Upper Willamette River	ESA Threatened	2005	Final	Final	Alaska West Coast
		Central Valley spring-run in the San Joaquin River XN	ESA Experimental Population	---	---	---	Alaska West Coast
		Upper Columbia River spring-run in the Okanogan River subbasin XN	ESA Experimental Population	---	---	---	Alaska West Coast
		Central Valley spring-run XN Shasta	ESA Experimental Population	---	---	---	West Coast
		Sacramento winter-run XN Shasta	ESA Experimental Population	---	---	---	West Coast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
		Central Valley spring-run XN Yuba	ESA Experimental Population	---	---	---	West Coast
		Upper Klamath-Trinity River	ESA Candidate	---	---	---	Alaska West Coast
		Oregon Coast	ESA Candidate	---	---	---	West Coast
		Southern Oregon and Northern California Coastal	ESA Candidate	---	---	---	West Coast
Chum Salmon (Protected) *Oncorhynchus keta*	**SPECIES CATEGORY** Fish - Protected Fish	Columbia River ESU	ESA Threatened	1999	Final	Final	Alaska West Coast
		Hood Canal summer-run ESU	ESA Threatened	1999	Final	Final	Alaska West Coast
Coho Salmon (Protected) *Oncorhynchus kisutch*	**SPECIES CATEGORY** Fish - Protected Fish	Central California Coast ESU	ESA Endangered	2005; 1996 (original)	Final	Final	Alaska West Coast
		Lower Columbia River ESU	ESA Threatened	2005	Final	Final	Alaska West Coast
		Oregon coast ESU	ESA Threatened	2008	Final	Final	Alaska West Coast
		Southern Oregon & Northern California coasts ESU	ESA Threatened	1997	Final	Final	Alaska West Coast
Eulachon *Thaleichthys pacificus*	**SPECIES CATEGORY** Fish - Protected Fish	Southern DPS	ESA Threatened	2010	Final	Final	Alaska West Coast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
False Killer Whale *Pseudorca crassidens*	**SPECIES CATEGORY** Whales **SPECIES CATEGORY** Dolphins & Porpoises	Main Hawaiian Islands Insular DPS	ESA Endangered	2012	Final	Final	Pacific Islands
Fin Whale *Balaenoptera physalus*	**SPECIES CATEGORY** Whales	Species	ESA Endangered	1970	Final	---	Alaska New England/Mid-Atlantic Pacific Islands Southeast West Coast
Gray Whale *Eschrichtius robustus*	**SPECIES CATEGORY** Whales	Western North Pacific DPS	ESA Endangered	1994; 1970 (original)	---	---	Alaska West Coast
Green Sturgeon *Acipenser medirostris*	**SPECIES CATEGORY** Fish - Protected Fish	Southern DPS	ESA Threatened	2006	Final	Final	Alaska West Coast
Green Turtle *Chelonia mydas*	**SPECIES CATEGORY** Sea Turtles	Central South Pacific DPS	ESA Endangered	2016	Final	---	Pacific Islands
		Central West Pacific DPS	ESA Endangered	2016	Final	---	Pacific Islands
		Mediterranean DPS	ESA Endangered - Foreign	2016	---	---	Foreign
		Central North Pacific DPS	ESA Threatened	2016	Final	---	Pacific Islands
		East Pacific DPS	ESA Threatened	2016	Final	---	West Coast
		North Atlantic DPS	ESA Threatened	2016	Final	Final	New England/Mid-Atlantic Southeast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
		South Atlantic DPS	ESA Threatened	2016	Final	---	Southeast
		East Indian-West Pacific DPS	ESA Threatened - Foreign	2016	---	---	Foreign
		North Indian DPS	ESA Threatened - Foreign	2016	---	---	Foreign
		Southwest Indian DPS	ESA Threatened - Foreign	2016	---	---	Foreign
		Southwest Pacific DPS	ESA Threatened - Foreign	2016	---	---	Foreign
Guadalupe Fur Seal *Arctocephalus townsendi*	**SPECIES CATEGORY** Seals & Sea Lions	Species	ESA Threatened	1985	---	---	Alaska West Coast
Humpback Whale *Megaptera novaeangliae*	**SPECIES CATEGORY** Whales	Central America DPS	ESA Endangered	2016	Under Development	Final	West Coast
		Western North Pacific DPS	ESA Endangered	2016	Under Development	Final	Alaska
		Arabian Sea DPS	ESA Endangered - Foreign	2016	Final	---	Foreign
		Cape Verde Islands/Northwest Africa DPS	ESA Endangered - Foreign	2016	Final	---	Foreign
		Mexico DPS	ESA Threatened	2016	Under Development	Final	Alaska West Coast
Killer Whale *Orcinus orca* **Also Known As** Orca	**SPECIES CATEGORY** Dolphins & Porpoises	Southern Resident DPS	ESA Endangered	2005	Final	Final	Alaska West Coast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
	SPECIES CATEGORY Whales						
Leatherback Turtle *Dermochelys coriacea*	**SPECIES CATEGORY** Sea Turtles	Species	ESA Endangered	1970	Final	Final (U.S. Caribbean) Final (U.S. West Coast)	New England/Mid-Atlantic Pacific Islands Southeast West Coast
Loggerhead Turtle *Caretta caretta*	**SPECIES CATEGORY** Sea Turtles	North Pacific Ocean DPS	ESA Endangered	2011	Final	No	Pacific Islands West Coast
		Mediterranean Sea DPS	ESA Endangered - Foreign	2011	---	---	Foreign
		Northeast Atlantic Ocean DPS	ESA Endangered - Foreign	2011	---	---	Foreign
		North Indian Ocean DPS	ESA Endangered - Foreign	2011	---	---	Foreign
		South Pacific Ocean DPS	ESA Endangered - Foreign	2011	---	---	Foreign
		Northwest Atlantic Ocean DPS	ESA Threatened	2011	Final	Final	New England/Mid-Atlantic Southeast
		South Atlantic Ocean DPS	ESA Threatened - Foreign	2011	---	---	Foreign
		Southeast Indo-Pacific Ocean DPS	ESA Threatened - Foreign	2011	---	---	Foreign
		Southwest Indian Ocean DPS	ESA Threatened - Foreign	2011	---	---	Foreign

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
North Pacific Right Whale *Eubalaena japonica*	**SPECIES CATEGORY** Whales	Species	ESA Endangered	2008; 1970 (original)	Final	Final	Alaska West Coast
Oceanic Whitetip Shark *Carcharhinus longimanus*	**SPECIES CATEGORY** Fish - Highly Migratory Fish - Protected Fish - Sharks	Species	ESA Threatened	2018	Under Development	Not Prudent	New England/Mid-Atlantic Pacific Islands Southeast West Coast
Olive Ridley Turtle *Lepidochelys olivacea*	**SPECIES CATEGORY** Sea Turtles	Mexico's Pacific coast breeding populations	ESA Endangered	1978	Final	---	West Coast
		All other populations	ESA Threatened	---	---	---	Pacific Islands Southeast West Coast
Scalloped Hammerhead Shark *Sphyrna lewini*	**SPECIES CATEGORY** Fish - Highly Migratory Fish - Protected Fish - Sharks	Eastern Pacific DPS	ESA Endangered	2014	---	No	West Coast
		Eastern Atlantic DPS	ESA Endangered - Foreign	2014	---	---	Foreign
		Central & Southwest Atlantic DPS	ESA Threatened	2014	---	No	Southeast
		Indo-West Pacific DPS	ESA Threatened	2014	---	No	Pacific Islands
Sei Whale *Balaenoptera borealis*	**SPECIES CATEGORY** Whales	Species	ESA Endangered	1970	Final	---	Alaska New England/Mid-Atlantic Pacific Islands Southeast West Coast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
Sockeye Salmon (Protected) *Oncorhynchus nerka*	**SPECIES CATEGORY** Fish - Protected Fish	Snake River ESU	ESA Endangered	1991	Final	Final	Alaska West Coast
		Ozette Lake ESU	ESA Threatened	1999	Final	Final	Alaska West Coast
Sperm Whale *Physeter macrocephalus*	**SPECIES CATEGORY** Whales	Species	ESA Endangered	1970	Final	---	Alaska New England/Mid-Atlantic Pacific Islands Southeast West Coast
Steelhead Trout *Oncorhynchus mykiss*	**SPECIES CATEGORY** Fish - Protected Fish	Southern California DPS	ESA Endangered	1997	Final	Final	Alaska West Coast
		California Central Valley DPS	ESA Threatened	1998	Final	Final	Alaska West Coast
		Central California Coast DPS	ESA Threatened	1997	Final	Final	Alaska West Coast
		Lower Columbia River DPS	ESA Threatened	1998	Final	Final	Alaska West Coast
		Middle Columbia River	ESA Threatened	1999	Final	Final	Alaska West Coast
		Northern California DPS	ESA Threatened	2000	Final	Final	Alaska West Coast
		Puget Sound DPS	ESA Threatened	2007	Final	Final	Alaska West Coast
		Snake River Basin DPS	ESA Threatened	2006	Final	Final	Alaska West Coast

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
		South-Central California Coast DPS	ESA Threatened	1997	Final	Final	Alaska West Coast
		Upper Columbia River DPS	ESA Threatened	2006; 1997 (original)	Final	Final	Alaska West Coast
		Upper Willamette River DPS	ESA Threatened	1999	Final	Final	Alaska West Coast
		Middle Columbia River XN	ESA Experimental Population	---	---	---	Alaska West Coast
		Olympic Peninsula DPS	ESA Candidate	---	---	---	West Coast

1 2 Last »

Display

25 Display All

Species Name ▼	Species Category	Listed Entity	Protected Status	Year Listed	Recovery Plan	Critical Habitat	Region
Steller Sea Lion *Eumetopias jubatus*	**SPECIES CATEGORY** Seals & Sea Lions	Western DPS	ESA Endangered	1997; 1990 (original)	Final	Final	Alaska West Coast
White Abalone *Haliotis sorenseni*	**SPECIES CATEGORY** Invertebrates - Abalone	Species	ESA Endangered	2001	Final	Not Prudent	West Coast
Yelloweye Rockfish *Sebastes ruberrimus*	**SPECIES CATEGORY** Fish - Protected Fish	Puget Sound/ Georgia Basin DPS	ESA Threatened	2010	Final	Final	Alaska West Coast

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington Fish And Wildlife Office
510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263
Phone: (360) 753-9440 Fax: (360) 753-9405

In Reply Refer To: 02/05/2025 16:35:26 UTC
Project Code: 2025-0052134
Project Name: Medicine River Ranch

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Washington Fish And Wildlife Office
510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263
(360) 753-9440

PROJECT SUMMARY

Project Code: 2025-0052134
Project Name: Medicine River Ranch
Project Type: Commercial Development
Project Description: equestrian facility and equestrian therapy
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@47.00007775,-122.7054572110639,14z

Counties: Thurston County, Washington

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Yelm Pocket Gopher *Thomomys mazama yelmensis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7257	Threatened

BIRDS

NAME	STATUS
Marbled Murrelet *Brachyramphus marmoratus* Population: U.S.A. (CA, OR, WA) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Streaked Horned Lark *Eremophila alpestris strigata* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7268	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

FISHES

NAME	STATUS
Bull Trout *Salvelinus confluentus* Population: U.S.A., coterminous, lower 48 states There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8212	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Suckley's Cuckoo Bumble Bee *Bombus suckleyi* Population:	Proposed Endangered

NAME STATUS

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/10885

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: G.O. Graening
Address: 343 Carpenter Hill Road
City: Folsom
State: CA
Zip: 95630
Email ggraening@gmail.com
Phone: 9164525442

Attachment B

USDA Soil Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Thurston County Area, Washington

September 5, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map (Nisqually Medicine Ranch)

Map Scale: 1:8,130 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Thurston County Area, Washington
Survey Area Data: Version 17, Aug 29, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 26, 2023—Aug 14, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (Nisqually Medicine Ranch)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33	Everett very gravelly sandy loam, 8 to 15 percent slopes	8.0	10.5%
34	Everett very gravelly sandy loam, 15 to 30 percent slopes	0.1	0.1%
35	Everett very gravelly sandy loam, 30 to 50 percent slopes	0.1	0.1%
48	Indianola loamy sand, 15 to 30 percent slopes	14.5	19.1%
73	Nisqually loamy fine sand, 0 to 3 percent slopes	0.6	0.8%
109	Spana gravelly loam	48.6	64.0%
110	Spanaway gravelly sandy loam, 0 to 3 percent slopes	3.3	4.3%
129	Water	0.9	1.2%
2103	McChord-Everett complex, 15 to 30 percent slopes	0.0	0.0%
Totals for Area of Interest		**76.0**	**100.0%**

Map Unit Descriptions (Nisqually Medicine Ranch)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties

and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Thurston County Area, Washington

33—Everett very gravelly sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2t62b
Elevation: 30 to 900 feet
Mean annual precipitation: 35 to 91 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 180 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Everett and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Everett

Setting

Landform: Moraines, eskers, kames
Landform position (two-dimensional): Shoulder, footslope
Landform position (three-dimensional): Base slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and gravelly glacial outwash

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 3 inches: very gravelly sandy loam
Bw - 3 to 24 inches: very gravelly sandy loam
C1 - 24 to 35 inches: very gravelly loamy sand
C2 - 35 to 60 inches: extremely cobbly coarse sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: F002XA004WA - Puget Lowlands Forest
Forage suitability group: Droughty Soils (G002XN402WA), Droughty Soils (G002XS401WA), Droughty Soils (G002XF403WA)
Other vegetative classification: Droughty Soils (G002XN402WA), Droughty Soils (G002XS401WA), Droughty Soils (G002XF403WA)
Hydric soil rating: No

Minor Components

Alderwood

Percent of map unit: 10 percent
Landform: Hills, ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Nose slope, talf
Down-slope shape: Convex, linear
Across-slope shape: Convex
Hydric soil rating: No

Indianola

Percent of map unit: 10 percent
Landform: Kames, eskers, terraces
Landform position (three-dimensional): Riser
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

34—Everett very gravelly sandy loam, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: 2t62c
Elevation: 30 to 900 feet
Mean annual precipitation: 35 to 91 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 180 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Everett and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Everett

Setting

Landform: Moraines, eskers, kames
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and gravelly glacial outwash

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 3 inches: very gravelly sandy loam
Bw - 3 to 24 inches: very gravelly sandy loam
C1 - 24 to 35 inches: very gravelly loamy sand
C2 - 35 to 60 inches: extremely cobbly coarse sand

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: F002XA004WA - Puget Lowlands Forest
Forage suitability group: Droughty Soils (G002XN402WA), Droughty Soils (G002XS401WA)
Other vegetative classification: Droughty Soils (G002XN402WA), Droughty Soils (G002XS401WA)
Hydric soil rating: No

Minor Components

Indianola

Percent of map unit: 10 percent
Landform: Terraces, kames, eskers
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Alderwood

Percent of map unit: 10 percent
Landform: Hills, ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Nose slope, side slope, talf
Down-slope shape: Convex, linear
Across-slope shape: Convex
Hydric soil rating: No

35—Everett very gravelly sandy loam, 30 to 50 percent slopes

Map Unit Setting

National map unit symbol: 2t62d
Elevation: 30 to 900 feet
Mean annual precipitation: 35 to 91 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 180 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Everett and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Everett

Setting

Landform: Moraines, eskers, kames
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and gravelly glacial outwash

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 3 inches: very gravelly sandy loam
Bw - 3 to 24 inches: very gravelly sandy loam
C1 - 24 to 35 inches: very gravelly loamy sand
C2 - 35 to 60 inches: extremely cobbly coarse sand

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: F002XA004WA - Puget Lowlands Forest
Hydric soil rating: No

Minor Components

Indianola

Percent of map unit: 10 percent
Landform: Terraces, kames, eskers
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Alderwood

Percent of map unit: 10 percent
Landform: Hills, ridges
Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Nose slope, side slope, talf
Down-slope shape: Convex, linear
Across-slope shape: Convex
Hydric soil rating: No

48—Indianola loamy sand, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: 2t639
Elevation: 0 to 980 feet
Mean annual precipitation: 30 to 81 inches
Mean annual air temperature: 48 to 50 degrees F
Frost-free period: 170 to 210 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Indianola and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Indianola

Setting

Landform: Terraces, kames, eskers
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy glacial outwash

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 6 inches: loamy sand
Bw1 - 6 to 17 inches: loamy sand
Bw2 - 17 to 27 inches: sand
BC - 27 to 37 inches: sand
C - 37 to 60 inches: sand

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): 6e

Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: F002XA004WA - Puget Lowlands Forest
Forage suitability group: Droughty Soils (G002XN402WA), Droughty Soils (G002XS401WA)
Other vegetative classification: Droughty Soils (G002XN402WA), Droughty Soils (G002XS401WA)
Hydric soil rating: No

Minor Components

Alderwood
Percent of map unit: 8 percent
Landform: Hills, ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Nose slope, side slope, talf
Down-slope shape: Convex, linear
Across-slope shape: Convex
Hydric soil rating: No

Everett
Percent of map unit: 5 percent
Landform: Moraines, eskers, kames
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Norma
Percent of map unit: 2 percent
Landform: Drainageways, depressions
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave
Across-slope shape: Concave
Hydric soil rating: Yes

73—Nisqually loamy fine sand, 0 to 3 percent slopes

Map Unit Setting
National map unit symbol: 2ndc8
Elevation: 160 to 1,310 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 50 degrees F
Frost-free period: 150 to 200 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Nisqually and similar soils: 85 percent
Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nisqually

Setting

Landform: Terraces
Parent material: Sandy glacial outwash

Typical profile

H1 - 0 to 5 inches: loamy fine sand
H2 - 5 to 31 inches: loamy fine sand
H3 - 31 to 60 inches: loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: R002XA006WA - Puget Lowlands Prairie
Forage suitability group: Droughty Soils (G002XS401WA)
Other vegetative classification: Droughty Soils (G002XS401WA)
Hydric soil rating: No

Minor Components

Yelm

Percent of map unit: 3 percent
Hydric soil rating: No

Norma

Percent of map unit: 2 percent
Landform: Depressions
Other vegetative classification: Wet Soils (G002XS101WA)
Hydric soil rating: Yes

109—Spana gravelly loam

Map Unit Setting

National map unit symbol: 2nd7x
Elevation: 330 to 1,640 feet
Mean annual precipitation: 25 to 45 inches
Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 150 to 200 days
Farmland classification: Prime farmland if drained

Map Unit Composition
Spana and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Spana

Setting
Landform: Drainageways, outwash plains
Parent material: Glacial outwash

Typical profile
H1 - 0 to 22 inches: gravelly loam
H2 - 22 to 26 inches: gravelly loam
H3 - 26 to 38 inches: gravelly loam
H4 - 38 to 60 inches: extremely gravelly sandy loam

Properties and qualities
Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 12 to 35 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B
Ecological site: R002XA006WA - Puget Lowlands Prairie
Forage suitability group: Soils with Few Limitations (G002XS501WA)
Other vegetative classification: Soils with Few Limitations (G002XS501WA)
Hydric soil rating: No

110—Spanaway gravelly sandy loam, 0 to 3 percent slopes

Map Unit Setting
National map unit symbol: 2ndb6
Elevation: 330 to 1,310 feet
Mean annual precipitation: 35 to 65 inches
Mean annual air temperature: 50 degrees F
Frost-free period: 150 to 200 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Spanaway and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Spanaway

Setting

Landform: Terraces, outwash plains
Parent material: Volcanic ash over gravelly outwash

Typical profile

H1 - 0 to 15 inches: gravelly sandy loam
H2 - 15 to 20 inches: very gravelly loam
H3 - 20 to 60 inches: extremely gravelly sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: R002XA006WA - Puget Lowlands Prairie
Forage suitability group: Droughty Soils (G002XS401WA)
Other vegetative classification: Droughty Soils (G002XS401WA)
Hydric soil rating: No

129—Water

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Setting

Landform: Alluvial cones

2103—McChord-Everett complex, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: 2nczx
Elevation: 200 to 500 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 200 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Mcchord and similar soils: 55 percent
Everett and similar soils: 45 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mcchord

Setting

Landform: Eskers, kames
Parent material: Glacial drift

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
A - 2 to 8 inches: gravelly sandy loam
Bw1 - 8 to 21 inches: very gravelly sandy loam
Bw2 - 21 to 30 inches: very gravelly sandy loam
Bg - 30 to 47 inches: very gravelly loamy sand
Cd - 47 to 60 inches: extremely gravelly loamy sand

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 40 to 60 inches to densic material
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 24 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: F002XA004WA - Puget Lowlands Forest
Hydric soil rating: No

Description of Everett

Setting

Landform: Kames, eskers
Parent material: Glacial outwash

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 3 inches: very gravelly sandy loam
Bw - 3 to 24 inches: very gravelly sandy loam
C1 - 24 to 35 inches: very gravelly loamy sand
C2 - 35 to 60 inches: extremely cobbly coarse sand

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: F002XA004WA - Puget Lowlands Forest
Hydric soil rating: No

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Attachment C

Site Photos

Photo looking west from Yelm Highway towards property entrance.

View looking southwest of property entrance and powerlines in distance.

View looking south on ranch road of barn, stables, and housing

View looking west from southeast corner of property of barn and equestrian facilities.

View looking north along ranch road of open space and pasture.

View looking east of equestrian stables and pens and pasture.

View looking east of pasture and neighboring property.

View looking south of pasture, power lines, and animal pens.

View looking north of pasture and open space.

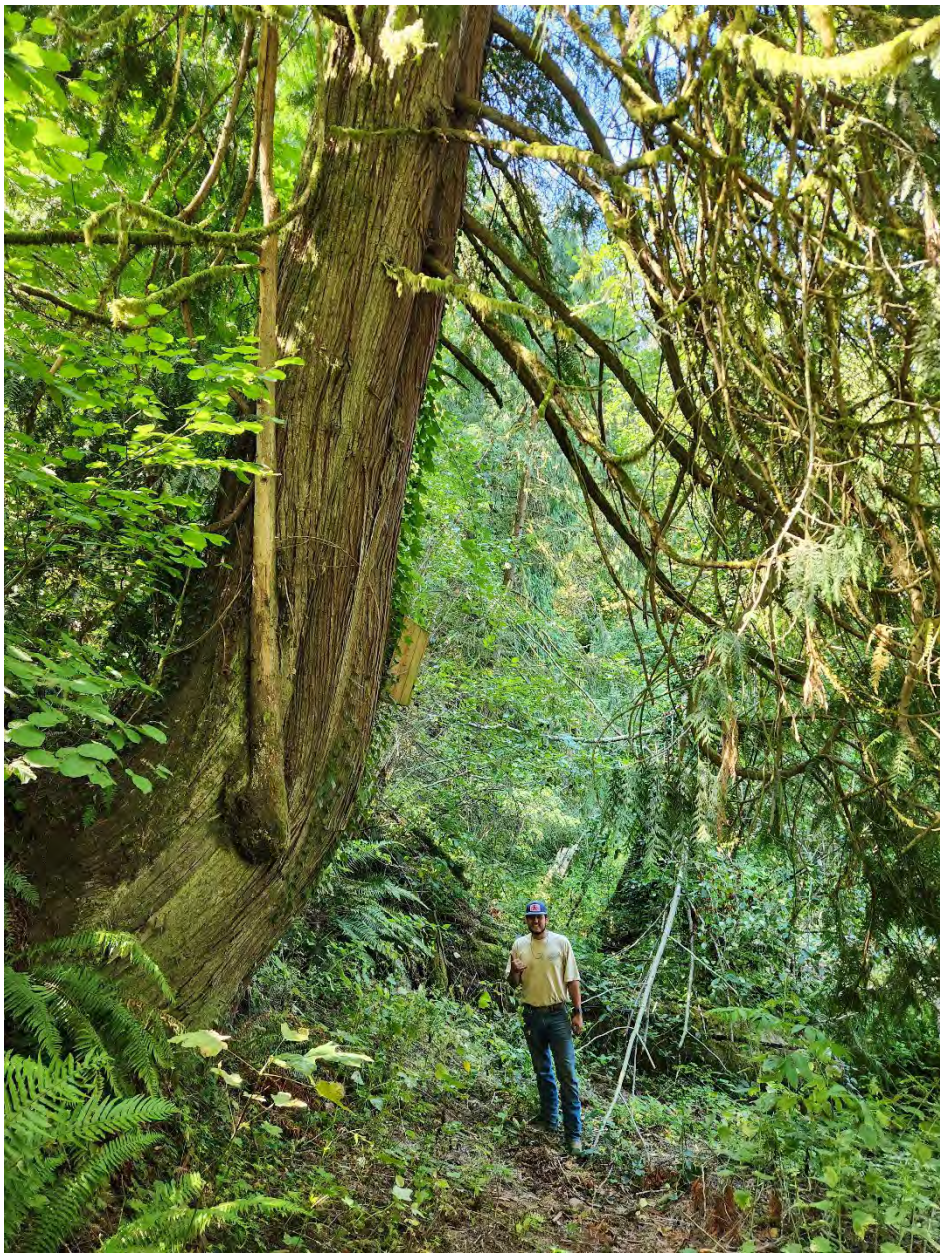
View along ranch road of rural residences.

View of pasture, equestrian corrals, and shade structures.

View looking south from ranch road of power lines and pasture.

View looking west of animal pens and open space and pasture.

View looking west of pond and associated wetland and riparian vegetation.



View of ancient cedar in riparian forest near pond, with ranch manager in foreground for scale.

Attachment D

List of Plant Species Detected

List of Plant Species Detected During the Field Survey

Scientific Name	Common Name
Acer macrophyllum	big leaf maple
Achillea millefolium	yarrow
Agrostis capillaris	Colonial bentgrass
Alnus rubra	Red alder
Anaphalis margartiacea	pearly everlasting
Arbutus menziesii	madrone
Avena spp.	wild oats
Berberis aquifolium	Oregon grape
Berberis nervosa	dwarf Oregon grape
Bromus carinatus	California brome
Bromus spp.	brome grasses
Carduus pycnocephalus	Italian thistle
Chenopodium album	lamb's quarters
Cirsium arvense	creeping thistle
Corylus cornuta	Beaked hazelnut
Crepis capillaris	smooth hawksbeard
Cytisus sp.	scotch broom
Echinocloa crus-galli	barnyard grass
Eragrostis spectabilis	purple lovegrass
Erigeron canadensis	horseweed
Gaultheria shallon	salal
Geranium robertianum	herb robert
Hedera helix	English ivy
Holcus lanatus	yorkshire fog
Holodiscus discolor	Creambush
Hypericum perforatum	St. John's wort
Impatiens capenis	jewelweed
Jacobaea vulgaris	tansy ragwort
Leucanthemum vulgare	oxeye daisy
Nuphar advena	spatterdock
Oemleria cerasiformis	Indian plum
Oxybasis glauca	oak-leaved goosefoot
Paxistima myrsinites	Oregon boxleaf
Plantago lanceolata	narrow leaf plantain
Pleurozium schreberi	red-stemmed feather moss
Populus balsamifera	balsam poplar
Pseudotsuga meziesii	Douglas fir
Pteridum aquilinum	braken fern
Quercus garryana	oregon oak
Quercus lobata	valley oak
Rosa gymnocarpa	dwarf rose
Rubus armenicacus	Himalayan blackberry
Rubus ursinus	California blackberry

Scientific Name	Common Name
Rumex crispus	curly dock
Salix lasiandra	Pacific willow
Sambucus racemosa	red elderberry
Solanum americanum	nightshade
Solidago canadensis	Canada goldenrod
Spergularia rubra	red sandspurry
Symphoricarpos albus	common snowberry
Thuja occidnentalis	Arborvitae
Thuja plicata	Western red cedar
Tsuga heterophylla	western hemlock
Typha sp.	cattail
Urtica dioica	stinging nettle
Vulpia myuros	rat tail fescue

Appendix B

Cultural Resources Investigations

Cultural Appendix is Confidential and Bound Separately

Appendix C

Phase I Environmental Site Assessment

Phase I Environmental Site Assessment

Nisqually Indian Tribe Horse Ranch Property
10747 Todtkarle Road SE
Olympia, Washington

for
Nisqually Indian Tribe

October 9, 2023

GeoEngineers
Earth Science + Technology

Phase I Environmental Site Assessment

Nisqually Indian Tribe Horse Ranch Property
10747 Todtkarle Road SE
Olympia, Washington

for
Nisqually Indian Tribe

October 9, 2023

GeoEngineers

1101 South Fawcett Avenue, Suite 200
Tacoma, Washington 98402
253.383.4940

Phase I Environmental Site Assessment

Nisqually Indian Tribe Horse Ranch Property
10747 Todtkarle Road SE
Olympia, Washington

File No. 0277-056-00

October 9, 2023

Prepared for:

Nisqually Indian Tribe
4820 She-Nah-Num Drive SE
Olympia, Washington 98513

Attention: Joe Cushman

Prepared by:

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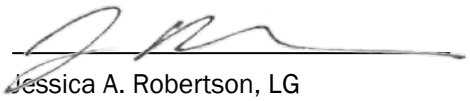
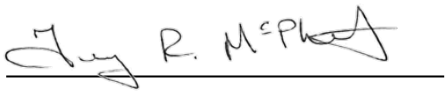


Jessica A. Robertson, LG
Environmental Geologist



Terry R. McPhetridge, LG, LHG
Principal

JAR:TRM:ch

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ACRONYMS, ABBREVIATIONS, AND KEY DEFINITIONS

AAI	All Appropriate Inquiries
ALLSITES	Washington State Department of Ecology Facility/Site Identification System Listing
AST	aboveground storage tank
ASTM	ASTM International
AUL	activity use limitations
BFPP	bona fide prospective purchaser
bgs	below ground surface
BIA	Bureau of Indian Affairs
CDL	Clandestine Drug Labs
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CMMP	Contaminated Media Management Plan
CREC	Controlled REC: This report utilizes the definitions for CREC per ASTM E 1527-21: "recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in-place subject to the implementation of the required controls."
CSCSL	Confirmed and Suspected Contaminated Sites List
Ecology	Washington State Department of Ecology
EDR	Environmental Data Resources, Inc.
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
FINDS	Federal Records Facility Index System/Facility Registry System
HMIRS	Hazardous Materials Information Reporting System
HREC	Historical Recognized Environmental Condition: This report utilizes the definitions for HREC per ASTM E 1527-21: "a previous release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls....A historical recognized environmental condition is not a recognized environmental condition.
HSL	Hazardous Sites List
ICIS	Integrated Compliance Information System
ICR	Independent Cleanup Report
LG	Licensed Geologist
LUST	leaking underground storage tank

MSL	mean sea level
MTCA	Model Toxics Control Act
NFA	No Further Action
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
PCBs	polychlorinated biphenyls
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition: This report utilizes the definitions for recognized environmental conditions (RECs) per ASTM E 1527-21: "(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. A *de minimis* condition is not a recognized environmental condition.
TCRS	Thurston County Resource Stewardship
USGS	United States Geological Survey
UST	underground storage tank
VCP	Voluntary Cleanup Program

1.0 INTRODUCTION

This report summarizes the results of our Phase I Environmental Site Assessment (ESA) performed for the Nisqually Indian Tribe on the Horse Ranch Property (Medicine River Ranch) located at 10735 and 10747 Todtkarle Road SE in Olympia, Washington. The 72-acre property (Thurston County Parcel numbers 21832340000, 21832340002, and 21832340003) is currently developed with a house, mobile home, barns and related structures for use as a horse ranch. The property is referred to herein as the "subject property." The subject property is shown relative to surrounding physical features on the Vicinity Map, Figure 1. The layout of the subject property and surrounding properties is shown on the Site Plan, Figure 2.

Our study was completed at the request of Joe Cushman of the Nisqually Indian Tribe. The subject property is currently owned by the Nisqually Indian Tribe. We understand that this Phase I ESA is required by the Bureau of Indian Affairs (BIA) to place the property from fee into trust. We further understand the results of the Phase I ESA will be used as part of the Nisqually Indian Tribe's and BIA's evaluation of recognized environmental conditions[1] (RECs) associated with property ownership. This report has been prepared for the exclusive use of the Nisqually Indian Tribe. No one except the Nisqually Indian Tribe should rely on this report without first conferring with GeoEngineers because this environmental report is not intended for use by others.

1.1. Phase I Scope of Services

The purpose of this Phase I ESA is to identify RECs in connection with the subject property. Our scope of services is in general accordance with ASTM International (ASTM) Standard Practice E1527-21 for Phase I ESAs and the United States Environmental Protection Agency's (EPA's) Federal Regulation 40 CFR Part 312 "Standards and Practices for All Appropriate Inquiries (AAI)," which are intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner or bona fide prospective purchaser limitations on liability under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The standard outlines the practice that constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined by 42 U.S.C. §9601. Our services, described below, were completed in general accordance with our proposal dated August 2, 2023. These services were completed by, or under the direction of, an environmental professional as described in 40 CFR Part 312.

Our specific scope of services for this Phase I ESA was as follows:

1. Reviewed readily available geotechnical reports, environmental reports and/or other relevant documents pertaining to environmental conditions at the subject property.
2. Reviewed user-provided information and evaluated the significance of any identified environmental liens or activity use limitations (AULs).

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[1] Recognized environmental conditions are defined in ASTM E 1527-13 as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property; (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions."

3. Reviewed the results of a federal, state, local and tribal environmental database search provided by an outside environmental data service for listings of properties with known or suspected environmental concerns on or near the subject property within the search distances specified by ASTM. Our database and file review search also included a review of EPA and Washington State Department of Ecology (Ecology) websites for readily available information (publications and reports) concerning area-wide soil and groundwater contamination on or adjacent to the subject property.
4. Reviewed regulatory agency files regarding listed properties of potential environmental concern relative to the subject property.
5. Identified a key site manager with specific knowledge of past and present property use and request that the key site manager meet a GeoEngineers' representative on site for an interview during the visual site reconnaissance and/or an interview by telephone if he or she is not available during the site reconnaissance. We also identified and interviewed others familiar with the use and history of the subject property, as available and appropriate, including representatives of current occupants that likely use, store, treat, handle or dispose of hazardous substances now or in the past.
6. Interviewed current owners as necessary to gather information or fill property use data gaps regarding the subject property.
7. Interviewed past owners and occupants of the subject property as necessary to gather information or fill property use data gaps regarding property use history.
8. Interviewed a representative of the local fire department, health department, police department and/or Ecology as necessary to gather information or fill data gaps regarding the history of the subject property and surrounding properties relative to the likely presence of hazardous substances.
9. Reviewed historical aerial photographs, fire insurance maps, building department records, city directories, chain-of-title reports, and land use and tax assessor records, as available and appropriate, to identify past development history on and adjacent to the subject property relative to the possible use, generation, storage, release or disposal of hazardous substances. We attempted to identify uses of the subject property from the present back to the time that records show no apparent structures on the subject property, back to the time that the property was first used for residential, agricultural, commercial, industrial or governmental purposes, or back to 1940, whichever is earliest.
10. Reviewed current United States Geological Survey (USGS) topographic maps to identify the physiographic setting of the subject property and provide a statement on the local geologic, soil and groundwater conditions based on our general experience and sources such as geologic maps and soil surveys.
11. Conducted a visual reconnaissance of the subject property and adjacent properties to identify visible evidence of RECs.
12. Identified the source(s) of potable water for the subject property and current heating and sewage disposal system(s) used at the subject property, if any, and their age if readily ascertainable.
13. Identified data gaps relative to the Phase I ESA study findings.
14. Provided a written summary of the Phase I ESA results and identified RECs, CRECs, HRECs, *de minimis* conditions and data gaps as appropriate, along with our opinion and recommendations regarding the potential for contamination by hazardous substances at the subject property and any significant data gaps identified.

1.2. Special Considerations

Our scope of services did not include an environmental compliance audit or an evaluation for the presence of lead-based paint, mold, polychlorinated biphenyls (PCBs) in light ballasts, radon, lead in drinking water, asbestos-containing building materials, urea-formaldehyde insulation in on-site structures or debris or other potentially hazardous building materials. Soil, groundwater, soil vapor, indoor air or surface water sampling was not part of our Phase I ESA services.

1.3. Report Shelf Life

The User of this Phase I ESA should be aware that ASTM E 1527-21 establishes that a Phase I ESA is viable when conducted within 180 days prior to the date of property acquisition or intended transaction and that a report completed within one year prior to the date of acquisition or intended transaction may be used provided that the following scope elements were updated within 180 days prior to the transaction: interviews with owners, operators, and occupants, a search for recorded environmental cleanup liens (a user responsibility), reviews of government records, visual inspection of the subject and adjacent properties, and the declaration by the environmental professional.

2.0 USER-PROVIDED INFORMATION

We received responses to a user questionnaire, a copy of which is provided in Appendix A. The user did not provide any specific findings that would suggest an REC or potential REC relative to the subject property based on the responses from the user-provided information including specialized knowledge, commonly known or reasonably ascertainable information, valuation reduction for environmental issues, reason for performing the Phase I ESA, etc.

2.1. Environmental Liens or Activity and Use Limitations (AULs)

A title document was not provided by the Nisqually Indian Tribe. The User did not identify recorded environmental liens in connection with the subject property.

A search of institutional control and engineering control registries was included in the database search report provided by a subcontracted regulatory list search service, Environmental Data Resources, Inc. (EDR). The database search report is included in Appendix B and is discussed in more detail in Section 3.2. The subject property was not listed on the institutional or engineering control registries. EDR also conducted a search of environmental liens and other AULs, included in Appendix C. Environmental liens and other AULs were not identified.

2.2. Summary of Previous Reports

Previous reports for the subject property were not identified except documents related to the removal of two residential heating oil underground storage tanks (USTs) from the subject property in April 2022. The documents were provided by Langseth Environmental (UST removal contractor) that are copies of documents provided to Thurston County Development Services under the UST removal permit, including copies of the permits, disposal certifications, photos, and limited soil sampling data. The available documents are presented in Appendix D.

Two residential heating oil USTs were removed from the southeast corner of the house on April 28, 2022 based on the documents provided by others. UST #1 (approximately 300-gallon capacity) was located under grass south of the corner of the house. UST #2 (approximately 425-gallon capacity) was located a few feet away from UST #1 under a concrete slab adjacent to the garage. Both USTs were pumped and rinsed prior to removal and were disposed of as scrap steel.

Soil samples were collected from beneath the former tank locations following UST removal for chemical analysis. Diesel-range petroleum hydrocarbons were not detected in the soil sample from underneath UST #1. Diesel-range petroleum hydrocarbons were detected in the soil sample from underneath UST #2 at a concentration of 2400 mg/kg that is slightly greater than the Model Toxics Control Act (MTCA) Method A cleanup level of 2,000 mg/kg. Over-excavation of the diesel-contaminated soil beneath the former UST #2 location was not conducted due to the close proximity to the building and a nearby water line.

3.0 RECORDS REVIEW

3.1. Location and Setting

General information, property use(s) and environmental setting of the subject property area are summarized in Table 1 below. The location is shown relative to surrounding physical features in Figure 1. The current layout of the subject property and surrounding property uses are shown in Figure 2. Photographs of the subject property are shown in Figure 3.

TABLE 1. SUBJECT PROPERTY INFORMATION

Topographic Map	USGS, 7.5-minute Tenalquot Prairie, Washington, topographic quadrangle map, dated 2020.
Quarter, Section, Township and Range	SW quarter of Section 32, Township 18, Range 01 East, Willamette Meridian
Address	The existing residences in the southwest portion of the subject property currently use addresses 10735 and 10747 Todtkarle Road SE in Olympia, Washington. An additional address off the Saskatoon Lane SE subject property access is not yet established.
General Location	Located in unincorporated area west of Yelm Highway SE, east of Todtkarle Road SE, and south of Saskatoon Lane SE
Tax Parcel Number	Thurston County parcel numbers 21832340000, 21832340002, and 21832340003.
Approximate Area	72 acres
Existing Use(s)	Medicine River Ranch horse ranch and residential
Geologic Setting	Puget Lowland recessional outwash and/or glacial till.
Nearest Surface Water Bodies	Lake St. Clair is located approximately 100 feet northwest of the south portion of the subject property.
Approximate Surface Elevation	The eastern portion of the subject property is generally flat with an approximate elevation of 250 feet above mean sea level (msl). The southwest portion of the property includes steep slopes to the northwest, such that the southwest subject property boundary is

	approximately 150 feet msl, based on USGS topographic map information.
Soil and Geologic Conditions	Interbeds of glacial till and outwash (silt, sand and gravel) deposits.
Depth to Groundwater	Perched groundwater may be encountered within 30 feet of ground surface based on our experience in the area. Regional groundwater is reportedly encountered at depths more than 100 feet below ground surface based on well log information for wells on and near the subject property.
Inferred Direction of Shallow Groundwater Flow	Groundwater flow is inferred to flow generally to the northwest based on local topography and proximity to surface water.

Our knowledge of the general physiographic setting, geology and groundwater occurrence in the vicinity of the subject property is based on our review of the maps listed above and our general experience in the area.

3.2. Standard Environmental Database Search

GeoEngineers reviewed the results of a search of pertinent environmental regulatory lists and databases for current or previous facilities listed at addresses located within ASTM-specified distances from the subject property. The search was performed on August 11, 2023. The information reviewed was provided by a subcontracted regulatory list search service, Environmental Data Resources, Inc. (EDR). The EDR report is presented in Appendix B. The report includes details regarding the listed facilities identified and maps showing the approximate locations of the listed facilities relative to the subject property.

GeoEngineers reviewed the search results for listings pertaining to the subject property. GeoEngineers also reviewed EDR's listing of database entries that could not be mapped because of insufficient addresses (orphans). Off-site facilities found within the specified distances from the subject property were evaluated for potential impact to the subject property.

3.2.1. Database and Regulatory Findings for the Subject Property

The subject property addresses (10735 and 10747 Todtkarle Road SE) were not identified on the regulatory database lists.

3.2.2. Screening Criteria for Other Listed Facilities

We screened the listed facilities within the ASTM search distances relative to the following criteria:

1. Adjacent Sites
    a. Listed adjacent sites were retained for additional review.
2. Non-Adjacent Sites
    a. Any non-adjacent sites included in the EDR report only by virtue of being listed in the RCRA, AST, UST, HMIRS, FINDS, ALLSITES, ICIS and/or NPDES databases (see Acronyms and Abbreviations) were not further reviewed because these databases are not indicative of known or suspected releases at a site. Sites listed in these databases only are considered low risk of contaminant migration and not potential RECs.

b. A screening radius of approximately 1/4-mile was used to identify listed non-adjacent sites potentially warranting further review based on our knowledge of soil and groundwater conditions at the subject property. Specifically, sites within approximately ¼-mile of the subject property **and** upgradient or cross-gradient that were listed in the Federal, State or Tribal Equivalent databases of CERCLIS, NPL, HSL, CSCSL, CSCSL NFA, VCP, ICR, Solid Waste Landfill, drycleaner, LUST, CDL, or Institutional Control Registries (see Acronyms and Abbreviations) were further reviewed because these databases indicate a reported known or suspected release at a site. We requested Ecology files for listed sites on these databases.

c. Sites that were either not confirmed or suspected contaminated sites, not identified as LUST sites or located outside a 1/4-mile radius from the subject property were generally considered low risk of contaminant migration and not potential RECs.

3.2.3. Database and Regulatory Findings for Screened Listed Facilities

No nearby or adjacent facilities were listed in the regulatory database report that in our opinion could pose a REC to the subject property.

3.3. Regulatory Agency File and Records Review

Ecology does not maintain a file for the subject property. We did not review Ecology files for other facilities listed in Appendix B because we did not identify additional listed facilities considered to represent a REC for the subject property. GeoEngineers requested reasonably ascertainable, pertinent records from Lacey Fire, Thurston County and Thurston County Sheriff as discussed below.

3.3.1. Review of State Regulatory Agency Files

Ecology does not maintain a file for the subject property.

3.3.2. Review of Local Regulatory Agency Files

3.3.2.1. Thurston County

We requested Thurston County Resource Stewardship (TCRS) and building department records on September 14, 2023. Thurston County has not completed its review of responsive records as of the completion of this report. This data gap is not considered significant because it is unlikely that Thurston County holds records indicating potential use or storage of hazardous materials or petroleum not available from other sources. We will notify Nisqually Indian Tribe if Thurston County responds with records that significantly change our conclusions.

3.3.2.2. Thurston County Sheriff

We requested relevant records for the subject property addresses from Thurston County Sheriff on September 14, 2023. Thurston County Sheriff responded on by providing available records for the subject property address, which included records regarding the following:

- A burglary incident in March 2018 in which two all-terrain vehicles (ATVs) were reported stolen from a garage.
- Emergency response to an individual reporting respiratory distress in December 2017, May 2018, and June 2018.
- Welfare check in response to an abandoned 911 call dated April 2023.

3.3.2.3. Lacey Fire District 3

We requested Lacey Fire District 3 records on September 14, 2023. On September 20, Lacey Fire responded with a statement that they do not have any records for fire incidents at the property. Lacey Fire does not maintain hazardous materials information.

3.3.2.4. Area-wide Contamination

We conducted a search of Ecology and EPA websites for readily available information (publications and reports) that may concern area-wide soil and groundwater contamination on or adjacent to the subject property.

The subject property is located within the footprint of the Tacoma Smelter Plume based on information reviewed on Ecology's website regarding the Tacoma Smelter Plume. This plume originated from an Asarco copper smelter that operated in Tacoma for almost 100 years and caused arsenic and lead contamination in near-surface soil throughout a large zone in the south Puget Sound region (this area is known as the plume footprint). Plume maps and Ecology's regional surface soil sampling data indicate that the typical concentration range of arsenic detected in soil within the area of the subject property is under 20 parts per million (ppm), less than the MTCA Unrestricted Land Use Cleanup level (20 ppm). The area mapped by Ecology is based on relatively small number of samples given the large area that is affected. The map shows an estimate of the highest arsenic levels likely to be found in an area.

The Tacoma Smelter shut down operations in early 1985. The site was developed in the late 1960s. Ecology has identified grading and redevelopment as a remediation option for impacts from the Tacoma Smelter Plume. Ecology has mitigated impacts to the Tacoma Smelter by the Dirt Alert program as discussed here https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Dirt-Alert-program.

3.4. Historical Resources

Our understanding of the history of the subject property is based on a review of the information from the historical resources listed in Table 2. Selected historical research documents are included in Appendix C.

TABLE 2. HISTORICAL RESOURCES REVIEWED

Description	Provider or Interviewee	Dates of Coverage or Dates of Knowledge of the Property	Date Reviewed or Contacted	Comment (See Section 4.2 for Findings)
Historical Aerial Photographs[1]	EDR	1941, 1954, 1957, 1968, 1975, 1981, 1990, 2006, 2009, 2015, and 2017	August 11, 2023	None.
Historical Aerial Photographs[1]	Thurston County GeoData	1996, 2000, 2003, 2006, 2009, 2012, 2015, 2017, 2018, 2019, and 2020	August 11, 2023	None.
Historical Aerial Photographs[1]	Google Earth	1990, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2022, and 2023	August 11, 2023	None.
Historical Fire Insurance Maps	EDR search of fire insurance maps	No coverage	August 11, 2023	None.

Description	Provider or Interviewee	Dates of Coverage or Dates of Knowledge of the Property	Date Reviewed or Contacted	Comment (See Section 4.2 for Findings)
Historical Topographic Maps	EDR search of USGS topographic maps	1916, 1944, 1948, 1959, 1968, 1973, 1981, 1986, 1994, 1997, 2014, 2017, and 2020	August 11, 2023	None.
City Directory Search	EDR	Approximate 5-year intervals, 1934 to 2020	August 12, 2023	Subject property street is first listed in the 1992 city directory.
County Assessor Records	Thurston County GeoData Center	Recent	September 14, 2023	None.
Archived Assessor Records	Thurston County Fieldbook Document Library	1980s to 1990s	September 14, 2023	None.

Note:

[1]The scale of the photographs reviewed allowed for an interpretation of general property development/configuration, such as identifying most structures, roadways and clearings. However, the scale of the photographs did not allow for identification of specific property features, such as fuel pumps, wells or chemical storage areas on the subject property, if any.

3.4.1. Historical Property Ownership and Use Summary

The subject property appears undeveloped and partially forested in aerial photographs dated 1941 through 1957. The clearing for the high voltage electrical lines that crosses diagonally to the southwest across the east side of the subject property is first visible in the 1954 aerial photograph. Existing buildings in the southwest corner of the subject property are first visible in the 1968 aerial photograph. The house was built in 1964 originally using oil as the heat source based on information provided in the archived Thurston County assessor information for the subject property. No information is included in the historical documents regarding the location of the heating oil tank. The original machine shed (now a barn) was built in 1963. Most of the machine shed had an earth floor but the west end had a concrete floor. Additional buildings built in the mid-1960s included a plainer shed (now the workshop), two feeder sheds, and two hay sheds. The mobile home was added to the north of the house and outbuildings in approximately 1984. Three more garage/storage buildings were built near the mobile home between 1985 and 1991.

Timber was harvested from the subject property between 2006 and 2011 based on available aerial photographs. Aerial photographs dated 2006 to recent show the subject property in the approximate current configuration with most previous trees removed.

The subject property parcels were owned by Oliver McLaughlin from at least the 1970s to 2003. Richard Oatfield owned the property from 2003 to 2020. Nisqually Indian Tribe purchased the subject property in 2020. Nisqually Indian Tribe has cleaned and repaired subject property buildings for conversion into use as a horse ranch since purchasing the subject property.

No information to indicate significant past use of hazardous materials or potential USTs at the subject property was identified in the available historical resources other than historical residential heating oil discussed in Section 2.2.

3.4.2. Adjacent Properties

Adjacent properties appear as undeveloped or lightly agricultural in aerial photographs dated 1941 and 1957.

North. Residential development (single family residences) is first visible on the north-adjacent property in the 1975 aerial photograph. Additional residences are visible in 1981 through early 2000s aerial photographs.

East. Single-family residences are first visible in 1968 aerial photograph, with additional houses added in aerial photographs dated 1975 to early 2000s.

South. South-adjacent property appears undeveloped and forested in reviewed aerial photographs dated 1941 to 1981. The existing house on south-adjacent property is first visible on the 1990 aerial photograph.

West. Light residential and/or recreational development along the shore of the lake to the west is first visible in the 1968 aerial photograph.

4.0 SITE RECONNAISSANCE

4.1. Subject Property Observations

A representative of GeoEngineers (Jessica Robertson, LG) performed a visual reconnaissance of the subject property on September 15, 2023. The subject property was accessed from adjacent roadways. The subject property is currently lightly developed with a house, a mobile home, a round pen, barns and storage structures. Our visual reconnaissance focused on the areas where hazardous substance use, storage and/or disposal were likely based on our experience.

Table 3 summarizes conditions observed during our site reconnaissance. The approximate locations of the observed features discussed in this section are shown in Figures 2 and 3. Photographs of the subject property were taken to document observations made during our reconnaissance and are presented in Figure 4.

TABLE 3. SUMMARY OF SITE RECONNAISSANCE OBSERVATIONS

Features	Observed		Comment
	Yes	No	
Current Uses and Existing Structures	X		The subject property is currently developed as a residence and horse ranch. A house, mobile home, a barn converted from a previous equipment storage building, livestock and hay barns and support and storage structures are clustered in the southwest portion of the subject property. A new covered round pen and small sheds are located near fenced horse enclosures in the west portion of the property. Clearing has been completed in some portions of the parcel for new planned construction of a covered arena and other new ranch structures.

Features	Observed		Comment
	Yes	No	
Evidence of Past Uses and Former Structures	X		Large stumps are evidence of previous logging activities at the subject property.
Heating/Cooling System	X		The house and mobile home are heated by electric systems. Barns and storage structures are unheated.
Floor Drains, Sumps or Drywells		X	None.
Aboveground Storage Tanks (ASTs)		X	None.
Underground Storage Tanks (USTs) or Evidence of USTs	X		An area of fresh gravel was observed at the southeast corner of the house near the area of the removed heating oil USTs (see Section 2.2).
Drums or Other Containers		X	None.
Identified Hazardous Substances and Petroleum Products (other than drums noted above or *de minimis* quantities of cleaning products)		X	None.
Unidentified Substances or Containers		X	None.
Evidence of Leaks, Spills or Releases Surrounding ASTs, USTs and/or Chemical Storage Areas		X	None.
Stained or Corroded Floors, Walls or Drains (other than the above or apparent water stains or minor oil stains on pavement from parked vehicles)		X	None.
Hydraulic Hoists		X	None.
Oil/Water Separators		X	None.
Electric or Hydraulic Equipment Containing PCBs		X	Pad-mounted transformers observed in the west portion of the property appear to be in good condition and owned by the local utility.
Discolored, Stained, or Stressed Soil or Vegetation Potentially from Hazardous Substances		X	None.
Solid Waste	X		A manure collection and storage area are located east of the barn/former equipment storage building.
On-site Septic or Sewage Disposal System	X		The house and mobile home use septic systems.
Potable Water Supply	X		One water well is located on the west side of the barn/former equipment storage building.
Standing Water or Other Pooled Liquids		X	None.
Catch Basins, Stormwater Drainage, or other Wastewater Discharges		X	None.
Pits/Ponds/Lagoons		X	None.
Strong, Pungent or Noxious Odors		X	None.

Features	Observed		Comment
	Yes	No	
Water Wells (agricultural, domestic, monitoring)		X	One water well is located on the west side of the barn/former equipment storage building.
Other Conditions of Environmental Concern		X	None.

4.2. Adjacent Property and Vicinity Observations

We viewed properties located adjacent to and surrounding the subject property on September 15, 2023 from accessible public rights-of-way and the subject property. We did not enter adjacent properties or buildings. The subject property generally is situated in an area that is developed for residential uses. Table 4 below outlines adjacent land uses and pertinent observations with respect to conditions that could pose an REC on the subject property. No prior uses of adjacent properties or the surrounding area were evident from the site reconnaissance except as noted below. Figure 2 shows adjacent property uses and locations in relation to the subject property.

TABLE 4. ADJOINING STREETS AND ADJACENT PROPERTIES OBSERVATIONS

Direction	Adjoining Street	Position Relative to Subject Property[1]	Adjacent Property and Use	Comments
North	Saskatoon Lane SE	Crossgradient	Undeveloped and Residential	None.
South	None	Crossgradient	Residential	None.
East	None	Upgradient	Residential	None.
West	Todtkarle Road SE	Downgradient	Residential	None.

Note:

[1] The inferred shallow groundwater flow direction in the vicinity of the subject property is toward the northwest as described in Section 3.1.

5.0 INTERVIEWS

Our understanding of the history of the subject property presented in Section 3.0 is partially based on interviews with the individuals listed in Table 5. Pertinent historical findings from interviews have also been integrated into Section 4.1 above.

TABLE 5. PERSONS INTERVIEWED

Agency Description	Provider or Interviewee	Dates of Coverage or Knowledge of the Property	Date Reviewed or Contacted	Comment (See Section 4.2 for Findings)
Key Site Manager/ Owner Representative	Keoni Kalama, Manager, Medicine River Ranch	2021 to present	September 15, 2023	See Section 5.1.
Interview	Thurston County	Recent	September 14, 2023	See Section 5.3.

Agency Description	Provider or Interviewee	Dates of Coverage or Knowledge of the Property	Date Reviewed or Contacted	Comment (See Section 4.2 for Findings)
Interview	Thurston County Sheriff Office	Recent	September 14, 2023	See Section 5.3.
Interview	Lacy Fire District 3	Recent	September 20, 2023	See Section 5.3.

5.1. Interview with the Key Site Manager/Owner/Occupant

A GeoEngineers, Inc. representative (Jessica Robertson, LG) interviewed Keoni Kalama, manager for Medicine River Ranch, during the site reconnaissance on September 15, 2023. Mr. Kalama is considered a "key site manager" for the purposes of this Phase I ESA. Mr. Kalama provided the following information regarding the property:

- The subject property was previously used for residential purposes and timber harvesting. The previous owner rented out the house and mobile home, and harvested trees from the subject property. Barns and storage buildings in the southwest portion of the subject property were used for timber harvesting equipment and as a small machine shop. Since 2022, the buildings were cleaned out and converted for use as horse and livestock barns and a ranch workshop. Contamination was not observed during cleanout of the former machine shop (now workshop) and the cleanup and renovation of the former equipment storage building (now horse barn).
- Small heating oil USTs were recently removed from the southeast corner of the house. (See Section 2.2.)
- Water is provided from a private well on the west side of the barn.

Mr. Kalama stated that he has no knowledge of additional USTs, significant spills, releases, or other use or storage of hazardous materials at the subject property.

5.2. Interviews with Local Government Officials

Records were requested from Lacey Fire, Thurston County and Thurston County Sheriff as discussed in Section 3.3.2.

6.0 EVALUATION

6.1. Findings

The following general findings were identified in connection with the subject property.

- The first identified development at the subject property was the construction of a machine shed (now barn) in 1963 and the house in 1964. The house originally used oil heat. Additional buildings also constructed in the mid-1960s included a plainer shed (now the workshop), two feeder sheds, and two hay sheds. The mobile home was added to the north of the house and outbuildings in approximately 1984. Three more garage/storage buildings were built near the mobile home between 1985 and 1991. Timber was harvested from the subject property between 2006 and 2011. Nisqually Indian Tribe has cleaned and repaired subject property buildings for conversion into use as a horse ranch following their

purchase of the subject property. Contamination was not identified in or near the buildings during cleanout and renovation, with exception of heating oil USTs associated with the house discussed below.

- Two residential heating oil USTs (300-gallon and 425-gallon capacity) were removed from the southeast corner of the house in April 2022. A soil sample collected from beneath the former 300-gallon UST location did not contain detectable concentrations of diesel-range petroleum hydrocarbons. However, diesel-range petroleum hydrocarbons were detected at a concentration of 2,400 mg/kg, greater than the MTCA Method A cleanup level of 2,000 mg/kg in the soil sample collected from beneath the former 425-gallon UST. Over-excavation of the diesel-contaminated soil beneath the former 425-gallon UST location was not conducted. The extent of residual contamination in soil is unknown in the vicinity of the former 425-gallon UST and is considered an REC to the subject property.
- The available historical resources and key person interviews do not indicate any known use, storage, or release of significant quantities of hazardous materials or petroleum products at the subject property. One '*de minimis*' condition was identified during this study includes the presence of a septic systems associated with the house and mobile home. This condition is considered '*de minimis*' because these buildings are only used for residential purposes, significant quantities of hazardous materials are not known to have been present and no releases are known to have occurred on the subject property.
- Nearby or adjacent properties are not considered RECs to the subject property based on the available information.

6.2. Data Gaps

Significant data gaps were not identified by this portion of the study.

6.3. Conclusions

GeoEngineers has performed a Phase I ESA in general conformance with the scope and limitations of ASTM Practice E 1527-13 and E1527-21 of the Horse Ranch Property (Medicine River Ranch) located at 10735 and 10747 Todtkarle Road SE (Thurston County Parcel No. 1832340000, 21832340002, and 21832340003) in Olympia, Washington. Any exceptions to, or deletions from, this practice are described in Section 1.2 of this report. This assessment has revealed no evidence of RECs in connection with the subject property except for the following:

- Two residential heating oil USTs (300-gallon capacity and 425-gallon capacity) were removed from the southeast corner of the house in April 2022. A soil sample collected from beneath the former 300-gallon UST location did not contain detectable concentrations of diesel-range petroleum hydrocarbons. However, diesel-range petroleum hydrocarbons were detected at a concentration of 2,400 mg/kg, greater than the MTCA Method A cleanup level of 2,000 mg/kg, in the soil sample collected from beneath the former 425-gallon UST. Over-excavation of the diesel-contaminated soil beneath the former 425-gallon UST location was not conducted. The extent of residual contamination in soil is unknown in the vicinity of the former 425-gallon UST and is considered an REC to the subject property.

One '*de minimis*' condition was identified during this study that includes the presence of septic systems associated with the house and mobile home. This condition is considered '*de minimis*' because these

buildings are only used for residential purposes, significant quantities of hazardous materials are not known to have been present and no releases are known to have occurred on the subject property.

7.0 LIMITATIONS AND GUIDELINES FOR USE

These limitations provide information to help you manage your risks with respect to the use of this report. Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory "limitations" provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or site.

7.1. Standard Limitations

This Phase I ESA has been prepared for use by the Nisqually Indian Tribe. GeoEngineers has performed this Phase I ESA of the Horse Ranch Property (Medicine River Ranch) located at 10735 and 10747 Todtkarle Road SE (Thurston County Parcel No. 1832340000, 21832340002, and 21832340003) in Olympia, Washington in general accordance with the scope and limitations of our proposal dated August 2, 2023, and ASTM International (ASTM) E 1527-21, Standard Practice for Phase I ESAs and EPA's Federal Regulation 40 CFR Part 312 "Standards and Practices for All Appropriate Inquiries (AAI)." This report has been prepared for the exclusive use of Nisqually Indian Tribe. This report is not intended for use by others, and the information contained herein is not applicable to other properties. Our report was prepared for the exclusive use of our Client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and generally accepted environmental practices in this area at the time this report was prepared.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with the generally accepted environmental science practices for Phase I ESAs in this area at the time this report was prepared. No warranty or other conditions express or implied, should be understood.

7.2. Special Limitations

GeoEngineers structures our services to meet the specific needs of our clients. For example, an environmental site assessment study conducted for a property owner or lessee may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and project property. This report should not be applied for any purpose or project except the one originally contemplated. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, do not rely on this report if it was:

- not prepared for you,
- not prepared for your project,

- not prepared for the specific property explored, or
- completed before important project changes were made.

If important changes are made to the project or subject property after the date of this report, GeoEngineers should be retained to review our interpretations and recommendations and to provide written modifications or confirmation, as appropriate.

GeoEngineers makes no warranties or guarantees regarding the accuracy or completeness of information provided or compiled by others. The information presented in this report is based on the above-described research and a single recent site visit. GeoEngineers has relied upon information provided by others in our description of historical conditions and in our review of regulatory databases and files. The available data do not provide definitive information with regard to all past uses, operations or incidents at the subject property or adjacent properties.

No ESA can wholly eliminate uncertainty regarding the potential for recognized environmental conditions (RECs) in connection with a property. Performance of an ESA study is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with a property. There is always a potential that areas with contamination that were not identified during this Phase I ESA exist at the subject property or in the study area. Further evaluation of such potential would require additional research, subsurface exploration, sampling and/or testing.

Some substances may be present in the vicinity of the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substance, change or if more stringent environmental standards are developed in the future.

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time (for example, a Phase I ESA report is typically applicable for 180 days), by events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, slope instability or groundwater fluctuations. If more than six months have passed since issuance of our report or work product, or if any of the described events may have occurred, please contact GeoEngineers before applying this report so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding a specific project.

GeoEngineers' Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations,

recommendations, findings, or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants and no conclusions or inferences should be drawn regarding Biological Pollutants, as they may relate to this project. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. If Client desires these specialized services, they should be obtained from a consultant who offers services in this specialized field.

We appreciate the opportunity to be of service to Nisqually Indian Tribe. Please call if you require more information or have questions regarding this report.

8.0 REFERENCES

ASTM International (ASTM) Standard E 1527-21 for Phase I ESAs.

Environmental Data Resources, Inc. (EDR). 2021. Certified Sanborn Map Report, August 11, 2023.

Environmental Data Resources, Inc. (EDR). 2021. EDR City Directory image report, dated August 12, 2023.

Environmental Data Resources, Inc. (EDR). 2021. EDR Historical Aerial Photo Package, dated August 11, 2023.

Environmental Data Resources, Inc. (EDR). 2023. Radius Map Report, August 11, 2023 (comprehensive environmental database report, including Ecology and EPA databases).

Environmental Data Resources, Inc. (EDR). 2023. EDR Topographic Map Report, dated August 11, 2023.

Thurston County Tax Assessor records provided by Thurston County GeoData.

Washington State Department of Natural Resources. 2002. Geologic Map of Washington—Northwest Quadrant.

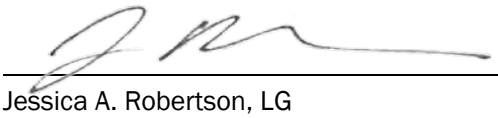
United States Environmental Protection Agency (EPA) Federal Standard 40 CFR Part 312 "Standards and Practices for All Appropriate Inquiries (AAI).

9.0 STATEMENT AND SIGNATURES OF ENVIRONMENTAL PROFESSIONAL

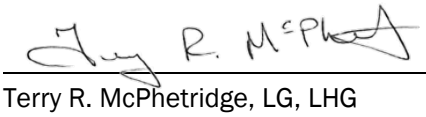
"I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Sec. 312.10 of 40 CFR Part 312."*

"I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

**A person who does not qualify as an Environmental Professional may assist in the conduct of all appropriate inquiries in accordance with ASTM E 1527-13, if such person is under the supervision or responsible charge of a person meeting the definition of an environmental professional when conducting such activities.*



Jessica A. Robertson, LG
Project Manager

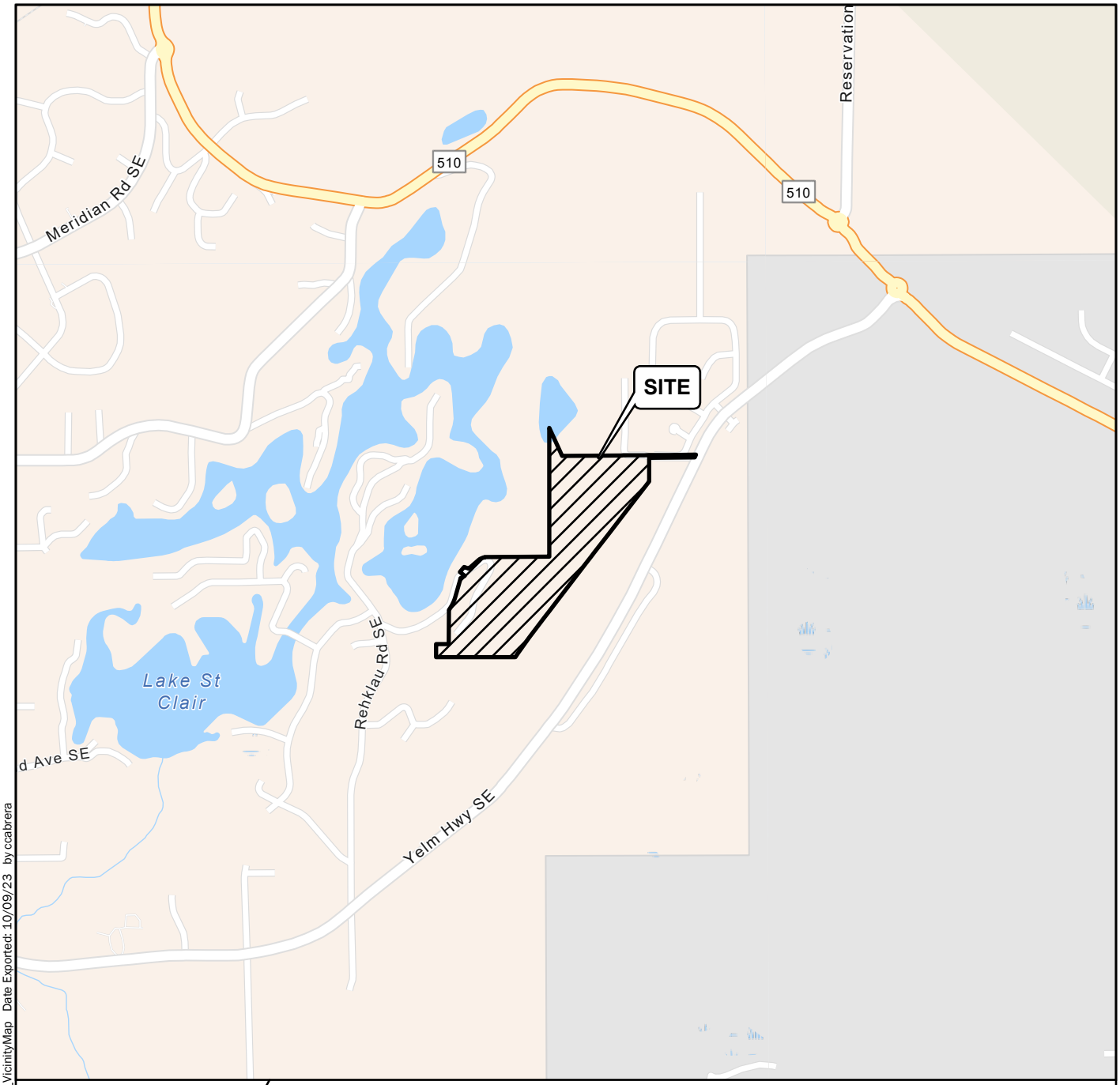


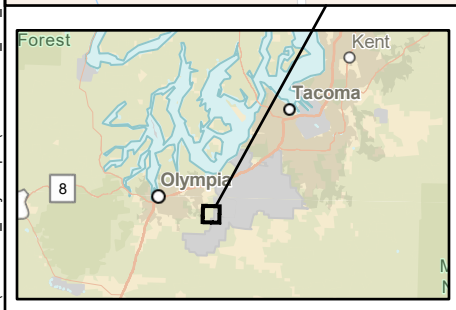
Terry R. McPhetridge, LG, LHG
Principal

9.1. Qualifications of Environmental Professional

Terry McPhetridge is a licensed geologist (LG) and licensed hydrogeologist (LHG) in Washington (#1020) and has 30 years of experience completing and overseeing Phase I ESAs. Terry is an Environmental Professional per 40 CFR Part 312. Jessica Robertson is a licensed geologist (LG) in Washington (#2570) and has more than 15 years of experience doing Phase I ESAs. Jessica is an Environmental Professional per 40 CFR Part 312.

Resumes for Terry McPhetridge and Jessica Robertson are presented in Appendix E.





N

0 2,000

Feet

Source(s):
- ESRI

Coordinate System: NAD 1983 UTM Zone 10N

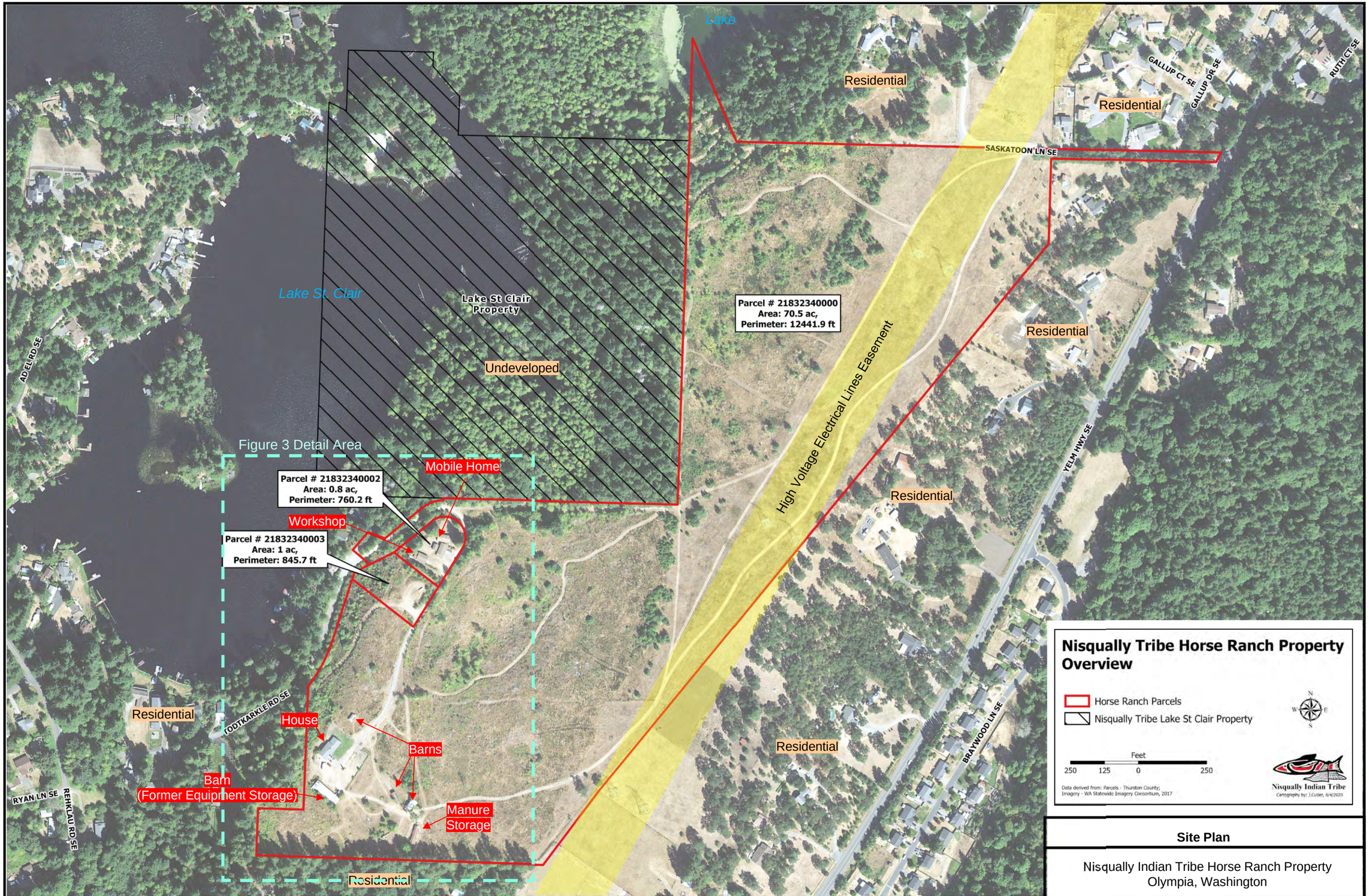
Vicinity Map

Nisqually Indian Tribe Horse Ranch Property
Olympia, Washington

GeoEngineers

Figure 1

P:\0\0277056\GIS\0277056_Project\0277056_Project.aprx\027705600_F01_VicinityMap Date Exported: 10/09/23 by ccabrera



Source: Nisqually Indian Tribe Horse Ranch Property Overview, 2023

Site Plan

Nisqually Indian Tribe Horse Ranch Property
Olympia, Washington

GeoEngineers

Figure 2

Approximate Subject Property Boundary

Source: 2023 aerial photograph, Google Earth

Site Plan Detail

Nisqually Indian Tribe Horse Ranch Property
Olympia, Washington

GeoEngineers

Figure 3

0277-056-00

Photograph 1. Looking south toward house on the right and barn/former equipment storage building on the left.

Photograph 2. Gravel backfill at location of former USTs near southeast corner of house.

Site Photographs, September 2023

Nisqually Indian Tribe Horse Ranch Property
Olympia, Washington

GeoEngineers

Figure 4A

Photograph 3. Looking west inside the barn/former equipment storage building from the east end.

Photograph 4. Water well just west of the barn.

Site Photographs, September 2023

Nisqually Indian Tribe Horse Ranch Property
Olympia, Washington

GeoEngineers

Figure 4B

Photograph 5. Representative view of inside storage on the west end of barn/former equipment storage building.

Photograph 6. Small quantity fuel storage containers stored in the west end of the barn/former equipment storage building.

Site Photographs, September 2023	
Nisqually Indian Tribe Horse Ranch Property Olympia, Washington	
GeoEngineers	Figure 4C

Photograph 7. Looking northwest at the workshop on the left and garage adjacent to mobile home on the right.

Photograph 8. Looking west at mobile home with garage visible to the left.

Site Photographs, September 2023

Nisqually Indian Tribe Horse Ranch Property
Olympia, Washington

GeoEngineers

Figure 4D

Photograph 9. Representative view inside workshop.

Photograph 10. Pad-mounted electrical transformer along driveway south of mobile home/workshop area.

Site Photographs, September 2023	
Nisqually Indian Tribe Horse Ranch Property Olympia, Washington	
GeoEngineers	Figure 4E

Photograph 11. Looking east across the property from the driveway north of the house.

Photograph 12. Looking east from barn/former equipment storage building toward additional sheds and storage structures.

Site Photographs, September 2023	
Nisqually Indian Tribe Horse Ranch Property Olympia, Washington	
GeoEngineers	Figure 4F

Photograph 13. Looking west across the property from the west paddock area toward new covered round pen.

Photograph 14. Representative view looking east at west paddock area.

Site Photographs, September 2023

Nisqually Indian Tribe Horse Ranch Property
Olympia, Washington

GeoEngineers

Figure 4G

APPENDIX A
User Provided Information and Completed User Questionnaire

PHASE I ESA USER QUESTIONNAIRE
MEDICINE RIVER RANCH PROPERTY
TODTKARLE ROAD, OLYMPIA, WASHINGTON
FILE NO. 0277-056-00

In order to qualify for one of the federal landowner liability protections, and to enable us to fully address the objectives of the Phase I ESA, please complete the questionnaire below to the best of your knowledge and provide the additional information requested.

Environmental Liens and Activity and Use Limitations (AULs)

Answer questions 1 and 2 below through review of one of the two methods below. Please indicate the method used and provide us copies of the relevant title documents:

a. Review of preliminary title report or title commitment

b. Review of title search information report such as recorded documents back to 1980

1. Are you aware of any environmental cleanup liens against the subject property that are filed or recorded under federal, tribal and state or local law?

   ☐ YES ☒ NO ☐ DON'T KNOW Explain:

2. Are you aware of any Activity and Use Limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state or local law?

   ☐ YES ☒ NO ☐ DON'T KNOW Explain:

Specialized and/or Commonly Known Knowledge, Experience, and Information

3. As the user of this Phase I ESA, do you have any specialized knowledge or experience related to the subject property, nearby properties, or potential current or past uses of these properties? For example are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

   ☐ YES ☒ NO ☐ DON'T KNOW Explain:

4. Are you aware of commonly known or reasonably ascertainable information about the subject property that would help us identify conditions indicative or releases or threatened releases? For example,

   a. Do you know the past uses of the property?

      ☐ YES ☒ NO ☐ DON'T KNOW Explain:

   b. Do you know of specific chemicals that are present or once were present on the property?

      ☐ YES ☒ NO ☐ DON'T KNOW Explain:

   c. Do you know of spills or other chemical releases that have taken place at the property?

      ☐ YES ☒ NO ☐ DON'T KNOW Explain:

   d. Do you know of any environmental cleanups that have taken place at the property?

      ☐ YES ☒ NO ☐ DON'T KNOW Explain:

5. Based on your knowledge and experience related to the subject property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

   ☐ YES ☒ NO ☐ DON'T KNOW Explain:

Purchase Price

6. Does the purchase price being paid for the subject property reasonable reflect the fair market value of the property?

   ☒ YES ☐ NO ☐ DON'T KNOW Explain:

   a. If you conclude that there is a difference and you answered NO above, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

      ☐ YES ☐ NO ☐ DON'T KNOW Explain:

User Questionnaire Completed By (Name and Organization): J Cushman NHSQ

Date: 8-1-23

List of requested information, if available:

- Names and phone numbers of key individuals with knowledge of property use history.
- A map showing the boundaries of the subject property.
- Tax ID numbers for parcels included within the subject property.
- Copies of any past environmental site assessment and/or audit reports or risk assessment studies.
- Environmental permits.
- Registrations for underground and aboveground storage tanks (if any).
- Material data safety sheets for hazardous substances used or stored on-site (if any).
- Community right-to-know plans pertaining to the subject property.
- Safety plans pertaining to on-site facilities.
- Reports regarding geotechnical and/or hydrogeologic conditions at or near the subject property.
- Notices or other correspondence from any governmental agency relating to past or current violations of environmental laws with respect to the subject property or relating to environmental liens encumbering the property.
- Environmental Liens or Recorded Activity Use Limitations (AULs).
- Chain-of-Title or other Title Report documents.

APPENDIX B
Environmental Data Resources, Inc. (EDR)
Radius Map Report

Medicine River Ranch Property
10747 TODTKARLE RD SE
Olympia, WA 98513

Inquiry Number: 7415454.2s
August 11, 2023

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

10747 TODTKARLE RD SE
OLYMPIA, WA 98513

COORDINATES

Latitude (North):	46.9989720 - 46° 59' 56.29''
Longitude (West):	122.7104060 - 122° 42' 37.46''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	522017.7
UTM Y (Meters):	5204872.0
Elevation:	162 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	14820822 NISQUALLY, WA
Version Date:	2020
South Map:	14730128 TENALQUOT PRAIRIE, WA
Version Date:	2020

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20191010
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
10747 TODTKARLE RD SE
OLYMPIA, WA 98513

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg	JOINT BASE LEWIS-MCC		DOD	Same	709, 0.134, East
1	EAST OLYMPIA GROCERY	5002 REHKLAU RD SE	EDR Hist Auto	Lower	540, 0.102, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROLS..... Institutional Controls Sites List

Federal ERNS list

ERNS..... Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

HSL..... Hazardous Sites List

Lists of state- and tribal hazardous waste facilities

CSCSL..... Confirmed and Suspected Contaminated Sites List

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF..... Solid Waste Facility Database

Lists of state and tribal leaking storage tanks

LUST..... Leaking Underground Storage Tanks Site List
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST..... Underground Storage Tank Listing
UST..... Underground Storage Tank Database
AST..... Aboveground Storage Tank Locations
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

INST CONTROL..... Institutional Control Site List

Lists of state and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Sites
INDIAN VCP..... Voluntary Cleanup Priority Listing
ICR..... Independent Cleanup Reports
PTAP..... PTAP Site Listing

Lists of state and tribal brownfield sites

BROWNFIELDS..... Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

SWTIRE..... Solid Waste Tire Facilities

SWRCY Recycling Facility List
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
ODI Open Dump Inventory
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register
ALLSITES Facility/Site Identification System Listing
CDL Clandestine Drug Lab Contaminated Site List
HIST CDL List of Sites Contaminated by Clandestine Drug Labs
CSCSL NFA Confirmed & Contaminated Sites - No Further Action
US CDL National Clandestine Laboratory Register

Local Land Records

LIENS 2 CERCLA Lien Information

Records of Emergency Release Reports

HMIRS Hazardous Materials Information Reporting System
SPILLS Reported Spills
SPILLS 90 SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR RCRA - Non Generators / No Longer Regulated
FUDS Formerly Used Defense Sites
SCRD DRYCLEANERS State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR Financial Assurance Information
EPA WATCH LIST EPA WATCH LIST
2020 COR ACTION 2020 Corrective Action Program List
TSCA Toxic Substances Control Act
TRIS Toxic Chemical Release Inventory System
SSTS Section 7 Tracking Systems
ROD Records Of Decision
RMP Risk Management Plans
RAATS RCRA Administrative Action Tracking System
PRP Potentially Responsible Parties
PADS PCB Activity Database System
ICIS Integrated Compliance Information System
FTTS FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS Material Licensing Tracking System
COAL ASH DOE Steam-Electric Plant Operation Data
COAL ASH EPA Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER PCB Transformer Registration Database
RADINFO Radiation Information Database
HIST FTTS FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS Incident and Accident Data
CONSENT Superfund (CERCLA) Consent Decrees
INDIAN RESERV Indian Reservations
FUSRAP Formerly Utilized Sites Remedial Action Program
UMTRA Uranium Mill Tailings Sites

LEAD SMELTERS Lead Smelter Sites
US AIRS Aerometric Information Retrieval System Facility Subsystem
US MINES Mines Master Index File
ABANDONED MINES Abandoned Mines
FINDS Facility Index System/Facility Registry System
UXO Unexploded Ordnance Sites
ECHO Enforcement & Compliance History Information
DOCKET HWC Hazardous Waste Compliance Docket Listing
FUELS PROGRAM EPA Fuels Program Registered Listing
PFAS NPL Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES Federal Sites PFAS Information
PFAS TSCA PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR PFAS Contamination Site Location Listing
PFAS WQP Ambient Environmental Sampling for PFAS
PFAS NPDES Clean Water Act Discharge Monitoring Information
PFAS ECHO Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAINING Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC Aqueous Foam Related Incidents Listing
PFAS PFAS Contamination Site Location Listing
AQUEOUS FOAM Firefighting Foam Incidents
AIRS Washington Emissions Data System
ASBESTOS ASBESTOS
COAL ASH Coal Ash Disposal Site Listing
DRYCLEANERS Drycleaner List
Financial Assurance Financial Assurance Information Listing
Inactive Drycleaners Inactive Drycleaners
MANIFEST Hazardous Waste Manifest Data
NPDES Water Quality Permit System Data
UIC Underground Injection Wells Listing
PFAS TRIS List of PFAS Added to the TRI
MINES MRDS Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS Recovered Government Archive State Hazardous Waste Facilities List
RGA LF Recovered Government Archive Solid Waste Facilities List
RGA LUST Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

DOD: Consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

A review of the DOD list, as provided by EDR, and dated 06/07/2021 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOINT BASE LEWIS-MCC		E 1/8 - 1/4 (0.134 mi.)	0	8

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

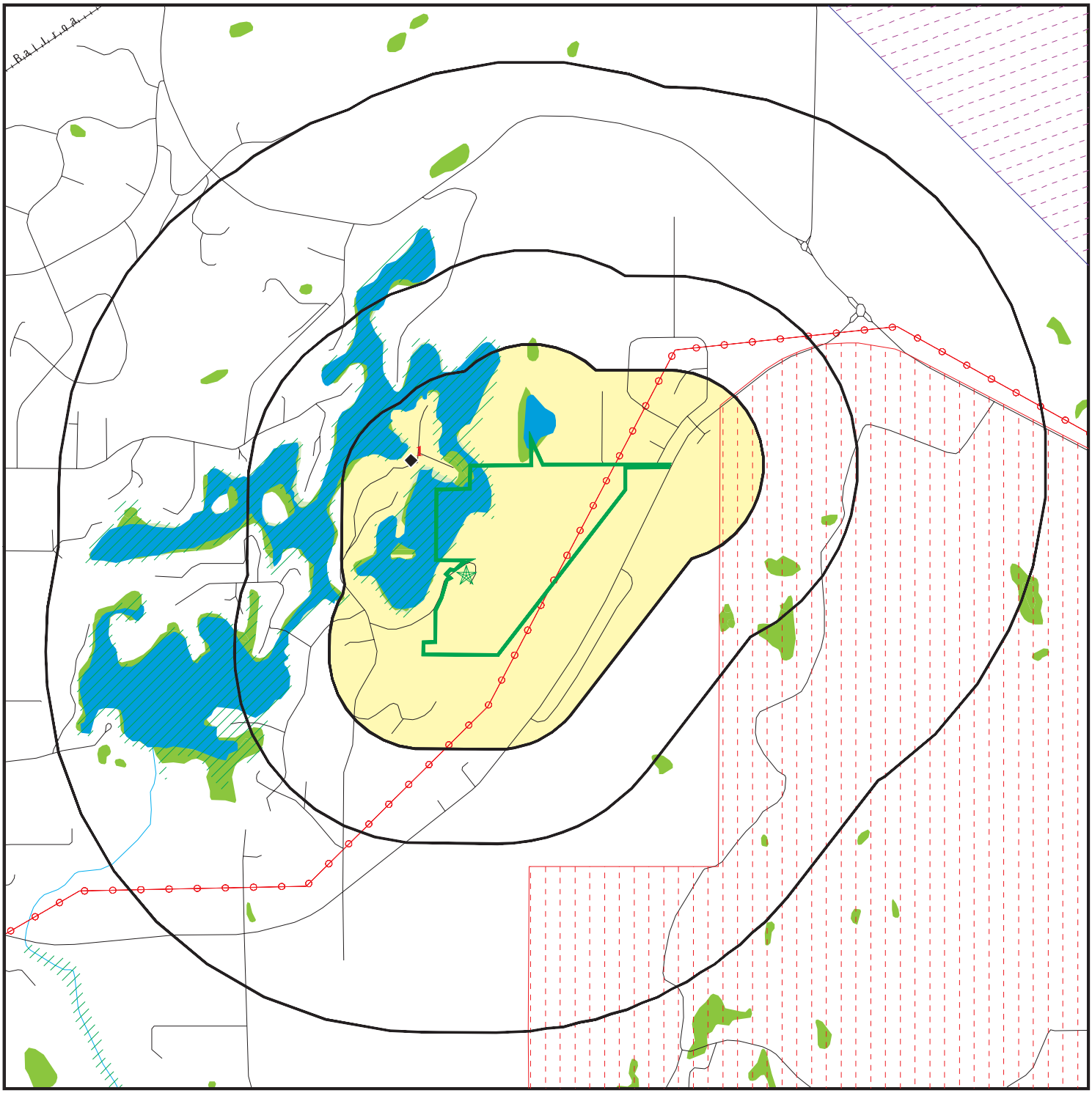
Lower Elevation	Address	Direction / Distance	Map ID	Page
EAST OLYMPIA GROCERY	5002 REHKLAU RD SE	NNW 0 - 1/8 (0.102 mi.)	1	8

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
NISQUALLY INDIAN TRIBE WRP	SWF/LF

OVERVIEW MAP - 7415454.2S

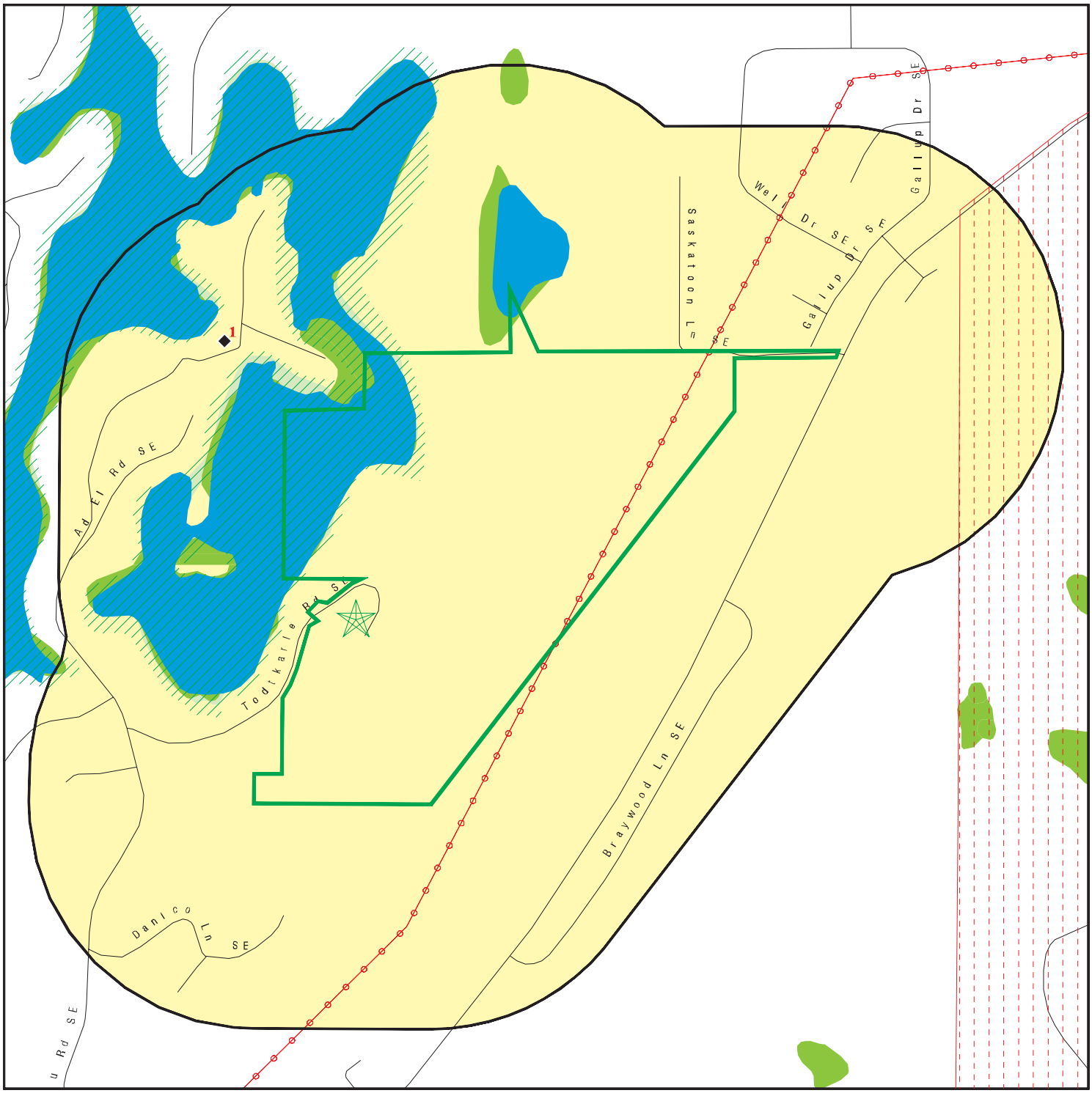


- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Medicine River Ranch Property	CLIENT:	GeoEngineers, Inc.
ADDRESS:	10747 TODTKARLE RD SE Olympia WA 98513	CONTACT:	Jessica A Robertson
LAT/LONG:	46.998972 / 122.710406	INQUIRY #:	7415454.2s
		DATE:	August 11, 2023 7:54 pm

DETAIL MAP - 7415454.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

0 1/8 1/4 1/2 Miles

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Medicine River Ranch Property	CLIENT:	GeoEngineers, Inc.
ADDRESS:	10747 TODTKARLE RD SE Olympia WA 98513	CONTACT:	Jessica A Robertson
LAT/LONG:	46.998972 / 122.710406	INQUIRY #:	7415454.2s
		DATE:	August 11, 2023 7:55 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
HSL	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
CSCSL	1.000		0	0	0	0	NR	0
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
INST CONTROL	0.500		0	0	0	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
ICR	0.500		0	0	0	NR	NR	0
PTAP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWTIRE	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
ALLSITES	0.500		0	0	0	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
HIST CDL	0.001		0	NR	NR	NR	NR	0
CSCSL NFA	0.500		0	0	0	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	1	0	0	NR	1
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAINING	0.250		0	0	NR	NR	NR	0
PFAS PART 139 AIRPORT	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
ASBESTOS	0.001		0	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
Inactive Drycleaners	0.250		0	0	NR	NR	NR	0
MANIFEST	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	1	1	0	0	0	2

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

DOD **JOINT BASE LEWIS-MCCHORD** **DOD** **CUSA400080**
Region East **, WA** **N/A**
1/8-1/4
709 ft.

DOD:
Site Name: JOINT BASE LEWIS-MCCHORD
DOD Component: Army Active
Joint Base: Joint Base Lewis - McChord
Operating Status: ACT (Active): Site has an on-going operational/support mission (s).

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1 **EAST OLYMPIA GROCERY** **EDR Hist Auto** **1022022886**
NNW **5002 REHKLAU RD SE** **N/A**
< 1/8 **OLYMPIA, WA 98513**
0.102 mi.
540 ft.

Relative: EDR Hist Auto
Lower

Actual: Year: Name: Type:
105 ft. 2008 EAST OLYMPIA GROCERY Convenience Stores
2009 EAST OLYMPIA GROCERY Convenience Stores
2010 EAST OLYMPIA GROCERY Convenience Stores

Count: 1 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
OLYMPIA	S127065556	NISQUALLY INDIAN TRIBE WRP	12100 YELM HIGHWAY SE	98513	SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2023
Date Data Arrived at EDR: 03/28/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 06/23/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/31/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 54

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

HSL: Hazardous Sites List

The Hazardous Sites List is a subset of the CSCSL Report. It includes sites which have been assessed and ranked using the Washington Ranking Method (WARM).

Date of Government Version: 02/23/2023
Date Data Arrived at EDR: 03/02/2023
Date Made Active in Reports: 05/22/2023
Number of Days to Update: 81

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 05/30/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Semi-Annually

Lists of state- and tribal hazardous waste facilities

CSCSL: Confirmed and Suspected Contaminated Sites List

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 07/05/2023
Number of Days to Update: 84

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF: Solid Waste Facility Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/30/2022
Date Data Arrived at EDR: 12/27/2022
Date Made Active in Reports: 12/30/2022
Number of Days to Update: 3

Source: Department of Ecology
Telephone: 360-407-6132
Last EDR Contact: 05/22/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Annually

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tanks Site List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/10/2023
Date Made Active in Reports: 08/03/2023
Number of Days to Update: 85

Source: Department of Ecology
Telephone: 360-407-7183
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 82

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

UST: Underground Storage Tank Database
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/10/2023
Date Made Active in Reports: 08/04/2023
Number of Days to Update: 86

Source: Department of Ecology
Telephone: 360-407-7183
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

AST: Aboveground Storage Tank Locations
A listing of aboveground storage tank locations regulated by the Department of Ecology's Spill Prevention, Preparedness and Response Program.

Date of Government Version: 12/14/2015
Date Data Arrived at EDR: 02/02/2016
Date Made Active in Reports: 05/03/2016
Number of Days to Update: 91

Source: Department of Ecology
Telephone: 360-407-7562
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

INST CONTROL: Institutional Control Site List

The Environmental Covenants Registry is a list of sites that have implemented institutional controls as part of the remedy. Institutional controls are administrative or legal measures used to prevent activities that may compromise the integrity of a cleanup action. They are meant to prevent exposure to contamination remaining on site. Institutional controls may include environmental covenants (also known as "deed restrictions"), zoning restrictions, public health advisories, or other administrative tools. The most common institutional control is an environmental covenant. Environmental covenants are legal recorded documents that typically limit certain uses of the property, such as: Drilling a water supply well on the property. Disturbing pavement covering contaminated areas. Residential use of the property.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 07/05/2023
Number of Days to Update: 84

Source: Department of Ecology
Telephone: 360-407-7170
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Quarterly

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Sites

Sites that have entered either the Voluntary Cleanup Program or its predecessor Independent Remedial Action Program.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 07/05/2023
Number of Days to Update: 84

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/13/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Varies

ICR: Independent Cleanup Reports

These are remedial action reports Ecology has received from either the owner or operator of the sites. These actions have been conducted without department oversight or approval and are not under an order or decree. This database is no longer updated by the Department of Ecology.

Date of Government Version: 12/01/2002
Date Data Arrived at EDR: 01/03/2003
Date Made Active in Reports: 01/22/2003
Number of Days to Update: 19

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 08/10/2009
Next Scheduled EDR Contact: 11/09/2009
Data Release Frequency: No Update Planned

PTAP: PTAP Site Listing

A list of sites accepted into the Petroleum Technical Assistance Program. The Petroleum Technical Assistance Program (PTAP) expands the state's ability to respond to the high customer demand to clean up petroleum contaminated sites. Under the PTAP, the Pollution Liability Insurance Agency (PLIA) may provide informal site-specific technical consultations and issue written opinion letters to persons conducting independent remedial actions at qualifying petroleum cleanup sites. PLIA may provide these services under the authority of RCW 70.149.040(9) and the Model Toxics Control Act (MTCA), Chapter 70.149 RCW and Chapter 173-340 WAC.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/10/2023
Date Made Active in Reports: 08/03/2023
Number of Days to Update: 85

Source: Department of Ecology
Telephone: 360-407-0515
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Brownfields Sites Listing

A listing of brownfields sites included in the Confirmed & Suspected Sites Listing. Brownfields are abandoned, idle or underused commercial or industrial properties, where the expansion or redevelopment is hindered by real or perceived contamination. Brownfields vary in size, location, age, and past use -- they can be anything from a five-hundred acre automobile assembly plant to a small, abandoned corner gas station.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 06/30/2023
Number of Days to Update: 79

Source: Department of Ecology
Telephone: 360-725-4030
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 04/06/2023
Date Data Arrived at EDR: 04/13/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/08/2023
Next Scheduled EDR Contact: 09/25/2023
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Facility List

A llisting of recycling center locations.

Date of Government Version: 04/13/2023
Date Data Arrived at EDR: 04/14/2023
Date Made Active in Reports: 07/17/2023
Number of Days to Update: 94

Source: Department of Ecology
Telephone: 360-407-6105
Last EDR Contact: 07/12/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

SWTIRE: Solid Waste Tire Facilities

This study identified sites statewide with unauthorized accumulations of scrap tires.

Date of Government Version: 11/01/2005
Date Data Arrived at EDR: 03/16/2006
Date Made Active in Reports: 04/13/2006
Number of Days to Update: 28

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 09/08/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Varies

SWTIRE 2: Solid Waste Tire Facilities 2
solid waste tire piles

Date of Government Version: 06/01/2022
Date Data Arrived at EDR: 06/23/2022
Date Made Active in Reports: 09/12/2022
Number of Days to Update: 81

Source: Department of Ecology
Telephone: 425-649-7104
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/27/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 48

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ALLSITES: Facility/Site Identification System Listing
Information on facilities and sites of interest to the Department of Ecology.

Date of Government Version: 04/24/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 89

Source: Department of Ecology
Telephone: 360-407-6423
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Quarterly

CDL: Clandestine Drug Lab Contaminated Site List
Illegal methamphetamine labs use hazardous chemicals that create public health hazards. Chemicals and residues can cause burns, respiratory and neurological damage, and death. Biological hazards associated with intravenous needles, feces, and blood also pose health risks.

Date of Government Version: 04/24/2023
Date Data Arrived at EDR: 05/03/2023
Date Made Active in Reports: 07/26/2023
Number of Days to Update: 84

Source: Department of Health
Telephone: 360-236-3380
Last EDR Contact: 07/27/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

HIST CDL: List of Sites Contaminated by Clandestine Drug Labs
This listing of contaminated sites by Clandestine Drug Labs includes non-remediated properties. The current CDL listing does not. This listing is no longer updated by the state agency.

Date of Government Version: 02/08/2007
Date Data Arrived at EDR: 06/26/2007
Date Made Active in Reports: 07/19/2007
Number of Days to Update: 23

Source: Department of Health
Telephone: 360-236-3381
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

CSCSL NFA: Confirmed and Contaminated Sites - No Further Action
This report contains information about sites that are undergoing cleanup and sites that are awaiting further investigation and/or cleanup. Sites on the Hazardous Sites List (see above) are included in this data set.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 06/30/2023
Number of Days to Update: 79

Source: Department of Ecology
Telephone: 360-407-7170
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 48

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/23/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/19/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

SPILLS: Reported Spills
Spills reported to the Spill Prevention, Preparedness and Response Division.

Date of Government Version: 02/27/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 05/22/2023
Number of Days to Update: 80

Source: Department of Ecology
Telephone: 360-407-6950
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Semi-Annually

SPILLS ERTS: Environmental Report Tracking System Listing
All programs in Ecology use the ERTS System for any Incidents regardless of the ?type? of incident. The programs include; Spills, Hazardous Waste, Water Quality, Air Quality, Toxics Cleanup, Water Resources, etc.

Date of Government Version: 03/13/2023
Date Data Arrived at EDR: 03/24/2023
Date Made Active in Reports: 06/07/2023
Number of Days to Update: 75

Source: Department of Ecology
Telephone: 360-407-7455
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 05/23/2006
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 55

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/16/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/10/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/01/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/13/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/20/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/16/2023
Next Scheduled EDR Contact: 09/25/2023
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 02/16/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 75

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/19/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 04/17/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 83

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 06/12/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/07/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/15/2023
Date Data Arrived at EDR: 03/21/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 70
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/12/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 04/14/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 87
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 06/22/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2023
Date Data Arrived at EDR: 04/20/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 81

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 10/02/2023
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/10/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data
Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 04/03/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Quarterly

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/01/2023
Date Data Arrived at EDR: 05/24/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 61

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/07/2022
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 82

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing
Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines
An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/17/2023
Date Data Arrived at EDR: 03/17/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 74

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/13/2023
Next Scheduled EDR Contact: 09/18/2023
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/04/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 60

Source: EPA
Telephone: (206) 553-1200
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/25/2023
Date Data Arrived at EDR: 03/31/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/29/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 10/20/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 82

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/06/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 54

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/17/2023
Next Scheduled EDR Contact: 08/28/2023
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 06/07/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/06/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid, respectively. Both are fluorinated organic chemicals, part of a larger family of compounds referred to as perfluoroalkyl substances (PFASs).

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 06/20/2023
Number of Days to Update: 82

Source: Department of Ecology
Telephone: 360-407-6116
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

AQUEOUS FOAM: Firefighting Foam Incidents

Aqueous film-forming foam-laced water running off from fuel spills, firefighting events and routine training sessions has put those chemicals in ground water, surface water, sediments, biota, and other natural resources of the state.

Date of Government Version: 03/21/2023
Date Data Arrived at EDR: 03/22/2023
Date Made Active in Reports: 06/07/2023
Number of Days to Update: 77

Source: Department of Ecology
Telephone: 360-407-6116
Last EDR Contact: 06/28/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

AIRS (EMI): Washington Emissions Data System

Emissions inventory data.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 07/05/2023
Number of Days to Update: 84

Source: Department of Ecology
Telephone: 360-407-6040
Last EDR Contact: 07/13/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Annually

ASBESTOS: Asbestos Notification Listing

Asbestos sites

Date of Government Version: 02/17/2023
Date Data Arrived at EDR: 02/17/2023
Date Made Active in Reports: 03/10/2023
Number of Days to Update: 21

Source: Department of Labor & Industries
Telephone: 360-902-6209
Last EDR Contact: 08/10/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing

A listing of coal ash disposal site locations.

Date of Government Version: 07/11/2022
Date Data Arrived at EDR: 07/20/2022
Date Made Active in Reports: 10/04/2022
Number of Days to Update: 76

Source: Department of Ecology
Telephone: 360-407-6933
Last EDR Contact: 05/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEANERS: Drycleaner List

A listing of registered drycleaners who registered with the Department of Ecology (using the SIC code of 7215 and 7216) as hazardous waste generators.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 06/30/2023
Number of Days to Update: 79

Source: Department of Ecology
Telephone: 360-407-6732
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/17/2023
Date Data Arrived at EDR: 02/23/2023
Date Made Active in Reports: 05/10/2023
Number of Days to Update: 76

Source: Department of Ecology
Telephone: 360-586-1060
Last EDR Contact: 05/18/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: No Update Planned

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/12/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 08/08/2023
Number of Days to Update: 84

Source: Department of Ecology
Telephone: 360-407-6754
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

Financial Assurance 3: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/15/2017
Date Data Arrived at EDR: 11/20/2017
Date Made Active in Reports: 01/04/2018
Number of Days to Update: 45

Source: Department of Ecology
Telephone: 360-407-6136
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: No Update Planned

INACTIVE DRYCLEANERS: Inactive Drycleaners

A listing of inactive drycleaner facility locations.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 06/30/2023
Number of Days to Update: 79

Source: Department of Ecology
Telephone: 360-407-6732
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Annually

WA MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 08/11/2021
Date Made Active in Reports: 11/23/2021
Number of Days to Update: 104

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/07/2023
Next Scheduled EDR Contact: 09/25/2023
Data Release Frequency: Annually

NPDES: Water Quality Permit System Data
A listing of permitted wastewater facilities.

Date of Government Version: 04/10/2023
Date Data Arrived at EDR: 04/12/2023
Date Made Active in Reports: 07/05/2023
Number of Days to Update: 84

Source: Department of Ecology
Telephone: 360-407-6073
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Quarterly

UIC: Underground Injection Wells Listing
A listing of underground injection wells.

Date of Government Version: 07/27/2023
Date Data Arrived at EDR: 08/02/2023
Date Made Active in Reports: 08/08/2023
Number of Days to Update: 6

Source: Department of Ecology
Telephone: 360-407-6143
Last EDR Contact: 07/06/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Quarterly

PFAS TRIS: List of PFAS Added to the TRI
Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 06/07/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/25/2023
Next Scheduled EDR Contact: 09/04/2023
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: No Update Planned

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Ecology in Washington.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Ecology in Washington.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Ecology in Washington.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

KING COUNTY:

LF KING: Abandoned Landfill Study in King County

The King County Abandoned Landfill Survey was conducted from October through December 1984 by the Health Department's Environmental Health Division at the request of the King County Council. The primary objective of the survey was to determine if any public health problems existed at the predetermined 24 sites.

Date of Government Version: 04/30/1985
Date Data Arrived at EDR: 11/07/1994
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: Seattle-King County Department of Public Health
Telephone: 206-296-4785
Last EDR Contact: 10/21/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SEATTLE COUNTY:

LF SEATTLE CITY: Abandoned Landfill Study in the City of Seattle

The Seattle Abandoned Landfill Survey was conducted in June and July of 1984 by the Health Department's Environmental Health Division at the request of the Mayor's Office. The primary objective of the survey was to determine if any public health problems existed at the predetermined 12 sites.

Date of Government Version: 07/30/1984
Date Data Arrived at EDR: 11/07/1994
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: Seattle - King County Department of Public Health
Telephone: 206-296-4785
Last EDR Contact: 10/21/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SEATTLE/KING COUNTY:

LF SEATTLE/KING: Seattle - King County Abandoned Landfill Toxicity / Hazard Assessment Project
This report presents the Seattle-King County Health Department's follow-up investigation of two city owned and four county owned abandoned landfills which was conducted from February to December 1986.

Date of Government Version: 12/31/1986
Date Data Arrived at EDR: 08/18/1995
Date Made Active in Reports: 09/20/1995
Number of Days to Update: 33

Source: Department of Public Health
Telephone: 206-296-4785
Last EDR Contact: 08/14/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SNOHOMISH COUNTY:

LF SNOHOMISH: Solid Waste Sites of Record at Snohomish Health District
Solid waste disposal and/or utilization sites in Snohomish County.

Date of Government Version: 09/23/2019
Date Data Arrived at EDR: 09/25/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 29

Source: Snohomish Health District
Telephone: 206-339-5250
Last EDR Contact: 06/07/2023
Next Scheduled EDR Contact: 09/25/2023
Data Release Frequency: No Update Planned

TACOMA/PIERCE COUNTY:

LF TACOMA/PIERCE: Closed Landfill Survey
Following numerous requests for information about closed dumpsites and landfills in Pierce County, the Tacoma-Pierce County Health Department decided to conduct a study on the matter. The aim of the study was to evaluate public health risks associated with the closed dumpsites and landfills, and to determine the need, if any, for further investigations of a more detailed nature. The sites represent all of the known dumpsites and landfills closed after 1950.

Date of Government Version: 09/01/2002
Date Data Arrived at EDR: 03/24/2003
Date Made Active in Reports: 05/14/2003
Number of Days to Update: 51

Source: Tacoma-Pierce County Health Department
Telephone: 206-591-6500
Last EDR Contact: 03/19/2003
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/16/2022
Date Made Active in Reports: 02/06/2023
Number of Days to Update: 82

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/27/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/06/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2023
Next Scheduled EDR Contact: 09/18/2023
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Daycare Center Listing
Source: Department of Social & Health Services
Telephone: 253-383-1735

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Ecology
Telephone: 360-407-6121

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

MEDICINE RIVER RANCH PROPERTY
10747 TODTKARLE RD SE
OLYMPIA, WA 98513

TARGET PROPERTY COORDINATES

Latitude (North):	46.998972 - 46° 59' 56.30''
Longitude (West):	122.710406 - 122° 42' 37.46''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	522017.7
UTM Y (Meters):	5204872.0
Elevation:	162 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	14820822 NISQUALLY, WA
Version Date:	2020
South Map:	14730128 TENALQUOT PRAIRIE, WA
Version Date:	2020

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

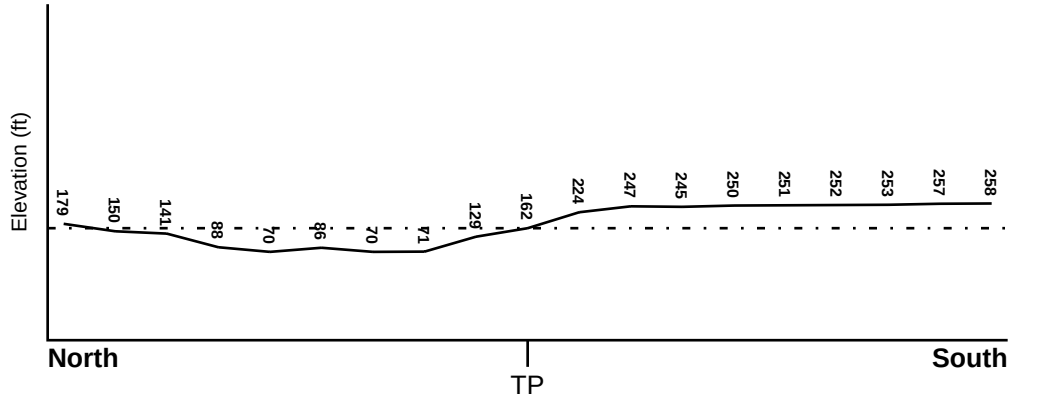
TOPOGRAPHIC INFORMATION

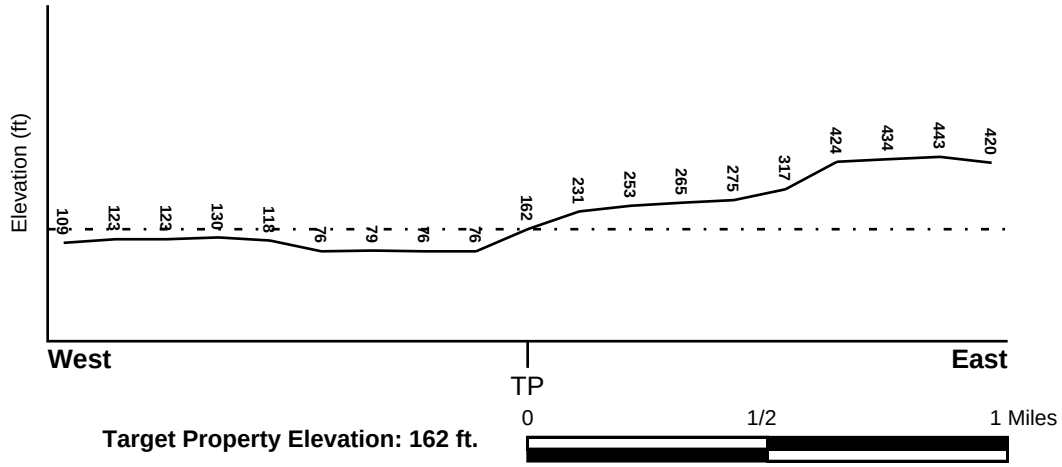
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





0 1/2 1 Miles

Target Property Elevation: 162 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
53067C0330E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
53067C0215E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WEIR PRAIRIE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

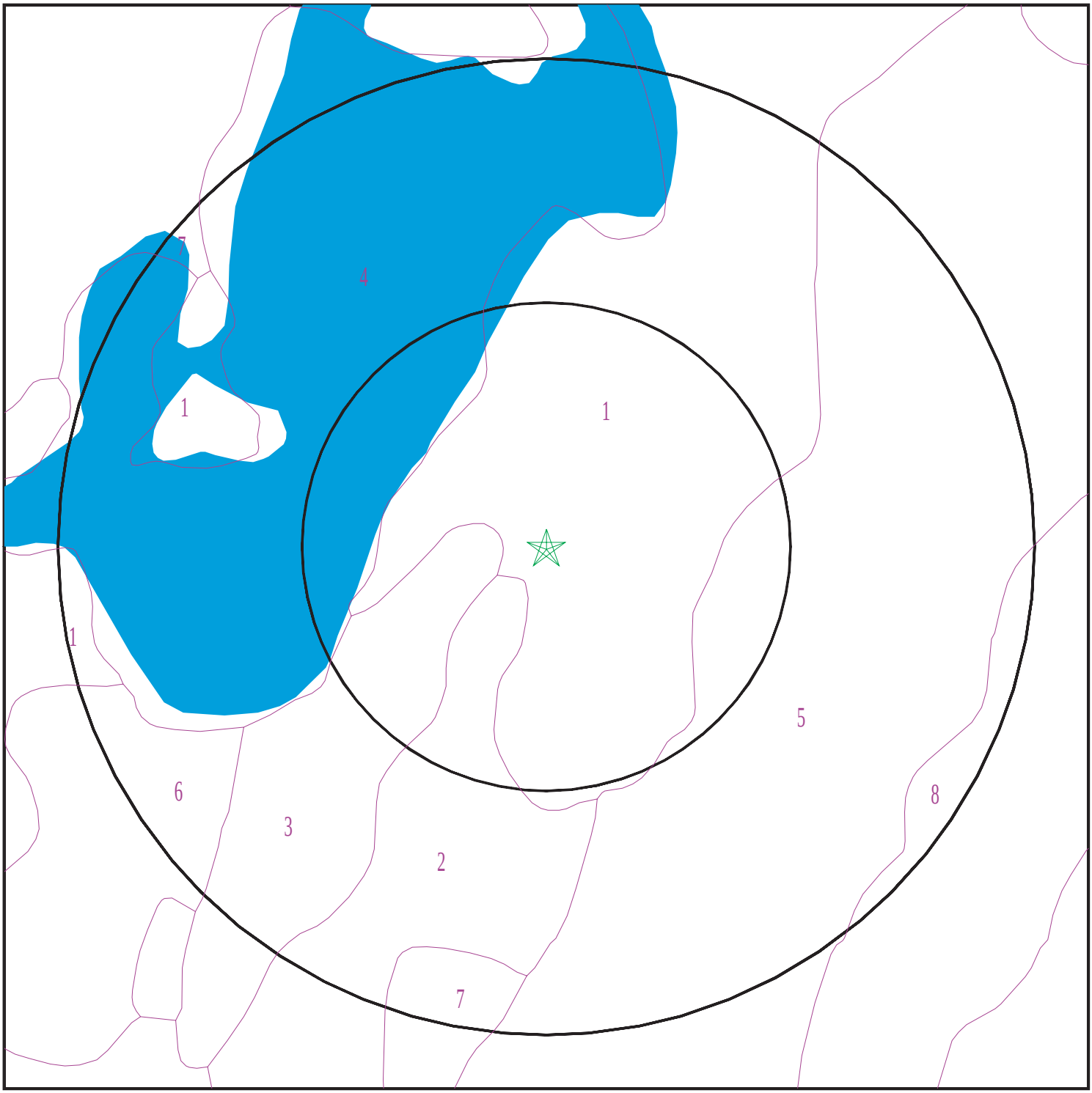
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 7415454.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Medicine River Ranch Property	CLIENT:	GeoEngineers, Inc.
ADDRESS:	10747 TODTKARLE RD SE Olympia WA 98513	CONTACT:	Jessica A Robertson
LAT/LONG:	46.998972 / 122.710406	INQUIRY #:	7415454.2s
		DATE:	August 11, 2023 7:55 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Indianola

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141	Max: 7.3 Min: 6.1
2	5 inches	25 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141	Max: 7.3 Min: 6.1
3	25 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141	Max: 7.3 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: Everett

Soil Surface Texture: very gravelly sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	very gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel.	Max: 705 Min: 141	Max: 6.5 Min: 4.5
2	3 inches	11 inches	extremely gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel.	Max: 705 Min: 141	Max: 6.5 Min: 4.5
3	11 inches	59 inches	extremely gravelly sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel.	Max: 705 Min: 141	Max: 6.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 3

Soil Component Name: Everett

Soil Surface Texture: very gravelly sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	very gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel.	Max: 705 Min: 141	Max: 6.5 Min: 4.5
2	3 inches	11 inches	extremely gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel.	Max: 705 Min: 141	Max: 6.5 Min: 4.5
3	11 inches	59 inches	extremely gravelly sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel.	Max: 705 Min: 141	Max: 6.5 Min: 4.5

Soil Map ID: 4

Soil Component Name: Water

Soil Surface Texture: very gravelly sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:
Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 5

Soil Component Name: Spana

Soil Surface Texture: gravelly loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 141 Min: 42	Max: 6 Min: 5.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	22 inches	25 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 141 Min: 42	Max: 6 Min: 5.1
3	25 inches	37 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 141 Min: 42	Max: 6 Min: 5.1
4	37 inches	59 inches	extremely gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 141 Min: 42	Max: 6 Min: 5.1

Soil Map ID: 6

Soil Component Name: Yelm

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 69 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 6.5 Min: 5.6
2	7 inches	46 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 6.5 Min: 5.6
3	46 inches	59 inches	loamy sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 6.5 Min: 5.6

Soil Map ID: 7

Soil Component Name: Everett

Soil Surface Texture: very gravelly sandy loam

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	very gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel.	Max: 705 Min: 141	Max: 6.5 Min: 4.5
2	3 inches	11 inches	extremely gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel.	Max: 705 Min: 141	Max: 6.5 Min: 4.5
3	11 inches	59 inches	extremely gravelly sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel.	Max: 705 Min: 141	Max: 6.5 Min: 4.5

Soil Map ID: 8

Soil Component Name: Nisqually

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141	Max: 6.5 Min: 5.6
2	5 inches	31 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141	Max: 6.5 Min: 5.6
3	31 inches	59 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141	Max: 6.5 Min: 5.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40001239623	0 - 1/8 Mile WNW
A2	USGS40001239634	0 - 1/8 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C8	USGS40001239515	1/8 - 1/4 Mile SW
D9	USGS40001239733	1/8 - 1/4 Mile NNE
C10	USGS40001279402	1/8 - 1/4 Mile SSW
E12	USGS40001239551	1/8 - 1/4 Mile WSW
E14	USGS40001239581	1/8 - 1/4 Mile WSW
E15	USGS40001239536	1/8 - 1/4 Mile WSW
E16	USGS40001239552	1/8 - 1/4 Mile WSW
E26	USGS40001239553	1/8 - 1/4 Mile WSW
F27	USGS40001239734	1/8 - 1/4 Mile NW
F28	USGS40001239735	1/4 - 1/2 Mile NW
29	USGS40001239446	1/4 - 1/2 Mile SSW
F30	USGS40001239756	1/4 - 1/2 Mile NW
F31	USGS40001239757	1/4 - 1/2 Mile NW
41	USGS40001239806	1/4 - 1/2 Mile WNW
42	USGS40001239975	1/4 - 1/2 Mile SW
43	USGS40001239841	1/4 - 1/2 Mile NNW
H51	USGS40001239610	1/4 - 1/2 Mile West
I52	USGS40001239894	1/4 - 1/2 Mile NNW
J53	USGS40001239354	1/4 - 1/2 Mile SSW
J57	USGS40001239355	1/4 - 1/2 Mile SSW
J59	USGS40001239345	1/4 - 1/2 Mile SSW
60	USGS40001239356	1/4 - 1/2 Mile SW
H63	USGS40001239611	1/4 - 1/2 Mile West
I66	USGS40001239932	1/4 - 1/2 Mile NNW
67	USGS40001239504	1/4 - 1/2 Mile WSW
L68	USGS40001239353	1/4 - 1/2 Mile SE
M78	USGS40001239951	1/4 - 1/2 Mile NNW
N79	USGS40001239798	1/4 - 1/2 Mile WNW
M83	USGS40001239976	1/4 - 1/2 Mile NNW
105	USGS40001239250	1/2 - 1 Mile South
106	USGS40001239914	1/2 - 1 Mile NW
S108	USGS40001239357	1/2 - 1 Mile SW
T109	USGS40001240041	1/2 - 1 Mile North
S113	USGS40001239387	1/2 - 1 Mile SW
S114	USGS40001239358	1/2 - 1 Mile SW
S115	USGS40001239346	1/2 - 1 Mile SW
S116	USGS40001239347	1/2 - 1 Mile SW
117	USGS40001239505	1/2 - 1 Mile WSW
V122	USGS40001239613	1/2 - 1 Mile West
V123	USGS40001239612	1/2 - 1 Mile West
W124	USGS40001240011	1/2 - 1 Mile NNW
U125	USGS40001239169	1/2 - 1 Mile South
X126	USGS40001240104	1/2 - 1 Mile NNW
X127	USGS40001240105	1/2 - 1 Mile NNW
W128	USGS40001240012	1/2 - 1 Mile NNW
Y134	USGS40001239933	1/2 - 1 Mile NW
Z136	USGS40001239935	1/2 - 1 Mile NE
137	USGS40001239226	1/2 - 1 Mile SSW
139	USGS40001239893	1/2 - 1 Mile ENE
AA141	USGS40001240139	1/2 - 1 Mile North
147	USGS40001240013	1/2 - 1 Mile NW
AC148	USGS40001240140	1/2 - 1 Mile NNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AC149	USGS40001240141	1/2 - 1 Mile NNW
Z150	USGS40001239931	1/2 - 1 Mile NE
154	USGS40001240177	1/2 - 1 Mile North
AC162	USGS40001240159	1/2 - 1 Mile NNW
AC163	USGS40001240160	1/2 - 1 Mile NNW
AD164	USGS40001240076	1/2 - 1 Mile NW
AG173	USGS40001239170	1/2 - 1 Mile SW
AG177	USGS40001239171	1/2 - 1 Mile SW
AH178	USGS40001239736	1/2 - 1 Mile WNW
AH179	USGS40001239758	1/2 - 1 Mile WNW
AI181	USGS40001239905	1/2 - 1 Mile WNW
184	USGS40001240178	1/2 - 1 Mile NNW
AN198	USGS40001240138	1/2 - 1 Mile NE
AO199	USGS40001239172	1/2 - 1 Mile SW
AP202	USGS40001240227	1/2 - 1 Mile NNW
208	USGS40001239359	1/2 - 1 Mile WSW
AQ209	USGS40001239035	1/2 - 1 Mile SSW
AQ210	USGS40001239036	1/2 - 1 Mile SSW
211	USGS40001240206	1/2 - 1 Mile NNW
213	USGS40001239469	1/2 - 1 Mile WSW
AP215	USGS40001240283	1/2 - 1 Mile NNW
AR216	USGS40001240287	1/2 - 1 Mile NNW
AR217	USGS40001240288	1/2 - 1 Mile NNW
226	USGS40001238964	1/2 - 1 Mile SSW
229	USGS40001237997	1/2 - 1 Mile SW
230	USGS40001239878	1/2 - 1 Mile WNW
232	USGS40001239257	1/2 - 1 Mile WSW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B3	WALOG2000020042	0 - 1/8 Mile SSE
B4	WALOG2000023691	0 - 1/8 Mile SSE
B5	WALOG2000024580	0 - 1/8 Mile SSE
A6	WALOG2000026308	0 - 1/8 Mile WNW
A7	WALOG2000021253	0 - 1/8 Mile WNW
D11	WALOG2000027026	1/8 - 1/4 Mile NNE
C13	WA1200000018767	1/8 - 1/4 Mile SW
E17	WALOG2000022316	1/8 - 1/4 Mile WSW
E18	WALOG2000023098	1/8 - 1/4 Mile WSW
E19	WALOG2000019992	1/8 - 1/4 Mile WSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
E20	WALOG2000020591	1/8 - 1/4 Mile WSW
E21	WALOG2000026664	1/8 - 1/4 Mile WSW
E22	WALOG2000201617	1/8 - 1/4 Mile WSW
E23	WALOG2000422151	1/8 - 1/4 Mile WSW
E24	WALOG2000027278	1/8 - 1/4 Mile WSW
E25	WALOG2000201616	1/8 - 1/4 Mile WSW
F32	WA1200000006292	1/4 - 1/2 Mile NW
F33	WA1200000012203	1/4 - 1/2 Mile NW
F34	WALOG2000352370	1/4 - 1/2 Mile NW
F35	WALOG2000026170	1/4 - 1/2 Mile NW
F36	WALOG2000021725	1/4 - 1/2 Mile NW
F37	WALOG2000020919	1/4 - 1/2 Mile NW
F38	WALOG2000202383	1/4 - 1/2 Mile NW
F39	WALOG2000433010	1/4 - 1/2 Mile NW
F40	WALOG2000463596	1/4 - 1/2 Mile NW
G44	WALOG2000027545	1/4 - 1/2 Mile NNE
G45	WALOG2000022481	1/4 - 1/2 Mile NNE
G46	WALOG2000026236	1/4 - 1/2 Mile NNE
G47	WALOG2000026884	1/4 - 1/2 Mile NNE
G48	WALOG2000026005	1/4 - 1/2 Mile NNE
G49	WALOG2000019424	1/4 - 1/2 Mile NNE
50	WALOG2000023524	1/4 - 1/2 Mile South
J54	WALOG2000024434	1/4 - 1/2 Mile SSW
J55	WALOG2000024147	1/4 - 1/2 Mile SSW
J56	WALOG2000020964	1/4 - 1/2 Mile SSW
58	WA1200000025249	1/4 - 1/2 Mile NW
K61	WALOG2000027007	1/4 - 1/2 Mile North
K62	WALOG2000025512	1/4 - 1/2 Mile North
L64	WALOG2000019739	1/4 - 1/2 Mile SE
L65	WALOG2000019572	1/4 - 1/2 Mile SE
M69	WALOG2000027347	1/4 - 1/2 Mile NNW
M70	WALOG2000291090	1/4 - 1/2 Mile NNW
M71	WALOG2000025260	1/4 - 1/2 Mile NNW
M72	WALOG2000026934	1/4 - 1/2 Mile NNW
M73	WALOG2000025346	1/4 - 1/2 Mile NNW
M74	WALOG2000025313	1/4 - 1/2 Mile NNW
M75	WALOG2000024340	1/4 - 1/2 Mile NNW
M76	WALOG2000020865	1/4 - 1/2 Mile NNW
M77	WALOG2000019368	1/4 - 1/2 Mile NNW
O80	WALOG2000022505	1/4 - 1/2 Mile South
O81	WALOG2000028068	1/4 - 1/2 Mile South
O82	WALOG2000021512	1/4 - 1/2 Mile South
P84	WALOG2000026202	1/4 - 1/2 Mile West
P85	WALOG2000021071	1/4 - 1/2 Mile West
P86	WALOG2000021020	1/4 - 1/2 Mile West
P87	WALOG2000026384	1/4 - 1/2 Mile West
P88	WALOG2000352239	1/4 - 1/2 Mile West
P89	WALOG2000303884	1/4 - 1/2 Mile West
P90	WALOG2000303820	1/4 - 1/2 Mile West
Q91	WA1200000031387	1/4 - 1/2 Mile SW
Q92	WALOG2000020319	1/4 - 1/2 Mile SW
Q93	WALOG2000019691	1/4 - 1/2 Mile SW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

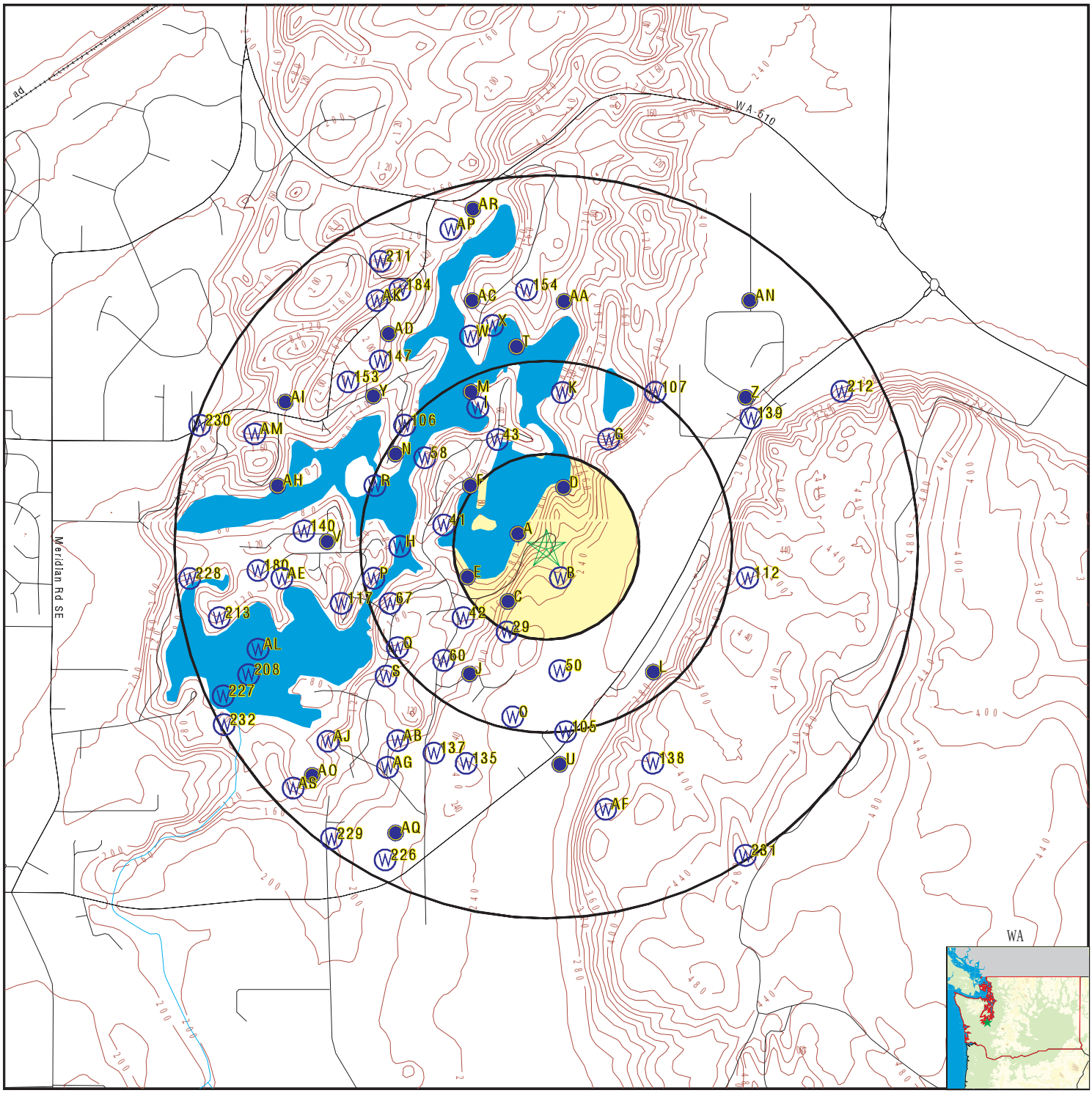
MAP ID	WELL ID	LOCATION FROM TP
Q94	WALOG2000192124	1/4 - 1/2 Mile SW
Q95	WALOG2000291094	1/4 - 1/2 Mile SW
Q96	WALOG2000025373	1/4 - 1/2 Mile SW
Q97	WALOG2000022480	1/4 - 1/2 Mile SW
Q98	WALOG2000023749	1/4 - 1/2 Mile SW
N99	WA1200000025660	1/4 - 1/2 Mile WNW
R100	WALOG2000290270	1/4 - 1/2 Mile WNW
R101	WALOG2000028223	1/4 - 1/2 Mile WNW
R102	WALOG2000023490	1/4 - 1/2 Mile WNW
R103	WALOG2000773121	1/4 - 1/2 Mile WNW
R104	WALOG2000773122	1/4 - 1/2 Mile WNW
107	WALOG2000028518	1/2 - 1 Mile NE
T110	WALOG2000022010	1/2 - 1 Mile North
T111	WALOG2000022009	1/2 - 1 Mile North
112	WALOG2000366297	1/2 - 1 Mile East
U118	WALOG2000024394	1/2 - 1 Mile South
U119	WALOG2000025701	1/2 - 1 Mile South
U120	WALOG2000024055	1/2 - 1 Mile South
V121	WALOG2000025324	1/2 - 1 Mile West
Y129	WALOG2000026849	1/2 - 1 Mile NW
Y130	WALOG2000026235	1/2 - 1 Mile NW
Y131	WALOG2000028038	1/2 - 1 Mile NW
Y132	WALOG2000021972	1/2 - 1 Mile NW
Y133	WALOG2000024559	1/2 - 1 Mile NW
135	WALOG2000028565	1/2 - 1 Mile SSW
138	WA1200000000997	1/2 - 1 Mile SSE
140	WA1200000012406	1/2 - 1 Mile West
AB142	WALOG2000022940	1/2 - 1 Mile SW
AB143	WALOG2000019354	1/2 - 1 Mile SW
AA144	WALOG2000248614	1/2 - 1 Mile North
AA145	WALOG2000358556	1/2 - 1 Mile North
Z146	WA1200000030312	1/2 - 1 Mile NE
Z151	WA1200000023181	1/2 - 1 Mile NE
Z152	WALOG2000026144	1/2 - 1 Mile NE
153	WA1200000009748	1/2 - 1 Mile NW
AC155	WALOG2000336568	1/2 - 1 Mile NNW
AC156	WALOG2000480920	1/2 - 1 Mile NNW
AC157	WALOG2000480921	1/2 - 1 Mile NNW
AC158	WALOG2000021982	1/2 - 1 Mile NNW
AC159	WALOG2000019376	1/2 - 1 Mile NNW
AC160	WALOG2000026856	1/2 - 1 Mile NNW
AC161	WALOG2000023376	1/2 - 1 Mile NNW
AE165	WALOG2000022982	1/2 - 1 Mile West
AE166	WALOG2000028155	1/2 - 1 Mile West
AE167	WALOG2000380609	1/2 - 1 Mile West
AD168	WA1200000008666	1/2 - 1 Mile NW
AF169	WALOG2000020602	1/2 - 1 Mile SSE
AF170	WALOG2000019604	1/2 - 1 Mile SSE
AF171	WALOG2000026845	1/2 - 1 Mile SSE
AF172	WALOG2000022713	1/2 - 1 Mile SSE
AH174	WALOG2000024247	1/2 - 1 Mile WNW
AH175	WALOG2000019466	1/2 - 1 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AH176	WALOG2000028547	1/2 - 1 Mile WNW
180	WA1200000004916	1/2 - 1 Mile West
AJ182	WA1200000031388	1/2 - 1 Mile SW
AJ183	WALOG2000022772	1/2 - 1 Mile SW
AK185	WALOG2000871416	1/2 - 1 Mile NW
AK186	WALOG2000871436	1/2 - 1 Mile NW
AK187	WALOG2000303831	1/2 - 1 Mile NW
AK188	WALOG2000348337	1/2 - 1 Mile NW
AK189	WALOG2000026483	1/2 - 1 Mile NW
AK190	WALOG2000271110	1/2 - 1 Mile NW
AK191	WALOG2000018959	1/2 - 1 Mile NW
AK192	WALOG2000022511	1/2 - 1 Mile NW
AI193	WALOG2000294106	1/2 - 1 Mile WNW
AL194	WALOG2000021684	1/2 - 1 Mile WSW
AL195	WALOG2000019971	1/2 - 1 Mile WSW
AM196	WA1200000001078	1/2 - 1 Mile WNW
AM197	WA1200000012126	1/2 - 1 Mile WNW
AN200	WALOG2000021510	1/2 - 1 Mile NE
AN201	WALOG2000756792	1/2 - 1 Mile NE
AQ203	WALOG2000026224	1/2 - 1 Mile SSW
AQ204	WALOG2000024400	1/2 - 1 Mile SSW
AQ205	WALOG2000021487	1/2 - 1 Mile SSW
AQ206	WA1200000031390	1/2 - 1 Mile SSW
AQ207	WA1200000031389	1/2 - 1 Mile SSW
212	WALOG2000021459	1/2 - 1 Mile ENE
AO214	WA1200000026922	1/2 - 1 Mile SW
AR218	WALOG2000202059	1/2 - 1 Mile NNW
AR219	WALOG2000591129	1/2 - 1 Mile NNW
AR220	WALOG2000202060	1/2 - 1 Mile NNW
AS221	WALOG2000025322	1/2 - 1 Mile SW
AS222	WALOG2000026058	1/2 - 1 Mile SW
AS223	WALOG2000024436	1/2 - 1 Mile SW
AS224	WALOG2000020648	1/2 - 1 Mile SW
AS225	WALOG2000024383	1/2 - 1 Mile SW
227	WALOG2000025323	1/2 - 1 Mile WSW
228	WA1200000005147	1/2 - 1 Mile West
231	WALOG2000024253	1/2 - 1 Mile SSE

PHYSICAL SETTING SOURCE MAP - 7415454.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Medicine River Ranch Property	CLIENT:	GeoEngineers, Inc.
ADDRESS:	10747 TODTKARLE RD SE Olympia WA 98513	CONTACT:	Jessica A Robertson
LAT/LONG:	46.998972 / 122.710406	INQUIRY #:	7415454.2s
		DATE:	August 11, 2023 7:55 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
WNW
0 - 1/8 Mile
Lower

FED USGS **USGS40001239623**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32P02	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19851001
Well Depth:	81	Well Depth Units:	ft
Well Hole Depth:	81	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1990-07-25
Feet below surface:	40.66	Feet to sea level:	Not Reported
Note:	Other conditions existed that would affect the measured water level.		

Level reading date:	1990-07-25	Feet below surface:	40.66
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

Level reading date:	1988-07-06	Feet below surface:	44.50
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1988-07-06	Feet below surface:	44.50
Feet to sea level:	Not Reported	Note:	Not Reported

A2
WNW
0 - 1/8 Mile
Lower

FED USGS **USGS40001239634**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32SW1	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19850701	Well Depth:	112
Well Depth Units:	ft	Well Hole Depth:	112
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1985-07-01
Feet below surface:	72	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1985-07-01	Feet below surface:	72
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B3
SSE **WA WELLS** **WALOG2000020042**
0 - 1/8 Mile
Higher

Database:	Ecology Well Logs	Well Log ID:	22882
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	009424	Date Received:	Not Reported
Diameter (in):	16	Casing Depth (ft):	196
Well completion:	24-JUN-96	Well Owner:	CITY OF OLYMPIA
Well Type:	Water	Driller #:	1146
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

B4
SSE **WA WELLS** **WALOG2000023691**
0 - 1/8 Mile
Higher

Database:	Ecology Well Logs	Well Log ID:	26928
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	31-JAN-86
Diameter (in):	6	Casing Depth (ft):	81
Well completion:	Not Reported	Well Owner:	LEE PETERSON
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

B5
SSE **WA WELLS** **WALOG2000024580**
0 - 1/8 Mile
Higher

Database:	Ecology Well Logs	Well Log ID:	27951
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	214
Well completion:	Not Reported	Well Owner:	OLIVER MCLEUCHLIN
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

A6
WNW **WA WELLS** **WALOG2000026308**
0 - 1/8 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	29945
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	8	Casing Depth (ft):	157

Well completion:	Not Reported	Well Owner:	TODT CEDERS WATER ASSOC.
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

A7
WNW
0 - 1/8 Mile
Lower

WA WELLS **WALOG2000021253**

Database:	Ecology Well Logs	Well Log ID:	24235
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	14-AUG-85
Diameter (in):	6	Casing Depth (ft):	112
Well completion:	Not Reported	Well Owner:	ELOON STEVENS
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

C8
SW
1/8 - 1/4 Mile
Higher

FED USGS **USGS40001239515**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32N03	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19730201
Well Depth:	158	Well Depth Units:	ft
Well Hole Depth:	158	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1988-06-02
Feet below surface:	149.35	Feet to sea level:	Not Reported
Note:	The site had been pumped recently.		

Level reading date:	1988-06-02	Feet below surface:	149.35
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.

Level reading date:	1988-05-17	Feet below surface:	131.76
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1988-05-17	Feet below surface:	131.76
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

D9
NNE
1/8 - 1/4 Mile
Lower

FED USGS **USGS40001239733**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32L02	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19941019	Well Depth:	104.75
Well Depth Units:	ft	Well Hole Depth:	105
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1994-10-25
Feet below surface:	75	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1994-10-25	Feet below surface:	75
Feet to sea level:	Not Reported	Note:	Not Reported

C10
SSW
1/8 - 1/4 Mile
Higher

FED USGS **USGS40001279402**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32P01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19620101
Well Depth:	215	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	2	Level reading date:	1962-11-01
Feet below surface:	199	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1962-11-01	Feet below surface:	199
Feet to sea level:	Not Reported	Note:	Not Reported

D11
NNE
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000027026**

Database:	Ecology Well Logs	Well Log ID:	30822
Well Tag #:	AAE231	Project Tag #:	Not Reported
Notice of Intent #:	055411	Date Received:	31-OCT-94
Diameter (in):	6	Casing Depth (ft):	104

Well completion:	24-OCT-94	Well Owner:	JEFF KRUEGAR
Well Type:	Water	Driller #:	0067
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

E12
WSW **FED USGS** **USGS40001239551**
1/8 - 1/4 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32N06	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19921030	Well Depth:	139
Well Depth Units:	ft	Well Hole Depth:	139
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1992-10-30
Feet below surface:	115	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1992-10-30	Feet below surface:	115
Feet to sea level:	Not Reported	Note:	Not Reported

C13
SW **WA WELLS** **WA1200000018767**
1/8 - 1/4 Mile
Lower

Database:	Water Wells	PWS ID:	88570
Source #:	01	Source Name:	WELL #1 AHF116
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Nisqually
Well Depth:	156	Source Susceptibility:	H
System Name:	TODT CEDARS WATER ASSOC	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	21
Total Population Served:	21	Total Connections:	14
PWS Status:	Active	Residential Connection:	14
DOE Well Tag:	Not Reported	Capacity (gpm):	40
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

E14
WSW **FED USGS** **USGS40001239581**
1/8 - 1/4 Mile
Lower

Organization ID:	USGS-WA
Organization Name:	USGS Washington Water Science Center

Monitor Location:	18N/01E-32N08	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19940421	Well Depth:	72
Well Depth Units:	ft	Well Hole Depth:	72
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1994-04-26
Feet below surface:	53	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1994-04-26	Feet below surface:	53
Feet to sea level:	Not Reported	Note:	Not Reported

E15
WSW
1/8 - 1/4 Mile
Lower

FED USGS **USGS40001239536**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32N05	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19881101	Well Depth:	128.33
Well Depth Units:	ft	Well Hole Depth:	128.33
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1988-11-03
Feet below surface:	106	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1988-11-03	Feet below surface:	106
Feet to sea level:	Not Reported	Note:	Not Reported

E16
WSW
1/8 - 1/4 Mile
Lower

FED USGS **USGS40001239552**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32N07	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19940204	Well Depth:	139
Well Depth Units:	ft	Well Hole Depth:	139
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1994-02-07
Feet below surface:	114	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1994-02-07	Feet below surface:	114
Feet to sea level:	Not Reported	Note:	Not Reported

E17
WSW
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000022316**

Database:	Ecology Well Logs	Well Log ID:	25435
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	18-FEB-88
Diameter (in):	6	Casing Depth (ft):	81
Well completion:	Not Reported	Well Owner:	JACK HALE
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

E18
WSW
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000023098**

Database:	Ecology Well Logs	Well Log ID:	26281
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	207704	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	139
Well completion:	30-OCT-92	Well Owner:	JOHN ROY
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

E19
WSW
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000019992**

Database:	Ecology Well Logs	Well Log ID:	22820
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	041179	Date Received:	18-APR-94
Diameter (in):	6	Casing Depth (ft):	139
Well completion:	01-FEB-94	Well Owner:	CHUCK HOESCHEN
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
E20 **WSW** **1/8 - 1/4 Mile** **Lower**	**WA WELLS**	**WALOG2000020591**

Database:	Ecology Well Logs	Well Log ID:	23508
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	012478	Date Received:	27-DEC-88
Diameter (in):	6	Casing Depth (ft):	128
Well completion:	03-NOV-88	Well Owner:	DEAN RASMUSSEN
Well Type:	Water	Driller #:	1424
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

	Database	EDR ID Number
E21 **WSW** **1/8 - 1/4 Mile** **Lower**	**WA WELLS**	**WALOG2000026664**

Database:	Ecology Well Logs	Well Log ID:	30379
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	218
Well completion:	31-JAN-83	Well Owner:	WARREN WALNER
Well Type:	Water	Driller #:	0710
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

	Database	EDR ID Number
E22 **WSW** **1/8 - 1/4 Mile** **Lower**	**WA WELLS**	**WALOG2000201617**

Database:	Ecology Well Logs	Well Log ID:	272779
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	139
Well completion:	Not Reported	Well Owner:	DAN ENGLISH
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

	Database	EDR ID Number
E23 **WSW** **1/8 - 1/4 Mile** **Lower**	**WA WELLS**	**WALOG2000422151**

Database:	Ecology Well Logs	Well Log ID:	558047
Well Tag #:	BAR646	Project Tag #:	Not Reported
Notice of Intent #:	WE08642	Date Received:	05-NOV-08
Diameter (in):	6	Casing Depth (ft):	240

Well completion:	21-OCT-08	Well Owner:	Bruce Longmire
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

E24
WSW
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000027278**

Database:	Ecology Well Logs	Well Log ID:	31205
Well Tag #:	ABG295	Project Tag #:	Not Reported
Notice of Intent #:	W043868	Date Received:	06-MAY-94
Diameter (in):	6	Casing Depth (ft):	72
Well completion:	26-APR-94	Well Owner:	JEFF MCVICKER
Well Type:	Water	Driller #:	1493
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

E25
WSW
1/8 - 1/4 Mile
Lower

WA WELLS **WALOG2000201616**

Database:	Ecology Well Logs	Well Log ID:	272778
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	139
Well completion:	Not Reported	Well Owner:	DAN ENGLISH
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

E26
WSW
1/8 - 1/4 Mile
Lower

FED USGS **USGS40001239553**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32N02	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19871201
Well Depth:	81	Well Depth Units:	ft
Well Hole Depth:	81	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1988-06-28
Feet below surface:	42.69	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1988-06-28	Feet below surface:	42.69
Feet to sea level:	Not Reported	Note:	Not Reported

F27
NW
1/8 - 1/4 Mile
Lower

FED USGS **USGS40001239734**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32M03	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19810508	Well Depth:	101
Well Depth Units:	ft	Well Hole Depth:	101
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1981-05-14
Feet below surface:	81	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1981-05-14	Feet below surface:	81
Feet to sea level:	Not Reported	Note:	Not Reported

F28
NW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239735**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32M02	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19680401	Well Depth:	94
Well Depth Units:	ft	Well Hole Depth:	94
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1968-04-11
Feet below surface:	55	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1968-04-11	Feet below surface:	55
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

29
SSW
1/4 - 1/2 Mile
Higher

FED USGS **USGS40001239446**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-05D02	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19830621
Well Depth:	220	Well Depth Units:	ft
Well Hole Depth:	226	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1990-07-25
Feet below surface:	183.85	Feet to sea level:	Not Reported
Note:	Other conditions existed that would affect the measured water level.		

Level reading date:	1990-07-25	Feet below surface:	183.85
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

Level reading date:	1988-05-17	Feet below surface:	186.30
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1988-05-17	Feet below surface:	186.30
Feet to sea level:	Not Reported	Note:	Not Reported

F30
NW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239756**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32M04	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19911003	Well Depth:	115
Well Depth Units:	ft	Well Hole Depth:	116
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1991-11-05
Feet below surface:	76	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1991-11-05	Feet below surface:	76
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F31
NW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239757**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32M05	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19930817	Well Depth:	101
Well Depth Units:	ft	Well Hole Depth:	102
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1993-08-20
Feet below surface:	66	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1993-08-20	Feet below surface:	66
Feet to sea level:	Not Reported	Note:	Not Reported

F32
NW
1/4 - 1/2 Mile
Lower

WA WELLS **WA1200000006292**

Database:	Water Wells	PWS ID:	32668
Source #:	01	Source Name:	WELL 1
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Nisqually
Well Depth:	78	Source Susceptibility:	X
System Name:	HADDOW BONNIE SHORT PLAT	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	10
Total Population Served:	10	Total Connections:	4
PWS Status:	Active	Residential Connection:	4
DOE Well Tag:	Not Reported	Capacity (gpm):	28
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

F33
NW
1/4 - 1/2 Mile
Lower

WA WELLS **WA1200000012203**

Database:	Water Wells	PWS ID:	05424
Source #:	01	Source Name:	WELL #1ACB006
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	09/18/1996
Date Source Inactive:	12/07/2011	Water Resource Inventory Area:	Nisqually
Well Depth:	60	Source Susceptibility:	H
System Name:	SANDERS	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	4

Total Population Served:	4	Total Connections:	3
PWS Status:	Inactive	Residential Connection:	3
DOE Well Tag:	Not Reported	Capacity (gpm):	2.2
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

F34
NW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000352370**

Database:	Ecology Well Logs	Well Log ID:	460182
Well Tag #:	ABA303	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	14-DEC-95
Diameter (in):	6	Casing Depth (ft):	89
Well completion:	12-DEC-95	Well Owner:	ROBERT HANSEN
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

F35
NW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000026170**

Database:	Ecology Well Logs	Well Log ID:	29776
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	043739	Date Received:	12-NOV-91
Diameter (in):	6	Casing Depth (ft):	116
Well completion:	05-NOV-91	Well Owner:	TERRY FREDICKSON
Well Type:	Water	Driller #:	0242
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

F36
NW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000021725**

Database:	Ecology Well Logs	Well Log ID:	24755
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	19-MAY-81
Diameter (in):	6	Casing Depth (ft):	101
Well completion:	14-MAY-81	Well Owner:	GEORGE CLENDENON
Well Type:	Water	Driller #:	0388
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F37
NW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000020919**

Database:	Ecology Well Logs	Well Log ID:	23868
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	94
Well completion:	08-APR-68	Well Owner:	DONALD CANE
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

F38
NW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000202383**

Database:	Ecology Well Logs	Well Log ID:	273601
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	101
Well completion:	Not Reported	Well Owner:	SOUND CONTRACTORS
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

F39
NW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000433010**

Database:	Ecology Well Logs	Well Log ID:	573262
Well Tag #:	ABA303	Project Tag #:	Not Reported
Notice of Intent #:	W046497	Date Received:	12-DEC-95
Diameter (in):	6	Casing Depth (ft):	89
Well completion:	12-DEC-95	Well Owner:	Robert Hansen
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

F40
NW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000463596**

Database:	Ecology Well Logs	Well Log ID:	625008
Well Tag #:	APJ930	Project Tag #:	Not Reported
Notice of Intent #:	W227198	Date Received:	02-DEC-09
Diameter (in):	6	Casing Depth (ft):	139

Well completion:	02-NOV-09	Well Owner:	WILLIAM KNIGHT
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

41
WNW **FED USGS** **USGS40001239806**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32M01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19510701
Well Depth:	112	Well Depth Units:	ft
Well Hole Depth:	112	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1990-07-25
Feet below surface:	88.85	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1990-07-25	Feet below surface:	88.85
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1988-08-23	Feet below surface:	97.12
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.

Level reading date:	1988-08-23	Feet below surface:	97.12
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.

42
SW **FED USGS** **USGS40001239975**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32N01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19740711
Well Depth:	92	Well Depth Units:	ft
Well Hole Depth:	92	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1988-07-06
Feet below surface:	81.30	Feet to sea level:	Not Reported
Note:	The site had been pumped recently.		

Level reading date:	1988-07-06	Feet below surface:	81.30
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

43
NNW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239841**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32E04	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19750612
Well Depth:	67	Well Depth Units:	ft
Well Hole Depth:	67	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1975-06-12
Feet below surface:	41	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1975-06-12	Feet below surface:	41
Feet to sea level:	Not Reported	Note:	Not Reported

G44
NNE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000027545**

Database:	Ecology Well Logs	Well Log ID:	31537
Well Tag #:	ABQ582	Project Tag #:	Not Reported
Notice of Intent #:	W057087	Date Received:	01-DEC-95
Diameter (in):	6	Casing Depth (ft):	100
Well completion:	13-NOV-95	Well Owner:	MATT BAYDO
Well Type:	Water	Driller #:	2117
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

G45
NNE
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000022481**

Database:	Ecology Well Logs	Well Log ID:	25609
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	91
Well completion:	11-JUL-74	Well Owner:	JAMES RYAN
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
G46 **NNE** **1/4 - 1/2 Mile** **Lower**	**WA WELLS**	**WALOG2000026236**

Database:	Ecology Well Logs	Well Log ID:	29864
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	8	Casing Depth (ft):	153
Well completion:	15-SEP-67	Well Owner:	THOMSEN
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

G47 **NNE** **1/4 - 1/2 Mile** **Lower**	**WA WELLS**	**WALOG2000026884**

Database:	Ecology Well Logs	Well Log ID:	30631
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	Not Reported	Well Owner:	WILLIAMM BENEDICT
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

G48 **NNE** **1/4 - 1/2 Mile** **Lower**	**WA WELLS**	**WALOG2000026005**

Database:	Ecology Well Logs	Well Log ID:	29598
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	062828	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	117
Well completion:	14-JUN-90	Well Owner:	STEVE ROE
Well Type:	Water	Driller #:	0067
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

G49 **NNE** **1/4 - 1/2 Mile** **Lower**	**WA WELLS**	**WALOG2000019424**

Database:	Ecology Well Logs	Well Log ID:	22177
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	60

Well completion:	15-OCT-74	Well Owner:	BILLY CHRISTY
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

50
South
1/4 - 1/2 Mile
Higher

WA WELLS **WALOG2000023524**

Database:	Ecology Well Logs	Well Log ID:	26748
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	10-JUL-78
Diameter (in):	6	Casing Depth (ft):	180
Well completion:	30-JUN-78	Well Owner:	LACEY FIRE DEPT.
Well Type:	Water	Driller #:	0067
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

H51
West
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239610**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31R02	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19871220
Well Depth:	85	Well Depth Units:	ft
Well Hole Depth:	85	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1990-07-25
Feet below surface:	38.10	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1990-07-25	Feet below surface:	38.10
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1988-05-13	Feet below surface:	39.46
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1988-05-13	Feet below surface:	39.46
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

I52
NNW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239894**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32E03	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19880316
Well Depth:	98	Well Depth Units:	ft
Well Hole Depth:	98	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1988-05-16
Feet below surface:	69.70	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1988-05-16	Feet below surface:	69.70
Feet to sea level:	Not Reported	Note:	Not Reported

J53
SSW
1/4 - 1/2 Mile
Higher

FED USGS **USGS40001239354**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-05D05	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19890101	Well Depth:	183
Well Depth Units:	ft	Well Hole Depth:	184
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1989-01-01
Feet below surface:	163	Feet to sea level:	Not Reported
Note:	Not Reported		

J54
SSW
1/4 - 1/2 Mile
Higher

WA WELLS **WALOG2000024434**

Database:	Ecology Well Logs	Well Log ID:	27783
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	064667	Date Received:	02-NOV-90
Diameter (in):	6	Casing Depth (ft):	153
Well completion:	24-JUL-90	Well Owner:	MULLBOCK HAL
Well Type:	Water	Driller #:	0284
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported

Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

J55
SSW
1/4 - 1/2 Mile
Higher

WA WELLS **WALOG2000024147**

Database:	Ecology Well Logs	Well Log ID:	27452
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	019018	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	183
Well completion:	Not Reported	Well Owner:	MCKNIGHT
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

J56
SSW
1/4 - 1/2 Mile
Higher

WA WELLS **WALOG2000020964**

Database:	Ecology Well Logs	Well Log ID:	23913
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	03-FEB-86
Diameter (in):	6	Casing Depth (ft):	161
Well completion:	05-DEC-84	Well Owner:	DONOHOE CONSTRUCTION
Well Type:	Water	Driller #:	0067
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

J57
SSW
1/4 - 1/2 Mile
Higher

FED USGS **USGS40001239355**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-05D04	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19900724	Well Depth:	153
Well Depth Units:	ft	Well Hole Depth:	156
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1990-07-24
Feet below surface:	119	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

58
NW
1/4 - 1/2 Mile
Lower

WA WELLS **WA1200000025249**

Database:	Water Wells	PWS ID:	22007
Source #:	01	Source Name:	WELL A
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	01/06/1994	Water Resource Inventory Area:	Deschutes
Well Depth:	90	Source Susceptibility:	Not Reported
System Name:	AGGERGAARD	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	5
Total Population Served:	5	Total Connections:	2
PWS Status:	Inactive	Residential Connection:	2
DOE Well Tag:	Not Reported	Capacity (gpm):	Not Reported
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

J59
SSW
1/4 - 1/2 Mile
Higher

FED USGS **USGS40001239345**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-05D01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19830801
Well Depth:	219	Well Depth Units:	ft
Well Hole Depth:	226	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1983-08-01
Feet below surface:	183	Feet to sea level:	Not Reported
Note:	Not Reported		

60
SW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239356**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-05D03	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19831001
Well Depth:	149	Well Depth Units:	ft
Well Hole Depth:	149	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1988-06-23
Feet below surface:	111.9	Feet to sea level:	Not Reported
Note:	Not Reported		

K61
North
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000027007**

Database:	Ecology Well Logs	Well Log ID:	30798
Well Tag #:	AAE161	Project Tag #:	Not Reported
Notice of Intent #:	055215	Date Received:	09-NOV-95
Diameter (in):	6	Casing Depth (ft):	79
Well completion:	25-OCT-95	Well Owner:	ROMAYNE PHILES
Well Type:	Water	Driller #:	2236
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

K62
North
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000025512**

Database:	Ecology Well Logs	Well Log ID:	29036
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	055216	Date Received:	09-NOV-95
Diameter (in):	6	Casing Depth (ft):	79
Well completion:	19-OCT-95	Well Owner:	ROMAYNE PHILES
Well Type:	Water	Driller #:	2236
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

H63
West
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239611**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31R01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19680925
Well Depth:	91	Well Depth Units:	ft
Well Hole Depth:	91	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1988-07-05
Feet below surface:	46.40	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1988-07-05	Feet below surface:	46.40
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L64
SE
1/4 - 1/2 Mile
Higher

WA WELLS **WALOG2000019739**

Database:	Ecology Well Logs	Well Log ID:	22528
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	23-MAY-85
Diameter (in):	6	Casing Depth (ft):	190
Well completion:	Not Reported	Well Owner:	CAPPUCCIO
Well Type:	Water	Driller #:	0339
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

L65
SE
1/4 - 1/2 Mile
Higher

WA WELLS **WALOG2000019572**

Database:	Ecology Well Logs	Well Log ID:	22341
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A043557	Date Received:	19-NOV-98
Diameter (in):	6	Casing Depth (ft):	208
Well completion:	12-NOV-98	Well Owner:	BRAYWOOD PEASE & SONS, INC.
Well Type:	Decommisioning	Driller #:	0193
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

I66
NNW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239932**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32E06	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19920201	Well Depth:	86
Well Depth Units:	ft	Well Hole Depth:	87.17
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1992-02-10
Feet below surface:	66	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1992-02-10	Feet below surface:	66
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

67
WSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239504**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31R03	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19880922	Well Depth:	96
Well Depth Units:	ft	Well Hole Depth:	96
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1988-09-23
Feet below surface:	76	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1988-09-23	Feet below surface:	76
Feet to sea level:	Not Reported	Note:	Not Reported

L68
SE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40001239353**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-05B01	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19780401	Well Depth:	190
Well Depth Units:	ft	Well Hole Depth:	190
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1978-04-01
Feet below surface:	163	Feet to sea level:	Not Reported
Note:	Not Reported		

M69
NNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000027347**

Database:	Ecology Well Logs	Well Log ID:	31305
Well Tag #:	ABH309	Project Tag #:	Not Reported
Notice of Intent #:	W067186	Date Received:	27-NOV-95
Diameter (in):	6	Casing Depth (ft):	70
Well completion:	17-NOV-95	Well Owner:	VICTOR LANZA
Well Type:	Water	Driller #:	1706

Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

M70
NNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000291090**

Database:	Ecology Well Logs	Well Log ID:	381377
Well Tag #:	AGH625	Project Tag #:	Not Reported
Notice of Intent #:	W155759	Date Received:	05-DEC-03
Diameter (in):	6	Casing Depth (ft):	75
Well completion:	29-MAR-02	Well Owner:	ROB SHADLE
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

M71
NNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000025260**

Database:	Ecology Well Logs	Well Log ID:	28753
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	W089264	Date Received:	14-NOV-97
Diameter (in):	6	Casing Depth (ft):	89
Well completion:	23-MAY-97	Well Owner:	ROB BARCHEE
Well Type:	Water	Driller #:	1725
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

M72
NNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000026934**

Database:	Ecology Well Logs	Well Log ID:	30695
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	202781	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	83
Well completion:	21-DEC-92	Well Owner:	ZITTEL
Well Type:	Water	Driller #:	1725
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

M73
NNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000025346**

Database:	Ecology Well Logs	Well Log ID:	28849
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	83
Well completion:	17-NOV-76	Well Owner:	ROBERT HANDALL
Well Type:	Water	Driller #:	0326
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

M74
NNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000025313**

Database:	Ecology Well Logs	Well Log ID:	28813
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	23-MAR-81
Diameter (in):	6	Casing Depth (ft):	98
Well completion:	17-FEB-81	Well Owner:	ROBERT CUDNEY
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

M75
NNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000024340**

Database:	Ecology Well Logs	Well Log ID:	27665
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	019080	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	97
Well completion:	Not Reported	Well Owner:	MIKE ZITTLE
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

M76
NNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000020865**

Database:	Ecology Well Logs	Well Log ID:	23809
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	22-MAR-88
Diameter (in):	6	Casing Depth (ft):	98

Well completion:	16-MAR-88	Well Owner:	DON MCKECHNER
Well Type:	Water	Driller #:	0326
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

M77
NNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000019368**

Database:	Ecology Well Logs	Well Log ID:	22116
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	043745	Date Received:	13-FEB-92
Diameter (in):	6	Casing Depth (ft):	87
Well completion:	10-FEB-92	Well Owner:	BILL MARTIN
Well Type:	Water	Driller #:	0242
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

M78
NNW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239951**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32E07	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19921210	Well Depth:	83
Well Depth Units:	ft	Well Hole Depth:	85
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1992-12-21
Feet below surface:	60	Feet to sea level:	Not Reported
Note:	Not Reported		

N79
WNW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40001239798**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31J01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19600101
Well Depth:	80	Well Depth Units:	ft

Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported
Ground water levels,Number of Measurements:	4	Level reading date:	1990-07-25
Feet below surface:	54.97	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1990-07-25	Feet below surface:	54.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-10-06	Feet below surface:	60.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-10-06	Feet below surface:	60.56
Feet to sea level:	Not Reported	Note:	Not Reported

O80
South
1/4 - 1/2 Mile
Higher

WA WELLS **WALOG2000022505**

Database:	Ecology Well Logs	Well Log ID:	25635
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	01-MAY-85
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	Not Reported	Well Owner:	JAMES WARE
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

O81
South
1/4 - 1/2 Mile
Higher

WA WELLS **WALOG2000028068**

Database:	Ecology Well Logs	Well Log ID:	32125
Well Tag #:	ACM039	Project Tag #:	Not Reported
Notice of Intent #:	W092623	Date Received:	04-MAY-98
Diameter (in):	6	Casing Depth (ft):	240
Well completion:	27-APR-98	Well Owner:	WILLIAM KOEPP. DEB
Well Type:	Water	Driller #:	0921
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

O82
South
1/4 - 1/2 Mile
Higher

WA WELLS **WALOG2000021512**

Database:	Ecology Well Logs	Well Log ID:	24524
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	01-MAY-85
Diameter (in):	6	Casing Depth (ft):	153
Well completion:	Not Reported	Well Owner:	FRED BURNHART
Well Type:	Water	Driller #:	0832

Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

M83
NNW **FED USGS** **USGS40001239976**
1/4 - 1/2 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32E02	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19761117
Well Depth:	83	Well Depth Units:	ft
Well Hole Depth:	83	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1990-07-25
Feet below surface:	72.58	Feet to sea level:	Not Reported
Note:	Other conditions existed that would affect the measured water level.		

Level reading date:	1988-05-16	Feet below surface:	73.89
Feet to sea level:	Not Reported	Note:	Not Reported

P84
West **WA WELLS** **WALOG2000026202**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	29823
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	28-OCT-76
Diameter (in):	6	Casing Depth (ft):	123
Well completion:	Not Reported	Well Owner:	THOM THUMB WATER CO.
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

P85
West **WA WELLS** **WALOG2000021071**
1/4 - 1/2 Mile
Lower

Database:	Ecology Well Logs	Well Log ID:	24030
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	013866	Date Received:	29-SEP-88
Diameter (in):	6	Casing Depth (ft):	96
Well completion:	23-SEP-88	Well Owner:	E. PEDERSON
Well Type:	Water	Driller #:	0444
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

P86
West
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000021020**

Database:	Ecology Well Logs	Well Log ID:	23974
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	85
Well completion:	30-DEC-87	Well Owner:	DOYLE
Well Type:	Water	Driller #:	0326
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

P87
West
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000026384**

Database:	Ecology Well Logs	Well Log ID:	30033
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	12-OCT-77
Diameter (in):	6	Casing Depth (ft):	374
Well completion:	Not Reported	Well Owner:	TOM THUMB WATER CO.
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

P88
West
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000352239**

Database:	Ecology Well Logs	Well Log ID:	459949
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE01914	Date Received:	01-DEC-06
Diameter (in):	6	Casing Depth (ft):	76
Well completion:	18-OCT-06	Well Owner:	JERRY AND VIRGINIA SMITH
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

P89
West
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000303884**

Database:	Ecology Well Logs	Well Log ID:	395678
Well Tag #:	AKH312	Project Tag #:	Not Reported
Notice of Intent #:	W183516	Date Received:	29-DEC-04
Diameter (in):	6	Casing Depth (ft):	142

Well completion:	17-DEC-04	Well Owner:	JULIE CONWELL
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

P90
West
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000303820**

Database:	Ecology Well Logs	Well Log ID:	395609
Well Tag #:	AKH313	Project Tag #:	Not Reported
Notice of Intent #:	W183517	Date Received:	29-DEC-04
Diameter (in):	6	Casing Depth (ft):	142
Well completion:	27-DEC-04	Well Owner:	SHARON KING
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Q91
SW
1/4 - 1/2 Mile
Lower

WA WELLS **WA1200000031387**

Database:	Water Wells	PWS ID:	84894
Source #:	01	Source Name:	ST CLAIR VISTA
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	01/31/1996	Water Resource Inventory Area:	Nisqually
Well Depth:	248	Source Susceptibility:	Not Reported
System Name:	ST CLAIR VISTA	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	17
Total Population Served:	21	Total Connections:	9
PWS Status:	Inactive	Residential Connection:	8
DOE Well Tag:	Not Reported	Capacity (gpm):	19
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

Q92
SW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000020319**

Database:	Ecology Well Logs	Well Log ID:	23212
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	024610	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	59
Well completion:	09-JUN-89	Well Owner:	DAN MCINTYRE
Well Type:	Water	Driller #:	0067
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
Q93 **SW** **1/4 - 1/2 Mile** **Lower**	**WA WELLS**	**WALOG2000019691**

Database:	Ecology Well Logs	Well Log ID:	22470
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	013868	Date Received:	26-OCT-88
Diameter (in):	6	Casing Depth (ft):	116
Well completion:	11-OCT-85	Well Owner:	C. HAUEG
Well Type:	Water	Driller #:	0444
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

	Database	EDR ID Number
Q94 **SW** **1/4 - 1/2 Mile** **Lower**	**WA WELLS**	**WALOG2000192124**

Database:	Ecology Well Logs	Well Log ID:	249620
Well Tag #:	ACQ593	Project Tag #:	Not Reported
Notice of Intent #:	W103491	Date Received:	06-JUL-00
Diameter (in):	6	Casing Depth (ft):	188
Well completion:	19-JUN-00	Well Owner:	RON GREGORY
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

	Database	EDR ID Number
Q95 **SW** **1/4 - 1/2 Mile** **Lower**	**WA WELLS**	**WALOG2000291094**

Database:	Ecology Well Logs	Well Log ID:	381384
Well Tag #:	AGH634	Project Tag #:	Not Reported
Notice of Intent #:	W155767	Date Received:	05-DEC-03
Diameter (in):	6	Casing Depth (ft):	113
Well completion:	05-JUL-02	Well Owner:	TOM COBO
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

	Database	EDR ID Number
Q96 **SW** **1/4 - 1/2 Mile** **Lower**	**WA WELLS**	**WALOG2000025373**

Database:	Ecology Well Logs	Well Log ID:	28878
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	120

Well completion:	30-SEP-87	Well Owner:	ROBERT MCBURNRY
Well Type:	Water	Driller #:	0326
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Q97
SW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000022480**

Database:	Ecology Well Logs	Well Log ID:	25608
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	13-OCT-77
Diameter (in):	6	Casing Depth (ft):	120
Well completion:	16-SEP-77	Well Owner:	JAMES RYAN
Well Type:	Water	Driller #:	0067
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Q98
SW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000023749**

Database:	Ecology Well Logs	Well Log ID:	26991
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	02-DEC-85
Diameter (in):	6	Casing Depth (ft):	138
Well completion:	19-SEP-85	Well Owner:	LEROY OVERLAND
Well Type:	Water	Driller #:	0419
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

N99
WNW
1/4 - 1/2 Mile
Lower

WA WELLS **WA1200000025660**

Database:	Water Wells	PWS ID:	44520
Source #:	01	Source Name:	WELL #1
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Nisqually
Well Depth:	150	Source Susceptibility:	X
System Name:	LAKE ST CLAIRE WATER	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	23
Total Population Served:	23	Total Connections:	9
PWS Status:	Active	Residential Connection:	9
DOE Well Tag:	Not Reported	Capacity (gpm):	0
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

R100
WNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000290270**

Database:	Ecology Well Logs	Well Log ID:	380520
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A046674	Date Received:	30-MAR-04
Diameter (in):	Not Reported	Casing Depth (ft):	110
Well completion:	16-MAR-04	Well Owner:	MARK KELLOGG
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

R101
WNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000028223**

Database:	Ecology Well Logs	Well Log ID:	32314
Well Tag #:	ACQ571	Project Tag #:	Not Reported
Notice of Intent #:	W071284	Date Received:	07-MAY-98
Diameter (in):	6	Casing Depth (ft):	68
Well completion:	30-APR-98	Well Owner:	BERRY KRUEGER
Well Type:	Water	Driller #:	2341
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

R102
WNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000023490**

Database:	Ecology Well Logs	Well Log ID:	26707
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	10-JAN-80
Diameter (in):	6	Casing Depth (ft):	117
Well completion:	17-OCT-79	Well Owner:	KRIS CARSON
Well Type:	Water	Driller #:	0994
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

R103
WNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000773121**

Database:	Ecology Well Logs	Well Log ID:	1648180
Well Tag #:	Not Reported	Project Tag #:	1
Notice of Intent #:	SE64158	Date Received:	28-NOV-17
Diameter (in):	9	Casing Depth (ft):	36.5

Well completion:	14-NOV-17	Well Owner:	Golden
Well Type:	Resource Protection	Driller #:	3119
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

R104
WNW
1/4 - 1/2 Mile
Lower

WA WELLS **WALOG2000773122**

Database:	Ecology Well Logs	Well Log ID:	1648181
Well Tag #:	Not Reported	Project Tag #:	1
Notice of Intent #:	AE46088	Date Received:	28-NOV-17
Diameter (in):	9	Casing Depth (ft):	36.5
Well completion:	14-NOV-17	Well Owner:	Golden
Well Type:	Decommisioning	Driller #:	3119
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Dry Hole	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

105
South
1/2 - 1 Mile
Higher

FED USGS **USGS40001239250**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-05F01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19780630
Well Depth:	180	Well Depth Units:	ft
Well Hole Depth:	182	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1990-07-24
Feet below surface:	146.63	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1988-06-23	Feet below surface:	147.72
Feet to sea level:	Not Reported	Note:	Not Reported

106
NW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239914**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31H01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported

Aquifer Type:	Not Reported	Construction Date:	19750205
Well Depth:	101	Well Depth Units:	ft
Well Hole Depth:	101	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1990-07-25
Feet below surface:	69.22	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1990-07-25	Feet below surface:	69.22
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1988-05-11	Feet below surface:	70.33
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1988-05-11	Feet below surface:	70.33
Feet to sea level:	Not Reported	Note:	Not Reported

107
NE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000028518**

Database:	Ecology Well Logs	Well Log ID:	32633
Well Tag #:	AEG584	Project Tag #:	Not Reported
Notice of Intent #:	W089420	Date Received:	04-MAY-98
Diameter (in):	6	Casing Depth (ft):	205
Well completion:	21-APR-98	Well Owner:	ED & GAIL LEMOINE
Well Type:	Water	Driller #:	0067
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

S108
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239357**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06A03	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19850918	Well Depth:	138
Well Depth Units:	ft	Well Hole Depth:	138
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1985-09-19
Feet below surface:	91	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database | EDR ID Number

T109
North
1/2 - 1 Mile
Lower

FED USGS **USGS40001240041**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32NW1	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19800801	Well Depth:	88
Well Depth Units:	ft	Well Hole Depth:	88
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1980-08-01
Feet below surface:	58	Feet to sea level:	Not Reported
Note:	Not Reported		

T110
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000022010**

Database:	Ecology Well Logs	Well Log ID:	25079
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	16-JAN-81
Diameter (in):	6	Casing Depth (ft):	88
Well completion:	Not Reported	Well Owner:	HAROLD LOWE
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

T111
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000022009**

Database:	Ecology Well Logs	Well Log ID:	25078
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	01-MAY-85
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	Not Reported	Well Owner:	HAROLD LOWE
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

112
East
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000366297**

Database:	Ecology Well Logs	Well Log ID:	479495
Well Tag #:	AEN610	Project Tag #:	Not Reported
Notice of Intent #:	A104090	Date Received:	11-MAY-07
Diameter (in):	2	Casing Depth (ft):	18
Well completion:	23-APR-07	Well Owner:	COLLEGE WY PLAZA LLC
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

S113
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239387**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06A01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19870930
Well Depth:	120	Well Depth Units:	ft
Well Hole Depth:	120	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1987-09-30
Feet below surface:	87	Feet to sea level:	Not Reported
Note:	Not Reported		

S114
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239358**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06A02	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19770912	Well Depth:	120
Well Depth Units:	ft	Well Hole Depth:	121
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1977-09-16
Feet below surface:	91	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

S115
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239346**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06A04	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19811011	Well Depth:	116
Well Depth Units:	ft	Well Hole Depth:	116
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1988-10-11
Feet below surface:	88	Feet to sea level:	Not Reported
Note:	Not Reported		

S116
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239347**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06A05	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19890607	Well Depth:	59.67
Well Depth Units:	ft	Well Hole Depth:	61
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1989-06-08
Feet below surface:	38	Feet to sea level:	Not Reported
Note:	Not Reported		

117
WSW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239505**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31Q02	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19920430	Well Depth:	125

Well Depth Units:	ft	Well Hole Depth:	125
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1992-04-30
Feet below surface:	66	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1992-04-30	Feet below surface:	66
Feet to sea level:	Not Reported	Note:	Not Reported

U118
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000024394**

Database:	Ecology Well Logs	Well Log ID:	27737
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	05-OCT-79
Diameter (in):	6	Casing Depth (ft):	174
Well completion:	Not Reported	Well Owner:	MR & MRS LAWRENCE DUDLEY
Well Type:	Water	Driller #:	0339
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

U119
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000025701**

Database:	Ecology Well Logs	Well Log ID:	29240
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	23-MAY-85
Diameter (in):	6	Casing Depth (ft):	203
Well completion:	Not Reported	Well Owner:	RUTH GALLOP
Well Type:	Water	Driller #:	0339
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

U120
South
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000024055**

Database:	Ecology Well Logs	Well Log ID:	27340
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	144
Well completion:	Not Reported	Well Owner:	MARTIN OVERHAUSER
Well Type:	Water	Driller #:	0359
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

V121
West
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000025324**

Database:	Ecology Well Logs	Well Log ID:	28824
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	91
Well completion:	25-SEP-68	Well Owner:	ROBERT DOTSON
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

V122
West
1/2 - 1 Mile
Lower

FED USGS **USGS40001239613**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31Q01D1	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19771001
Well Depth:	373	Well Depth Units:	ft
Well Hole Depth:	373	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1990-07-24
Feet below surface:	115.93	Feet to sea level:	Not Reported
Note:	Other conditions existed that would affect the measured water level.		

Level reading date:	1990-07-24	Feet below surface:	115.93
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

Level reading date:	1988-05-13	Feet below surface:	117.11
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1988-05-13	Feet below surface:	117.11
Feet to sea level:	Not Reported	Note:	Not Reported

V123
West
1/2 - 1 Mile
Lower

FED USGS **USGS40001239612**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31Q01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported

Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19760826
Well Depth:	124	Well Depth Units:	ft
Well Hole Depth:	126	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1976-08-26
Feet below surface:	104	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1976-08-26	Feet below surface:	104
Feet to sea level:	Not Reported	Note:	Not Reported

W124
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001240011**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32D05	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19810217
Well Depth:	98	Well Depth Units:	ft
Well Hole Depth:	98	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	3	Level reading date:	1990-07-25
Feet below surface:	74.90	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1988-06-30	Feet below surface:	77.27
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.

Level reading date:	1988-06-28	Feet below surface:	77.27
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.

U125
South
1/2 - 1 Mile
Higher

FED USGS **USGS40001239169**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-05F02	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19770701	Well Depth:	203
Well Depth Units:	ft	Well Hole Depth:	216
Well Hole Depth Units:	ft		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

X126
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001240104**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32D04	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19010101
Well Depth:	62	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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X127
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001240105**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32D04D1	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19801001
Well Depth:	76	Well Depth Units:	ft
Well Hole Depth:	76	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1990-07-24
Feet below surface:	48.64	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1988-06-29	Feet below surface:	51.08
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

W128
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001240012**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32D09	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19870801
Well Depth:	93	Well Depth Units:	ft
Well Hole Depth:	93	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1990-07-24
Feet below surface:	46.55	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1988-07-22	Feet below surface:	59.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-06-07	Feet below surface:	57.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-05-11	Feet below surface:	57.91
Feet to sea level:	Not Reported	Note:	Not Reported

Y129
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000026849**

Database:	Ecology Well Logs	Well Log ID:	30591
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	101
Well completion:	05-FEB-75	Well Owner:	WILLIAM PETERSON
Well Type:	Water	Driller #:	0157
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Y130
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000026235**

Database:	Ecology Well Logs	Well Log ID:	29863
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	21-AUG-74
Diameter (in):	6	Casing Depth (ft):	119
Well completion:	31-AUG-68	Well Owner:	THOMPSON LAME WATER ASSOC.
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Y131
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000028038**

Database:	Ecology Well Logs	Well Log ID:	32093
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	W104282	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	198
Well completion:	03-JUN-98	Well Owner:	RICHARD PEUAN
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Y132
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000021972**

Database:	Ecology Well Logs	Well Log ID:	25038
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	210
Well completion:	Not Reported	Well Owner:	HANK BENSON
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Y133
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000024559**

Database:	Ecology Well Logs	Well Log ID:	27925
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	03-MAR-93	Well Owner:	NYLANDER
Well Type:	Water	Driller #:	0067
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Y134
NW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239933**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31H02	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19680831
Well Depth:	119	Well Depth Units:	ft
Well Hole Depth:	119	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	4	Level reading date:	1990-07-25
Feet below surface:	73.26	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1990-07-25	Feet below surface:	73.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-06-30	Feet below surface:	75.45
Feet to sea level:	Not Reported		

Note:	Other conditions existed that would affect the measured water level.		
Level reading date:	1988-06-30	Feet below surface:	75.45
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

135
SSW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000028565**

Database:	Ecology Well Logs	Well Log ID:	32683
Well Tag #:	AEJ409	Project Tag #:	Not Reported
Notice of Intent #:	W092641	Date Received:	19-OCT-98
Diameter (in):	6	Casing Depth (ft):	120
Well completion:	15-OCT-98	Well Owner:	TIM SPOONER
Well Type:	Water	Driller #:	1210
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Z136
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40001239935**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32H02	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19740506
Well Depth:	216	Well Depth Units:	ft
Well Hole Depth:	219	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	50	Level reading date:	1991-04-30
Feet below surface:	178.12	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1991-04-30	Feet below surface:	178.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-03-28	Feet below surface:	173.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-03-28	Feet below surface:	173.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-26	Feet below surface:	173.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-26	Feet below surface:	173.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-01-03	Feet below surface:	174.59
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1991-01-03	Feet below surface:	174.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-10-18	Feet below surface:	179.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-10-18	Feet below surface:	179.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-09-06	Feet below surface:	174.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-09-06	Feet below surface:	174.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-07-24	Feet below surface:	174.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-07-24	Feet below surface:	174.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-06-18	Feet below surface:	175.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-06-18	Feet below surface:	175.45
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-05-16	Feet below surface:	174.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-05-16	Feet below surface:	174.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-04-17	Feet below surface:	174.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-04-17	Feet below surface:	174.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-03-13	Feet below surface:	174.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-03-13	Feet below surface:	174.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-02-14	Feet below surface:	175.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-02-14	Feet below surface:	175.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-01-18	Feet below surface:	176.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-01-18	Feet below surface:	176.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-12-20	Feet below surface:	177.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-12-20	Feet below surface:	177.09
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1989-11-17	Feet below surface:	178.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-11-17	Feet below surface:	178.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-10-18	Feet below surface:	177.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-10-18	Feet below surface:	177.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-09-20	Feet below surface:	176.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-09-20	Feet below surface:	176.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-08-17	Feet below surface:	178.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-08-17	Feet below surface:	178.99
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-06-08	Feet below surface:	176.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-06-08	Feet below surface:	176.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-05-09	Feet below surface:	175.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-05-09	Feet below surface:	175.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-04-14	Feet below surface:	176.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-04-14	Feet below surface:	176.02
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-03-14	Feet below surface:	176.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-03-14	Feet below surface:	176.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-02-14	Feet below surface:	176.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-02-14	Feet below surface:	176.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-01-06	Feet below surface:	177.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-01-06	Feet below surface:	177.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-05-11	Feet below surface:	175.48
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1988-05-11	Feet below surface:	175.48
Feet to sea level:	Not Reported	Note:	Not Reported

137
SSW **FED USGS** **USGS40001239226**
1/2 - 1 Mile
Higher

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-05E01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Unclassified Overburden
Aquifer Type:	Not Reported	Construction Date:	19830131
Well Depth:	218	Well Depth Units:	ft
Well Hole Depth:	218	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1990-07-25
Feet below surface:	170.65	Feet to sea level:	Not Reported
Note:	Other conditions existed that would affect the measured water level.		

Level reading date:	1988-06-30	Feet below surface:	171.93
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

138
SSE **WA WELLS** **WA1200000000997**
1/2 - 1 Mile
Higher

Database:	Water Wells	PWS ID:	05248
Source #:	01	Source Name:	Well 01
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	06/01/1990	Water Resource Inventory Area:	Nisqually
Well Depth:	190	Source Susceptibility:	Not Reported
System Name:	OLY.-YELM RD. FIRE SUBSTATION #32		
Public Water System Group:	B	System Type:	GRPB
Full Time Res Pop:	0	Total Population Served:	4
Total Connections:	4	PWS Status:	Inactive
Residential Connection:	0	DOE Well Tag:	Not Reported
Capacity (gpm):	30	Influenced by Droughts:	Not Reported
Influenced by Flooding:	Not Reported	Influenced by Surface Water:	U

139
ENE **FED USGS** **USGS40001239893**
1/2 - 1 Mile
Higher

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32H01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported

Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19571023
Well Depth:	189	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	2	Level reading date:	1957-10-23
Feet below surface:	171	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1957-10-23	Feet below surface:	171
Feet to sea level:	Not Reported	Note:	Not Reported

140
West
1/2 - 1 Mile
Lower

WA WELLS **WA1200000012406**

Database:	Water Wells	PWS ID:	05601
Source #:	01	Source Name:	WELL #1
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	06/10/2010
Date Source Inactive:	06/10/2010	Water Resource Inventory Area:	Deschutes
Well Depth:	370	Source Susceptibility:	H
System Name:	THOM THUM	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	20
Total Population Served:	20	Total Connections:	8
PWS Status:	Inactive	Residential Connection:	8
DOE Well Tag:	Not Reported	Capacity (gpm):	25
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

AA141
North
1/2 - 1 Mile
Lower

FED USGS **USGS40001240139**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32C01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19600101
Well Depth:	79	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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AB142
SW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000022940**

Database:	Ecology Well Logs	Well Log ID:	26101
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	215

Well completion:	14-NOV-83	Well Owner:	JOHN COX
Well Type:	Water	Driller #:	0419
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AB143
SW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000019354**

Database:	Ecology Well Logs	Well Log ID:	22101
Well Tag #:	ACB101	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	05-SEP-78
Diameter (in):	6	Casing Depth (ft):	249
Well completion:	Not Reported	Well Owner:	BILL JACOBS
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AA144
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000248614**

Database:	Ecology Well Logs	Well Log ID:	333235
Well Tag #:	AFS091	Project Tag #:	Not Reported
Notice of Intent #:	W137287	Date Received:	26-MAR-02
Diameter (in):	6	Casing Depth (ft):	119
Well completion:	05-SEP-01	Well Owner:	BILL THORNTON
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AA145
North
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000358556**

Database:	Ecology Well Logs	Well Log ID:	468116
Well Tag #:	APB979	Project Tag #:	Not Reported
Notice of Intent #:	W209215	Date Received:	21-FEB-07
Diameter (in):	6	Casing Depth (ft):	182
Well completion:	07-FEB-07	Well Owner:	ANDREW LENCH
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

Z146
NE
1/2 - 1 Mile
Higher

WA WELLS **WA1200000030312**

Database:	Water Wells	PWS ID:	66578
Source #:	08	Source Name:	EVERGRN PRAIR WELL NO TAG
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	03/31/1994
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Deschutes
Well Depth:	217	Source Susceptibility:	M
System Name:	PATTISON-500	Public Water System Group:	A
System Type:	Comm	Full Time Res Pop:	4080
Total Population Served:	4091	Total Connections:	1665
PWS Status:	Active	Residential Connection:	1644
DOE Well Tag:	Not Reported	Capacity (gpm):	150
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

147
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40001240013**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31H03	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19840501
Well Depth:	193	Well Depth Units:	ft
Well Hole Depth:	193	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1988-06-24
Feet below surface:	135.84	Feet to sea level:	Not Reported
Note:	Not Reported		

AC148
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001240140**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32D07	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19920128	Well Depth:	136.17
Well Depth Units:	ft	Well Hole Depth:	136.58
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1992-02-05
Feet below surface:	107	Feet to sea level:	Not Reported
Note:	Not Reported		

AC149
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001240141**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32D06	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19910601	Well Depth:	138
Well Depth Units:	ft	Well Hole Depth:	138
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1991-06-01
Feet below surface:	115	Feet to sea level:	Not Reported
Note:	Not Reported		

Z150
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40001239931**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32H03	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19781013	Well Depth:	199
Well Depth Units:	ft	Well Hole Depth:	201
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1978-10-17
Feet below surface:	179	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1978-10-17	Feet below surface:	179
Feet to sea level:	Not Reported	Note:	Not Reported

Z151
NE
1/2 - 1 Mile
Higher

WA WELLS **WA1200000023181**

Database:	Water Wells	PWS ID:	24161
Source #:	01	Source Name:	WELL # 1
Source Status:	Inactive	Source Type:	Ground Water - Well

Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	04/21/1997	Water Resource Inventory Area:	Nisqually
Well Depth:	217	Source Susceptibility:	Not Reported
System Name:	EVERGREEN PRAIRIE	Public Water System Group:	A
System Type:	Comm	Full Time Res Pop:	180
Total Population Served:	180	Total Connections:	72
PWS Status:	Inactive	Residential Connection:	72
DOE Well Tag:	Not Reported	Capacity (gpm):	59
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

Z152
NE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000026144**

Database:	Ecology Well Logs	Well Log ID:	29749
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	199
Well completion:	17-OCT-78	Well Owner:	TED WATTS
Well Type:	Water	Driller #:	0067
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

153
NW
1/2 - 1 Mile
Higher

WA WELLS **WA1200000009748**

Database:	Water Wells	PWS ID:	04450
Source #:	01	Source Name:	WELL #1 AHF182
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Deschutes
Well Depth:	171	Source Susceptibility:	H
System Name:	CLEARWATER	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	10
Total Population Served:	10	Total Connections:	4
PWS Status:	Inactive	Residential Connection:	4
DOE Well Tag:	Not Reported	Capacity (gpm):	30
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

154
North
1/2 - 1 Mile
Higher

FED USGS **USGS40001240177**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32C02	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported

Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19800804
Well Depth:	128	Well Depth Units:	ft
Well Hole Depth:	128	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	2	Level reading date:	1988-06-27
Feet below surface:	115.2	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1980-08-04	Feet below surface:	108
Feet to sea level:	Not Reported	Note:	Not Reported

AC155
NNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000336568**

Database:	Ecology Well Logs	Well Log ID:	436402
Well Tag #:	AFK318	Project Tag #:	Not Reported
Notice of Intent #:	W216804	Date Received:	18-APR-06
Diameter (in):	6	Casing Depth (ft):	121.6
Well completion:	07-SEP-06	Well Owner:	DON AND LINDA BETHKE
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AC156
NNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000480920**

Database:	Ecology Well Logs	Well Log ID:	659870
Well Tag #:	BCS017	Project Tag #:	Not Reported
Notice of Intent #:	WE11284	Date Received:	26-JUL-10
Diameter (in):	6	Casing Depth (ft):	70
Well completion:	28-JUN-10	Well Owner:	Melvin and Judy Miller
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AC157
NNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000480921**

Database:	Ecology Well Logs	Well Log ID:	659872
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE08971	Date Received:	26-JUL-10
Diameter (in):	6	Casing Depth (ft):	76
Well completion:	01-JUN-10	Well Owner:	Melvin and Judy Miller
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AC158
NNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000021982**

Database:	Ecology Well Logs	Well Log ID:	25048
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	8	Casing Depth (ft):	26
Well completion:	26-MAR-60	Well Owner:	HANS THOMSEN
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AC159
NNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000019376**

Database:	Ecology Well Logs	Well Log ID:	22124
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	207703	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	138
Well completion:	03-NOV-92	Well Owner:	BILL PETERSON
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AC160
NNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000026856**

Database:	Ecology Well Logs	Well Log ID:	30598
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	93
Well completion:	Not Reported	Well Owner:	WILLIAM ROMPA
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AC161
NNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000023376**

Database:	Ecology Well Logs	Well Log ID:	26581
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	12-JUL-94
Diameter (in):	6	Casing Depth (ft):	138

Well completion:	Not Reported	Well Owner:	KEN GERSHNER
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AC162
NNW **FED USGS** **USGS40001240159**
1/2 - 1 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32D08	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19921102	Well Depth:	138
Well Depth Units:	ft	Well Hole Depth:	138
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1992-11-03
Feet below surface:	100	Feet to sea level:	Not Reported
Note:	Not Reported		

AC163
NNW **FED USGS** **USGS40001240160**
1/2 - 1 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32D03	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19600101
Well Depth:	97	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1960-01-01
Feet below surface:	64	Feet to sea level:	Not Reported
Note:	Not Reported		

AD164
NW **FED USGS** **USGS40001240076**
1/2 - 1 Mile
Lower

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31A02	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		

HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19920725	Well Depth:	139
Well Depth Units:	ft	Well Hole Depth:	139
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1992-07-26
Feet below surface:	101	Feet to sea level:	Not Reported
Note:	Not Reported		

AE165
West
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000022982**

Database:	Ecology Well Logs	Well Log ID:	26150
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	044725	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	126
Well completion:	30-APR-92	Well Owner:	JOHN FRIEND
Well Type:	Water	Driller #:	1952
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AE166
West
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000028155**

Database:	Ecology Well Logs	Well Log ID:	32220
Well Tag #:	ACN304	Project Tag #:	Not Reported
Notice of Intent #:	W072203	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	117
Well completion:	13-AUG-96	Well Owner:	JOHN FRIEND
Well Type:	Water	Driller #:	1149
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AE167
West
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000380609**

Database:	Ecology Well Logs	Well Log ID:	500974
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A084118	Date Received:	13-NOV-07
Diameter (in):	6	Casing Depth (ft):	90
Well completion:	08-AUG-07	Well Owner:	KEITH BOZEMAN
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
AD168 **NW** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WA1200000008666**

Database:	Water Wells	PWS ID:	26061
Source #:	01	Source Name:	WELL #1 AHF181
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Deschutes
Well Depth:	193	Source Susceptibility:	H
System Name:	LANDRAM	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	10
Total Population Served:	10	Total Connections:	4
PWS Status:	Inactive	Residential Connection:	4
DOE Well Tag:	Not Reported	Capacity (gpm):	35
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

AF169 **SSE** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000020602**

Database:	Ecology Well Logs	Well Log ID:	23521
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	018602	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	100
Well completion:	19-AUG-88	Well Owner:	DEBBIE NEWITT
Well Type:	Water	Driller #:	1496
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AF170 **SSE** **1/2 - 1 Mile** **Higher**	**WA WELLS**	**WALOG2000019604**

Database:	Ecology Well Logs	Well Log ID:	22380
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	219
Well completion:	Not Reported	Well Owner:	BROBERG
Well Type:	Water	Driller #:	0326
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AF171
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000026845**

Database:	Ecology Well Logs	Well Log ID:	30587
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	30-OCT-84
Diameter (in):	6	Casing Depth (ft):	Not Reported
Well completion:	19-MAR-84	Well Owner:	WILLIAM PARNELL
Well Type:	Water	Driller #:	0326
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AF172
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000022713**

Database:	Ecology Well Logs	Well Log ID:	25861
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	30-OCT-84
Diameter (in):	6	Casing Depth (ft):	220
Well completion:	21-JUN-89	Well Owner:	JIM HAGGIVNO
Well Type:	Water	Driller #:	0326
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AG173
SW
1/2 - 1 Mile
Higher

FED USGS **USGS40001239170**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06H02	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19831114	Well Depth:	215
Well Depth Units:	ft	Well Hole Depth:	215
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1983-11-14
Feet below surface:	190	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AH174
WNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000024247**

Database:	Ecology Well Logs	Well Log ID:	27566
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	055188	Date Received:	19-MAY-95
Diameter (in):	6	Casing Depth (ft):	300
Well completion:	25-MAR-95	Well Owner:	MIKE ASCHENBRENNER
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AH175
WNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000019466**

Database:	Ecology Well Logs	Well Log ID:	22225
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	029363	Date Received:	10-MAY-90
Diameter (in):	6	Casing Depth (ft):	78
Well completion:	Not Reported	Well Owner:	BOB ETTINGER
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AH176
WNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000028547**

Database:	Ecology Well Logs	Well Log ID:	32663
Well Tag #:	AEJ214	Project Tag #:	Not Reported
Notice of Intent #:	W110404	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	124
Well completion:	15-OCT-98	Well Owner:	JOE MARCUSON
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AG177
SW
1/2 - 1 Mile
Higher

FED USGS **USGS40001239171**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06H01	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		

HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19780901	Well Depth:	249.17
Well Depth Units:	ft	Well Hole Depth:	250
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1978-09-01
Feet below surface:	64	Feet to sea level:	Not Reported
Note:	Not Reported		

AH178
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239736**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31K01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19750205
Well Depth:	101	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	2	Level reading date:	1975-02-05
Feet below surface:	65	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1975-02-05	Feet below surface:	65
Feet to sea level:	Not Reported	Note:	Not Reported

AH179
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239758**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31J02	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19730224
Well Depth:	79	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	2	Level reading date:	1973-02-24
Feet below surface:	42	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1973-02-24	Feet below surface:	42
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

180
West
1/2 - 1 Mile
Lower

WA WELLS **WA1200000004916**

Database:	Water Wells	PWS ID:	00384
Source #:	01	Source Name:	WELL #1 AHF112
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	09/05/1994
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Nisqually
Well Depth:	125	Source Susceptibility:	X
System Name:	JDF	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	24
Total Population Served:	24	Total Connections:	10
PWS Status:	Active	Residential Connection:	5
DOE Well Tag:	Not Reported	Capacity (gpm):	35
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

AI181
WNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239905**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31G01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19580117
Well Depth:	76	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	2	Level reading date:	1958-01-17
Feet below surface:	66	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1958-01-17	Feet below surface:	66
Feet to sea level:	Not Reported	Note:	Not Reported

AJ182
SW
1/2 - 1 Mile
Lower

WA WELLS **WA1200000031388**

Database:	Water Wells	PWS ID:	84895
Source #:	01	Source Name:	Well 01
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	11/28/1994	Water Resource Inventory Area:	Nisqually
Well Depth:	100	Source Susceptibility:	Not Reported
System Name:	ST CLAIR VISTA	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	8
Total Population Served:	8	Total Connections:	3

PWS Status:	Inactive	Residential Connection:	3
DOE Well Tag:	Not Reported	Capacity (gpm):	Not Reported
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

AJ183
SW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000022772**

Database:	Ecology Well Logs	Well Log ID:	25925
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	10-JAN-80
Diameter (in):	6	Casing Depth (ft):	135
Well completion:	03-JUL-79	Well Owner:	JIM RYAN
Well Type:	Water	Driller #:	0994
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

184
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001240178**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32D01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19600101
Well Depth:	108	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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AK185
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000871416**

Database:	Ecology Well Logs	Well Log ID:	1924268
Well Tag #:	BKP193	Project Tag #:	Not Reported
Notice of Intent #:	WE36834	Date Received:	22-OCT-19
Diameter (in):	6	Casing Depth (ft):	126.5
Well completion:	20-SEP-19	Well Owner:	Casey Thornton
Well Type:	Water	Driller #:	2677
Static Water Level:	99	Flow Rate (gpm):	20
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Air Test	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AK186
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000871436**

Database:	Ecology Well Logs	Well Log ID:	1924288
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE56999	Date Received:	22-OCT-19
Diameter (in):	6	Casing Depth (ft):	99
Well completion:	25-SEP-19	Well Owner:	Casey Thornton
Well Type:	Decommisioning	Driller #:	2677
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AK187
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000303831**

Database:	Ecology Well Logs	Well Log ID:	395620
Well Tag #:	AKH311	Project Tag #:	Not Reported
Notice of Intent #:	W183515	Date Received:	29-DEC-04
Diameter (in):	6	Casing Depth (ft):	142
Well completion:	22-DEC-04	Well Owner:	BRAN CONWELL
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AK188
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000348337**

Database:	Ecology Well Logs	Well Log ID:	454228
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	AE01369	Date Received:	29-SEP-06
Diameter (in):	6	Casing Depth (ft):	201
Well completion:	27-SEP-06	Well Owner:	STEVE HULLMAN
Well Type:	Decommisioning	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AK189
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000026483**

Database:	Ecology Well Logs	Well Log ID:	30168
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	76

Well completion:	Not Reported	Well Owner:	V. WELLS
Well Type:	Water	Driller #:	0193
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AK190
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000271110**

Database:	Ecology Well Logs	Well Log ID:	358940
Well Tag #:	AHL311	Project Tag #:	Not Reported
Notice of Intent #:	W165338	Date Received:	14-MAR-03
Diameter (in):	6	Casing Depth (ft):	158
Well completion:	12-MAR-03	Well Owner:	ACCENT HOMES LLC
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AK191
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000018959**

Database:	Ecology Well Logs	Well Log ID:	21646
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	139
Well completion:	26-JUL-96	Well Owner:	AL GRACE
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AK192
NW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000022511**

Database:	Ecology Well Logs	Well Log ID:	25641
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	17-AUG-78
Diameter (in):	6	Casing Depth (ft):	92
Well completion:	19-JUL-78	Well Owner:	JAMES ZBLEWSKI
Well Type:	Water	Driller #:	0444
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AI193
WNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000294106**

Database:	Ecology Well Logs	Well Log ID:	384565
Well Tag #:	AGH673	Project Tag #:	Not Reported
Notice of Intent #:	W166461	Date Received:	06-FEB-04
Diameter (in):	6	Casing Depth (ft):	137
Well completion:	29-DEC-03	Well Owner:	JOHN HART
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AL194
WSW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000021684**

Database:	Ecology Well Logs	Well Log ID:	24712
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	064769	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	Not Reported
Well completion:	10-NOV-91	Well Owner:	GENE FOX
Well Type:	Water	Driller #:	0067
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AL195
WSW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000019971**

Database:	Ecology Well Logs	Well Log ID:	22799
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	22-SEP-78
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	Not Reported	Well Owner:	CHRIS MUHAM
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AM196
WNW
1/2 - 1 Mile
Lower

WA WELLS **WA1200000001078**

Database:	Water Wells	PWS ID:	13261
Source #:	01	Source Name:	WELL # 1
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970

Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Deschutes
Well Depth:	172	Source Susceptibility:	H
System Name:	MARNEY	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	11
Total Population Served:	11	Total Connections:	4
PWS Status:	Active	Residential Connection:	4
DOE Well Tag:	Not Reported	Capacity (gpm):	35
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

AM197
WNW
1/2 - 1 Mile
Lower

WA WELLS **WA1200000012126**

Database:	Water Wells	PWS ID:	05351
Source #:	01	Source Name:	Well 01
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	02/10/1995	Water Resource Inventory Area:	Deschutes
Well Depth:	0	Source Susceptibility:	Not Reported
System Name:	RACE, GENE	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	8
Total Population Served:	8	Total Connections:	3
PWS Status:	Inactive	Residential Connection:	3
DOE Well Tag:	Not Reported	Capacity (gpm):	24
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

AN198
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40001240138**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-32A01	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19940815	Well Depth:	122
Well Depth Units:	ft	Well Hole Depth:	122
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1994-08-16
Feet below surface:	74	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AO199
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239172**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06G01D1	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19790628	Well Depth:	135
Well Depth Units:	ft	Well Hole Depth:	135
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1979-07-03
Feet below surface:	85	Feet to sea level:	Not Reported
Note:	Not Reported		

AN200
NE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000021510**

Database:	Ecology Well Logs	Well Log ID:	24522
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	W046449	Date Received:	13-SEP-94
Diameter (in):	6	Casing Depth (ft):	122
Well completion:	16-AUG-94	Well Owner:	FRED BAUMANN
Well Type:	Water	Driller #:	1547
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AN201
NE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000756792**

Database:	Ecology Well Logs	Well Log ID:	1625441
Well Tag #:	BKY807	Project Tag #:	Not Reported
Notice of Intent #:	WE26395	Date Received:	13-JUN-17
Diameter (in):	6	Casing Depth (ft):	197
Well completion:	24-APR-17	Well Owner:	Kelvin Kai
Well Type:	Water	Driller #:	2053
Static Water Level:	0	Flow Rate (gpm):	12
Flow Type:	Static Level	PSI:	Not Reported
Well Test:	Air Test	Water Reclamation #:	11

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AP202
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001240227**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-29N01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19710101
Well Depth:	226	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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AQ203
SSW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000026224**

Database:	Ecology Well Logs	Well Log ID:	29849
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	98
Well completion:	26-JAN-68	Well Owner:	THOMAS NEFF
Well Type:	Water	Driller #:	0326
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AQ204
SSW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000024400**

Database:	Ecology Well Logs	Well Log ID:	27744
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	029359	Date Received:	10-MAY-90
Diameter (in):	6	Casing Depth (ft):	102
Well completion:	Not Reported	Well Owner:	MR. CRAIG FORSTER
Well Type:	Water	Driller #:	0832
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AQ205
SSW
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000021487**

Database:	Ecology Well Logs	Well Log ID:	24498
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported

Diameter (in):	6	Casing Depth (ft):	75
Well completion:	23-JUN-72	Well Owner:	FRANK TOBINSKI
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AQ206
SSW
1/2 - 1 Mile
Higher

WA WELLS **WA1200000031390**

Database:	Water Wells	PWS ID:	84896
Source #:	02	Source Name:	WELL # 2
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Emergency	Date Source Effective:	01/01/1970
Date Source Inactive:	11/03/1995	Water Resource Inventory Area:	Nisqually
Well Depth:	424	Source Susceptibility:	Not Reported
System Name:	SUMMER SHORES WATER ASSOCIATION		
Public Water System Group:	A	System Type:	Comm
Full Time Res Pop:	234	Total Population Served:	264
Total Connections:	92	PWS Status:	Inactive
Residential Connection:	81	DOE Well Tag:	Not Reported
Capacity (gpm):	110	Influenced by Droughts:	Not Reported
Influenced by Flooding:	Not Reported	Influenced by Surface Water:	U

AQ207
SSW
1/2 - 1 Mile
Higher

WA WELLS **WA1200000031389**

Database:	Water Wells	PWS ID:	84896
Source #:	01	Source Name:	WELL # 1
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	11/03/1995	Water Resource Inventory Area:	Nisqually
Well Depth:	266	Source Susceptibility:	Not Reported
System Name:	SUMMER SHORES WATER ASSOCIATION		
Public Water System Group:	A	System Type:	Comm
Full Time Res Pop:	234	Total Population Served:	264
Total Connections:	92	PWS Status:	Inactive
Residential Connection:	81	DOE Well Tag:	Not Reported
Capacity (gpm):	135	Influenced by Droughts:	Not Reported
Influenced by Flooding:	Not Reported	Influenced by Surface Water:	U

208
WSW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239359**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06C02	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported

Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19911030	Well Depth:	69.33
Well Depth Units:	ft	Well Hole Depth:	70
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1991-11-10
Feet below surface:	26	Feet to sea level:	Not Reported
Note:	Not Reported		

AQ209
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS40001239035**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06J03	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	105	Well Depth Units:	ft
Well Hole Depth:	105	Well Hole Depth Units:	ft

AQ210
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS40001239036**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06J03D1	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19760127	Well Depth:	425
Well Depth Units:	ft	Well Hole Depth:	427
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1990-07-26
Feet below surface:	64.33	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1988-06-23	Feet below surface:	66.30
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

211
NNW
1/2 - 1 Mile
Lower | **FED USGS** | **USGS40001240206**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31A01	Type:	Well
Description:	Not Reported	HUC:	17110016
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19780719
Well Depth:	92	Well Depth Units:	ft
Well Hole Depth:	92	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	29	Level reading date:	1991-04-30
Feet below surface:	52.77	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1991-03-28	Feet below surface:	55.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-26	Feet below surface:	56.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-01-01	Feet below surface:	58.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-11-15	Feet below surface:	61.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-10-18	Feet below surface:	61.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-09-05	Feet below surface:	60.55
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-07-25	Feet below surface:	59.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-06-18	Feet below surface:	57.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-05-15	Feet below surface:	56.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-04-18	Feet below surface:	56.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-03-13	Feet below surface:	55.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-02-13	Feet below surface:	58.06
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-01-17	Feet below surface:	61.86
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1989-12-20	Feet below surface:	62.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-11-17	Feet below surface:	64.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-10-17	Feet below surface:	63.46
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-09-19	Feet below surface:	63.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-08-17	Feet below surface:	62.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-07-20	Feet below surface:	61.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-06-08	Feet below surface:	60.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-05-09	Feet below surface:	59.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-04-17	Feet below surface:	60.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-04-04	Feet below surface:	60.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-03-14	Feet below surface:	62.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-02-14	Feet below surface:	62.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-01-06	Feet below surface:	63.33
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-12-02	Feet below surface:	63.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-05-11	Feet below surface:	60.72
Feet to sea level:	Not Reported	Note:	Not Reported

212
ENE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000021459**

Database:	Ecology Well Logs	Well Log ID:	24467
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	A001147	Date Received:	Not Reported
Diameter (in):	Not Reported	Casing Depth (ft):	Not Reported
Well completion:	Not Reported	Well Owner:	FRANK GOODWIN
Well Type:	Decommisioning	Driller #:	1099
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

213
WSW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239469**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31P01	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19880513
Well Depth:	106	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	4	Level reading date:	1990-07-23
Feet below surface:	91.01	Feet to sea level:	Not Reported
Note:	Other conditions existed that would affect the measured water level.		

Level reading date:	1990-07-23	Feet below surface:	91.01
Feet to sea level:	Not Reported		
Note:	Other conditions existed that would affect the measured water level.		

Level reading date:	1988-05-13	Feet below surface:	94.42
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1988-05-13	Feet below surface:	94.42
Feet to sea level:	Not Reported	Note:	Not Reported

AO214
SW
1/2 - 1 Mile
Lower

WA WELLS **WA1200000026922**

Database:	Water Wells	PWS ID:	08277
Source #:	01	Source Name:	WELL # 1
Source Status:	Active	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	Not Reported	Water Resource Inventory Area:	Deschutes
Well Depth:	89	Source Susceptibility:	X
System Name:	MARTIN WELL	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	10
Total Population Served:	10	Total Connections:	5
PWS Status:	Active	Residential Connection:	5
DOE Well Tag:	Not Reported	Capacity (gpm):	0
Influenced by Droughts:	N	Influenced by Flooding:	N
Influenced by Surface Water:	U		

AP215
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001240283**

Organization ID:	USGS-WA
Organization Name:	USGS Washington Water Science Center

Monitor Location:	18N/01E-29N04	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19920602
Well Depth:	206	Well Depth Units:	ft
Well Hole Depth:	222	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1992-09-22
Feet below surface:	111	Feet to sea level:	Not Reported
Note:	Not Reported		

AR216
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001240287**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-29N03	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19930806	Well Depth:	180
Well Depth Units:	ft	Well Hole Depth:	180
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1993-08-06
Feet below surface:	120	Feet to sea level:	Not Reported
Note:	Not Reported		

AR217
NNW
1/2 - 1 Mile
Lower

FED USGS **USGS40001240288**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-29N02	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Unclassified Overburden	Aquifer Type:	Not Reported
Construction Date:	19930806	Well Depth:	200
Well Depth Units:	ft	Well Hole Depth:	200
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1993-08-06
Feet below surface:	143	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AR218
NNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000202059**

Database:	Ecology Well Logs	Well Log ID:	273241
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	180
Well completion:	Not Reported	Well Owner:	LYMAN FLEETWOOD
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AR219
NNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000591129**

Database:	Ecology Well Logs	Well Log ID:	877314
Well Tag #:	BIG109	Project Tag #:	Not Reported
Notice of Intent #:	W360965	Date Received:	24-SEP-13
Diameter (in):	6	Casing Depth (ft):	119
Well completion:	10-SEP-13	Well Owner:	Jason Hurley
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AR220
NNW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000202060**

Database:	Ecology Well Logs	Well Log ID:	273242
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	200
Well completion:	Not Reported	Well Owner:	LYMAN FLEETWOOD
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AS221
SW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000025322**

Database:	Ecology Well Logs	Well Log ID:	28822
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	139

Well completion:	30-JAN-79	Well Owner:	ROBERT DOTSON
Well Type:	Water	Driller #:	0526
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AS222
SW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000026058**

Database:	Ecology Well Logs	Well Log ID:	29654
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	8	Casing Depth (ft):	425
Well completion:	27-JAN-76	Well Owner:	SUMMER SHORES WATER CO.
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AS223
SW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000024436**

Database:	Ecology Well Logs	Well Log ID:	27785
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	02-FEB-79
Diameter (in):	6	Casing Depth (ft):	198
Well completion:	29-AUG-78	Well Owner:	MULTA - WAY CONTRACTORS
Well Type:	Water	Driller #:	0526
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

AS224
SW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000020648**

Database:	Ecology Well Logs	Well Log ID:	23572
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	018596	Date Received:	08-AUG-88
Diameter (in):	6	Casing Depth (ft):	140
Well completion:	01-AUG-88	Well Owner:	DENNIS AKEHURST
Well Type:	Water	Driller #:	1496
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

AS225
SW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000024383**

Database:	Ecology Well Logs	Well Log ID:	27719
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	Not Reported
Well completion:	Not Reported	Well Owner:	MORRIS & ANNA KNUTSEN
Well Type:	Water	Driller #:	0388
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

226
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS40001238964**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06J05	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19680116	Well Depth:	98
Well Depth Units:	ft	Well Hole Depth:	98
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1968-01-27
Feet below surface:	81	Feet to sea level:	Not Reported
Note:	Not Reported		

227
WSW
1/2 - 1 Mile
Lower

WA WELLS **WALOG2000025323**

Database:	Ecology Well Logs	Well Log ID:	28823
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	Not Reported	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	226
Well completion:	24-SEP-71	Well Owner:	ROBERT DOTSON
Well Type:	Water	Driller #:	Not Reported
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

228
West
1/2 - 1 Mile
Lower

WA WELLS **WA1200000005147**

Database:	Water Wells	PWS ID:	12981
Source #:	01	Source Name:	WELL # 1
Source Status:	Inactive	Source Type:	Ground Water - Well
Source Use:	Permanent	Date Source Effective:	01/01/1970
Date Source Inactive:	03/20/2001	Water Resource Inventory Area:	Nisqually
Well Depth:	160	Source Susceptibility:	Not Reported
System Name:	TWIN CAPES	Public Water System Group:	B
System Type:	GRPB	Full Time Res Pop:	24
Total Population Served:	24	Total Connections:	10
PWS Status:	Inactive	Residential Connection:	10
DOE Well Tag:	Not Reported	Capacity (gpm):	37
Influenced by Droughts:	Not Reported	Influenced by Flooding:	Not Reported
Influenced by Surface Water:	U		

229
SW
1/2 - 1 Mile
Higher

FED USGS **USGS40001237997**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06J04	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19720623
Well Depth:	75	Well Depth Units:	ft
Well Hole Depth:	75	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	27	Level reading date:	1991-04-30
Feet below surface:	49.08	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1991-03-28	Feet below surface:	49.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-02-26	Feet below surface:	50.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-01-03	Feet below surface:	51.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-11-15	Feet below surface:	51.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-10-18	Feet below surface:	53.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-09-05	Feet below surface:	51.65
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1990-07-24	Feet below surface:	51.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-06-18	Feet below surface:	50.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-05-15	Feet below surface:	50.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-04-17	Feet below surface:	50.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-03-13	Feet below surface:	50.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-02-13	Feet below surface:	50.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1990-01-17	Feet below surface:	51.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-12-20	Feet below surface:	52.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-11-17	Feet below surface:	52.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-10-17	Feet below surface:	52.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-09-18	Feet below surface:	52.66
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-07-20	Feet below surface:	52.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-06-08	Feet below surface:	51.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-05-09	Feet below surface:	51.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-04-04	Feet below surface:	51.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-03-14	Feet below surface:	52.53
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-02-14	Feet below surface:	52.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-01-05	Feet below surface:	53.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-12-02	Feet below surface:	53.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-05-16	Feet below surface:	52.12
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

230
WNW
1/2 - 1 Mile
Higher

FED USGS **USGS40001239878**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	18N/01E-31F03	Type:	Well
Description:	GWSI DATABASE AUGMENTATION SITE		
HUC:	17110019	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Not Reported
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19911001	Well Depth:	214
Well Depth Units:	ft	Well Hole Depth:	219
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1991-10-01
Feet below surface:	155	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1991-10-01	Feet below surface:	155
Feet to sea level:	Not Reported	Note:	Not Reported

231
SSE
1/2 - 1 Mile
Higher

WA WELLS **WALOG2000024253**

Database:	Ecology Well Logs	Well Log ID:	27572
Well Tag #:	Not Reported	Project Tag #:	Not Reported
Notice of Intent #:	W046476	Date Received:	Not Reported
Diameter (in):	6	Casing Depth (ft):	101
Well completion:	Not Reported	Well Owner:	MIKE BELLS
Well Type:	Water	Driller #:	0243
Static Water Level:	Not Reported	Flow Rate (gpm):	Not Reported
Flow Type:	Not Reported	PSI:	Not Reported
Well Test:	Not Reported	Water Reclamation #:	11

232
WSW
1/2 - 1 Mile
Lower

FED USGS **USGS40001239257**

Organization ID:	USGS-WA		
Organization Name:	USGS Washington Water Science Center		
Monitor Location:	17N/01E-06F02	Type:	Well
Description:	Not Reported	HUC:	17110019
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19600101
Well Depth:	60	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for THURSTON County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for THURSTON COUNTY, WA

Number of sites tested: 38

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.584 pCi/L	97%	3%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.171 pCi/L	86%	14%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Ecology
Telephone: 360-407-6121

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Wells
Source: Department of Health
Telephone: 360-236-3148
Group A and B well locations.

Water Well Listing
Source: Public Utility District
Telephone: 206-779-7656
A listing of water well locations in Kitsap County.

Ecology Well Logs
Source: Department of Ecology
Telephone: 360-407-7294
Point geodatabase with a record for each Ecology well report. Points are located by quarter quarter section centroid. Points contain all well report types including water wells, resource protection wells, and decommissioned wells.

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Listing
Source: Department of Natural Resources
Telephone: 360-902-1450
Locations that represent oil and gas test well sites in Washington State from 1890 to present.

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

APPENDIX C
Selected Historical Research Documents

Medicine River Ranch Property

10747 TODTKARLE RD SE

Olympia, WA 98513

Inquiry Number: 7415454.11

August 11, 2023

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

08/11/23

Site Name:

Medicine River Ranch Property
10747 TODTKARLE RD SE
Olympia, WA 98513
EDR Inquiry # 7415454.11

Client Name:

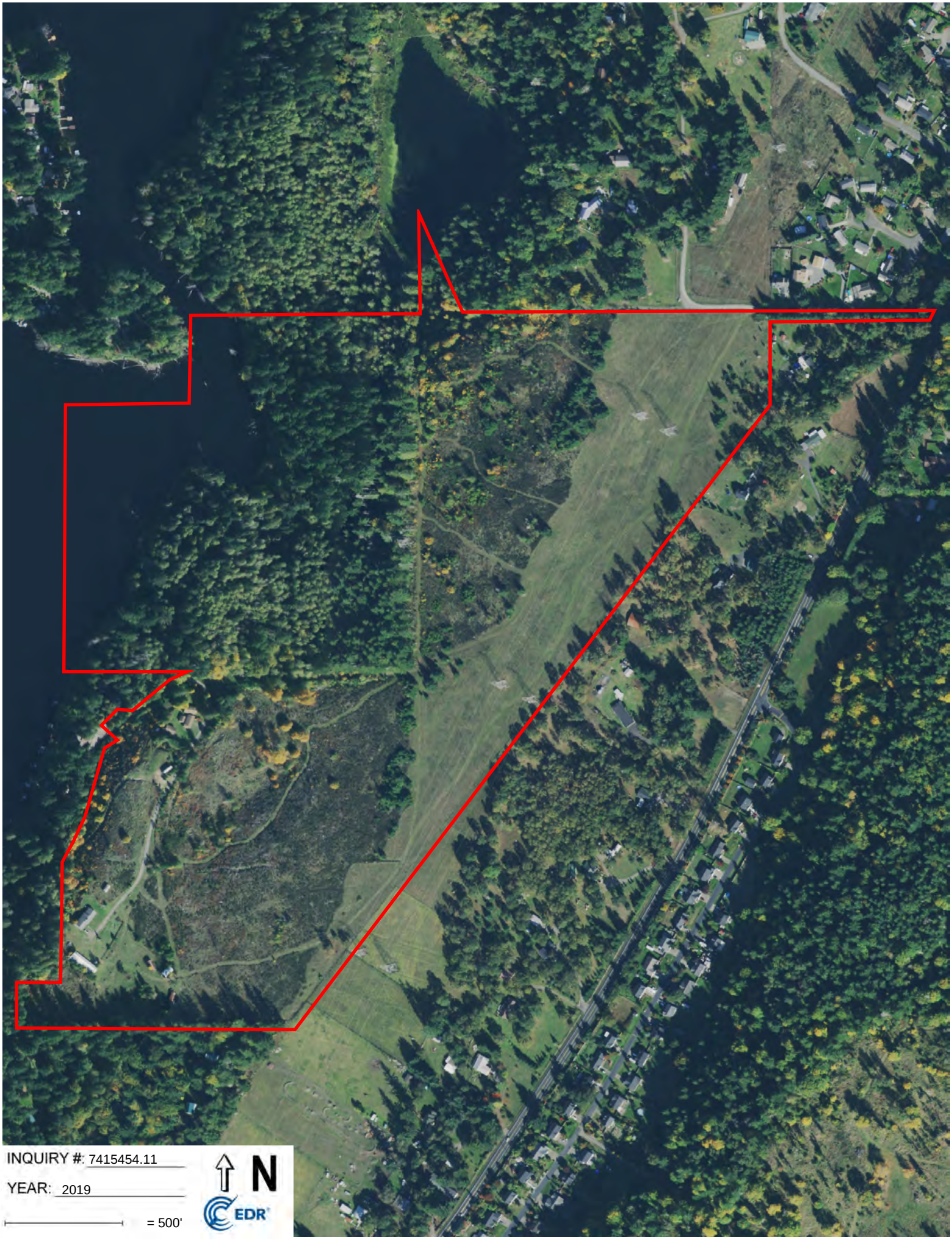
GeoEngineers, Inc.
600 Stewart Street
Seattle, WA 98103
Contact: Jessica A Robertson

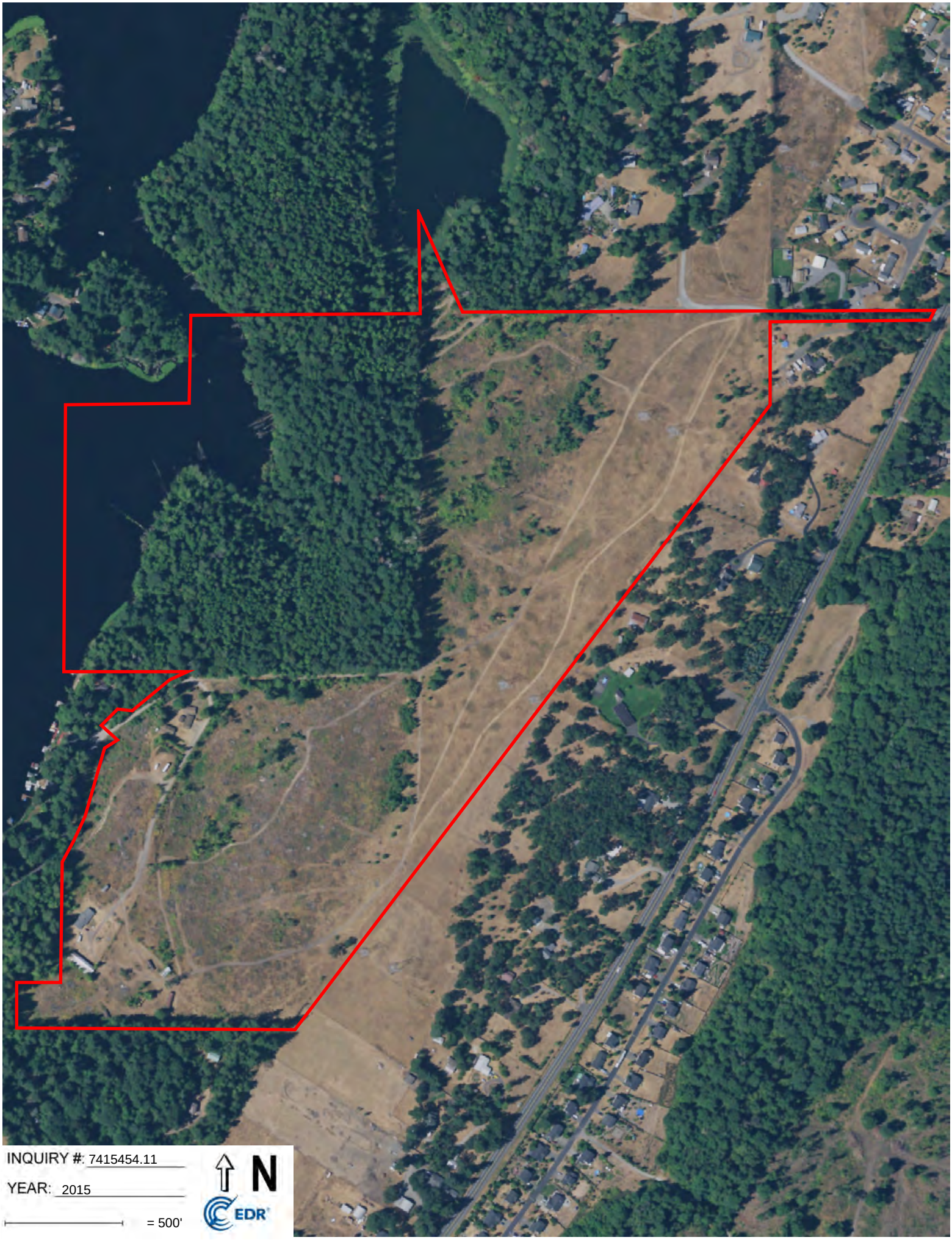
Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

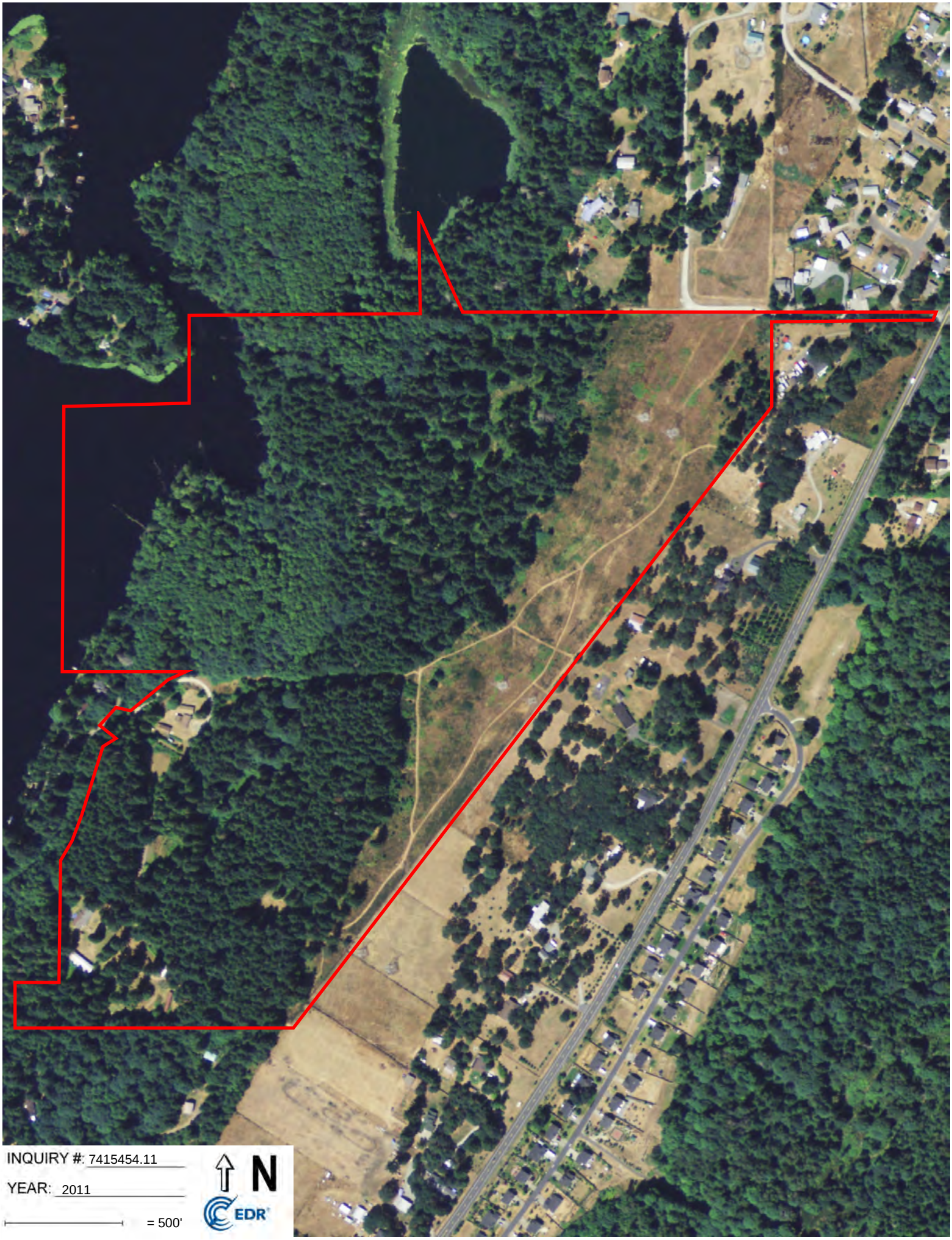
Search Results:

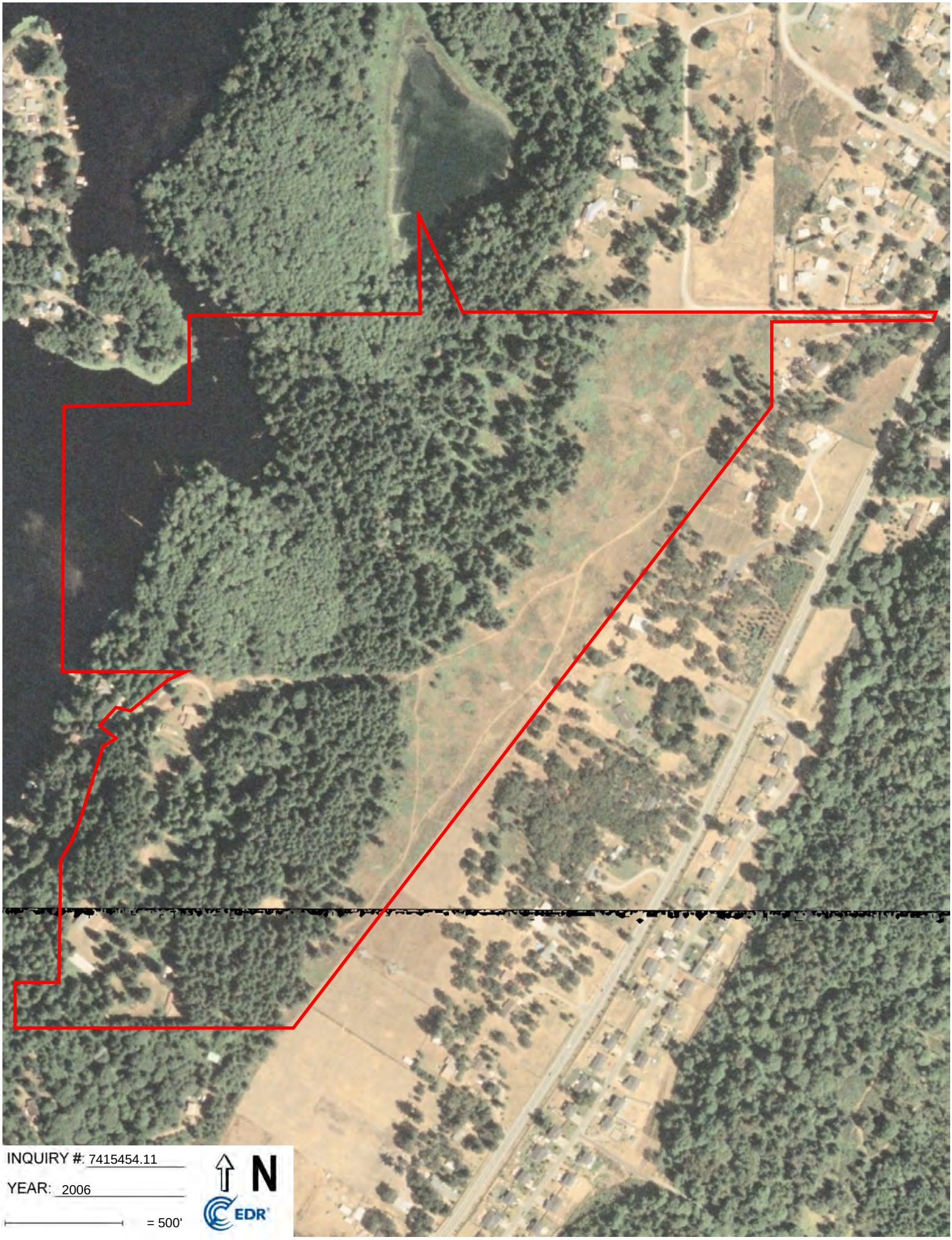
Year	*Scale*	*Details*	*Source*
2019	1"=500'	Flight Year: 2019	USDA/NAIP
2015	1"=500'	Flight Year: 2015	USDA/NAIP
2011	1"=500'	Flight Year: 2011	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1990	1"=500'	Acquisition Date: June 21, 1990	USGS/DOQQ
1981	1"=500'	Flight Date: July 26, 1981	USDA
1975	1"=500'	Flight Date: September 19, 1975	USGS
1968	1"=500'	Flight Date: September 02, 1968	USGS
1957	1"=500'	Flight Date: May 30, 1957	USGS
1954	1"=500'	Flight Date: May 16, 1954	USDA
1941	1"=500'	Flight Date: July 10, 1941	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.


INQUIRY #: 7415454.11
YEAR: 2019
= 500'
N
EDR


INQUIRY #: 7415454.11
YEAR: 2015
= 500'
N
EDR


INQUIRY #: 7415454.11
YEAR: 2011
= 500'
N
EDR


INQUIRY #: 7415454.11
YEAR: 2006
= 500'
N
EDR

INQUIRY #: 7415454.11

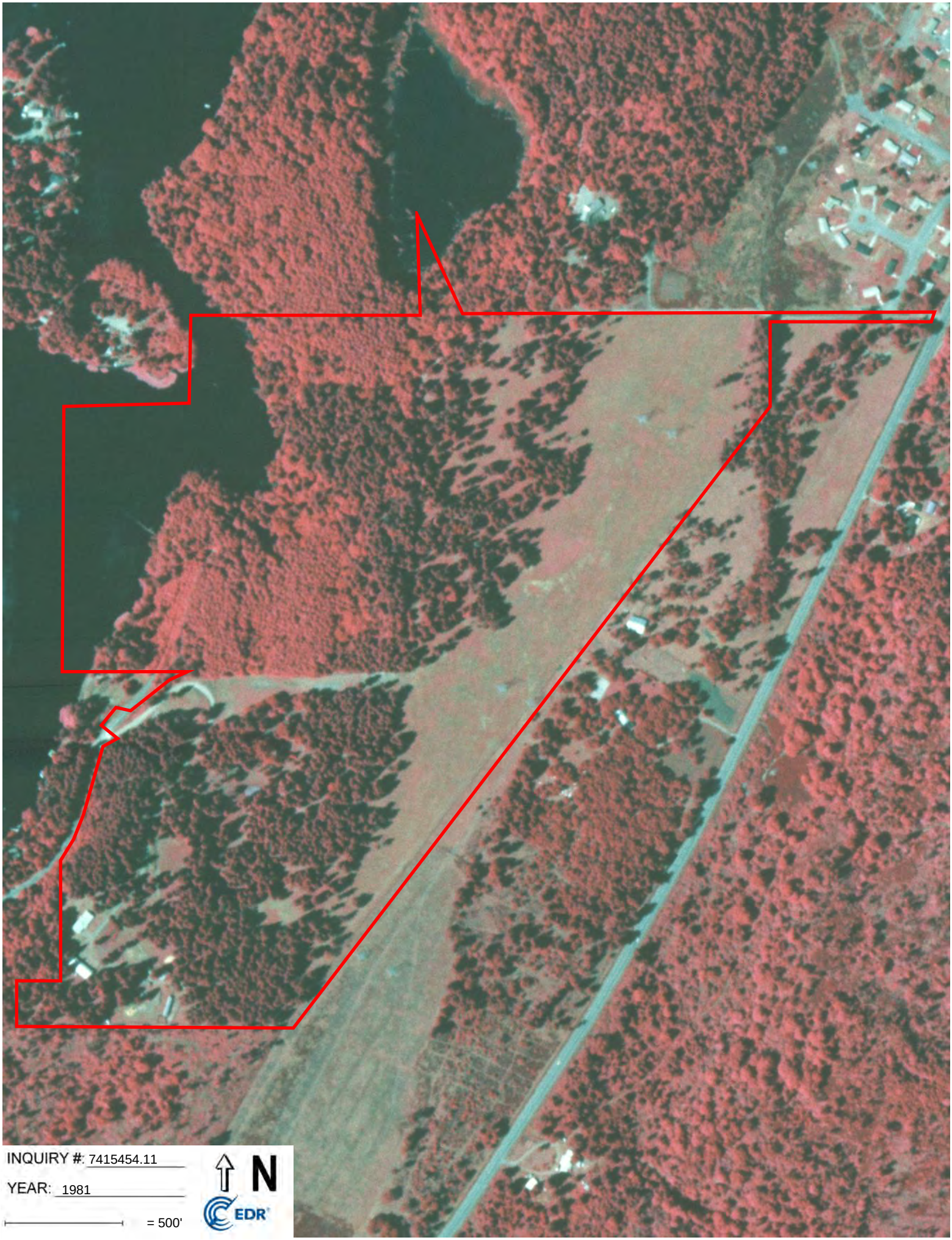
YEAR: 1990

= 500'

N

EDR

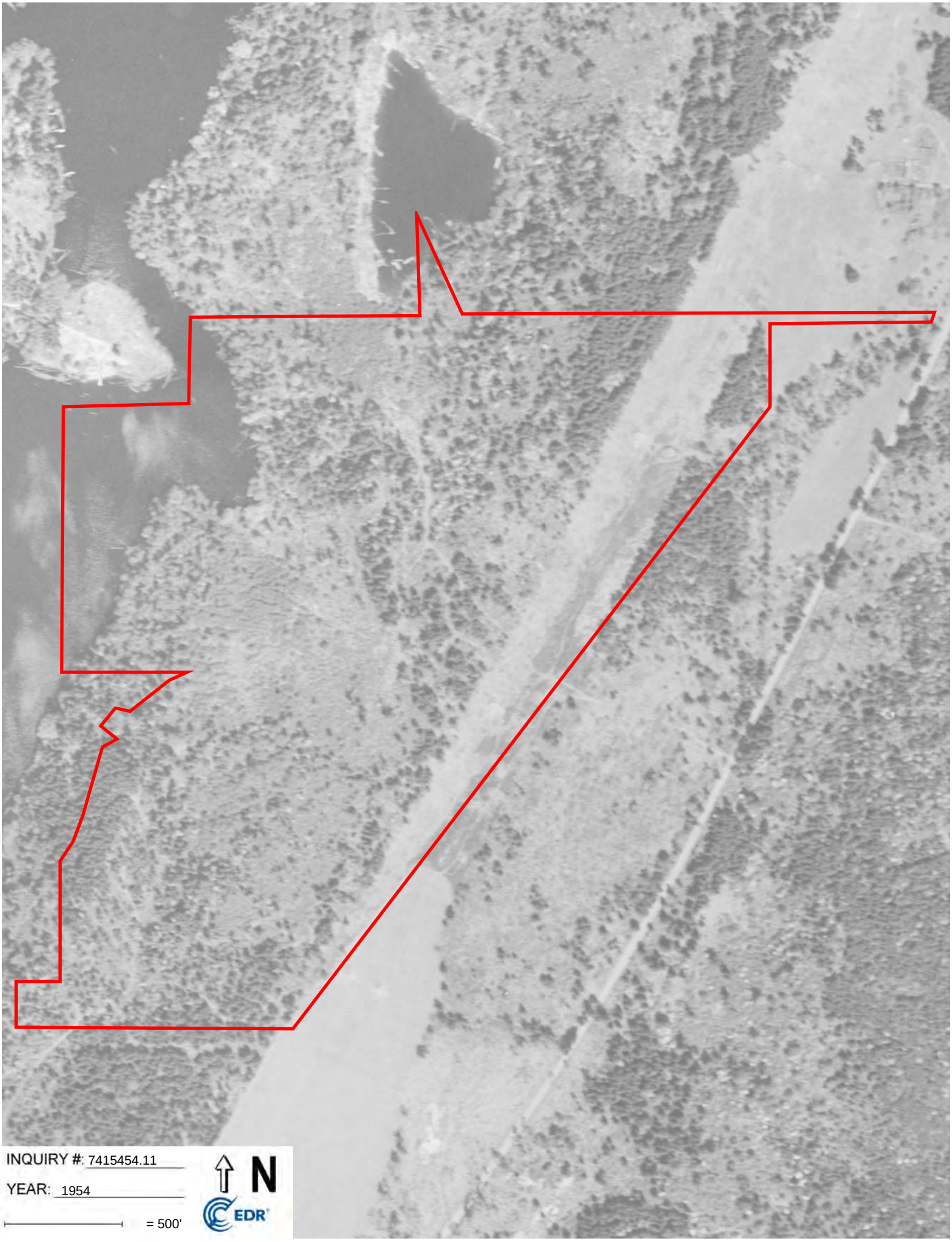
Subject boundary not shown because it exceeds image extent or image is not georeferenced.


INQUIRY #: 7415454.11
YEAR: 1981
= 500'
N
EDR


INQUIRY #: 7415454.11
YEAR: 1975
= 500'
N
EDR


INQUIRY #: 7415454.11
YEAR: 1968
= 500'
N
EDR


INQUIRY #: 7415454.11
YEAR: 1957
= 500'
N
EDR



INQUIRY #: 7415454.11

YEAR: 1954

= 500'

N

EDR


INQUIRY #: 7415454.11
YEAR: 1941
= 500'
N
EDR

Medicine River Ranch Property
10747 TODTKARLE RD SE
Olympia, WA 98513

Inquiry Number: 7415454.3
August 11, 2023

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

08/11/23

Site Name:

Medicine River Ranch Property
10747 TODTKARLE RD SE
Olympia, WA 98513
EDR Inquiry # 7415454.3

Client Name:

GeoEngineers, Inc.
600 Stewart Street
Seattle, WA 98103
Contact: Jessica A Robertson

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by GeoEngineers, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 82E0-4B77-BB09

PO # 0277-056-00

Project Phase I ESA

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 82E0-4B77-BB09

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

GeoEngineers, Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Medicine River Ranch Property
10747 TODTKARLE RD SE
Olympia, WA 98513

Inquiry Number: 7415454.4
August 11, 2023

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

08/11/23

Site Name:

Medicine River Ranch Property
10747 TODTKARLE RD SE
Olympia, WA 98513
EDR Inquiry # 7415454.4

Client Name:

GeoEngineers, Inc.
600 Stewart Street
Seattle, WA 98103
Contact: Jessica A Robertson

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by GeoEngineers, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# 0277-056-00
Project: Phase I ESA

Coordinates:

Latitude:	46.998972 46° 59' 56" North
Longitude:	-122.710406 -122° 42' 37" West
UTM Zone:	Zone 10 North
UTM X Meters:	522016.97
UTM Y Meters:	5205090.56
Elevation:	164.87' above sea level

Maps Provided:

2020	1968
2017	1959
2014, 2013	1948
1997	1944
1994, 1995	1916
1986	
1981	
1973	

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2020 Source Sheets

Tenalquot Prairie
2020
7.5-minute, 24000

Nisqually
2020
7.5-minute, 24000

2017 Source Sheets

Tenalquot Prairie
2017
7.5-minute, 24000

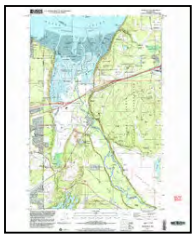
Nisqually
2017
7.5-minute, 24000

2014, 2013 Source Sheets

Nisqually
2014
7.5-minute, 24000

Tenalquot Prairie
2013
7.5-minute, 24000

1997 Source Sheets

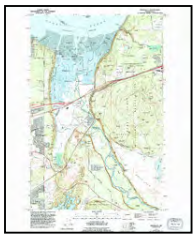


Nisqually
1997
7.5-minute, 24000
Aerial Photo Revised 1997

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

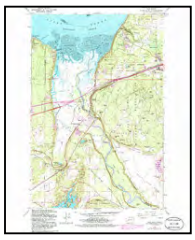
1994, 1995 Source Sheets



Nisqually
1994
7.5-minute, 24000
Aerial Photo Revised 1990

Tenalquot Prairie
1995
7.5-minute, 24000
Aerial Photo Revised 1990

1986 Source Sheets



Nisqually
1986
7.5-minute, 24000
Aerial Photo Revised 1978

1981 Source Sheets

Nisqually
1981
7.5-minute, 24000
Aerial Photo Revised 1978

1973 Source Sheets

Nisqually
1973
7.5-minute, 24000
Aerial Photo Revised 1973

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1968 Source Sheets

Nisqually
1968
7.5-minute, 24000
Aerial Photo Revised 1968

Tenalquot Prairie
1968
7.5-minute, 24000
Aerial Photo Revised 1968

Weir Prairie
1968
7.5-minute, 24000
Aerial Photo Revised 1968

1959 Source Sheets

Nisqually
1959
7.5-minute, 24000
Aerial Photo Revised 1947

Weir Prairie
1959
7.5-minute, 24000
Aerial Photo Revised 1957

1948 Source Sheets

Nisqually
1948
7.5-minute, 24000
Aerial Photo Revised 1947

1944 Source Sheets

ANDERSON ISLAND
1944
15-minute, 50000

YELM
1944
15-minute, 50000

Topo Sheet Key

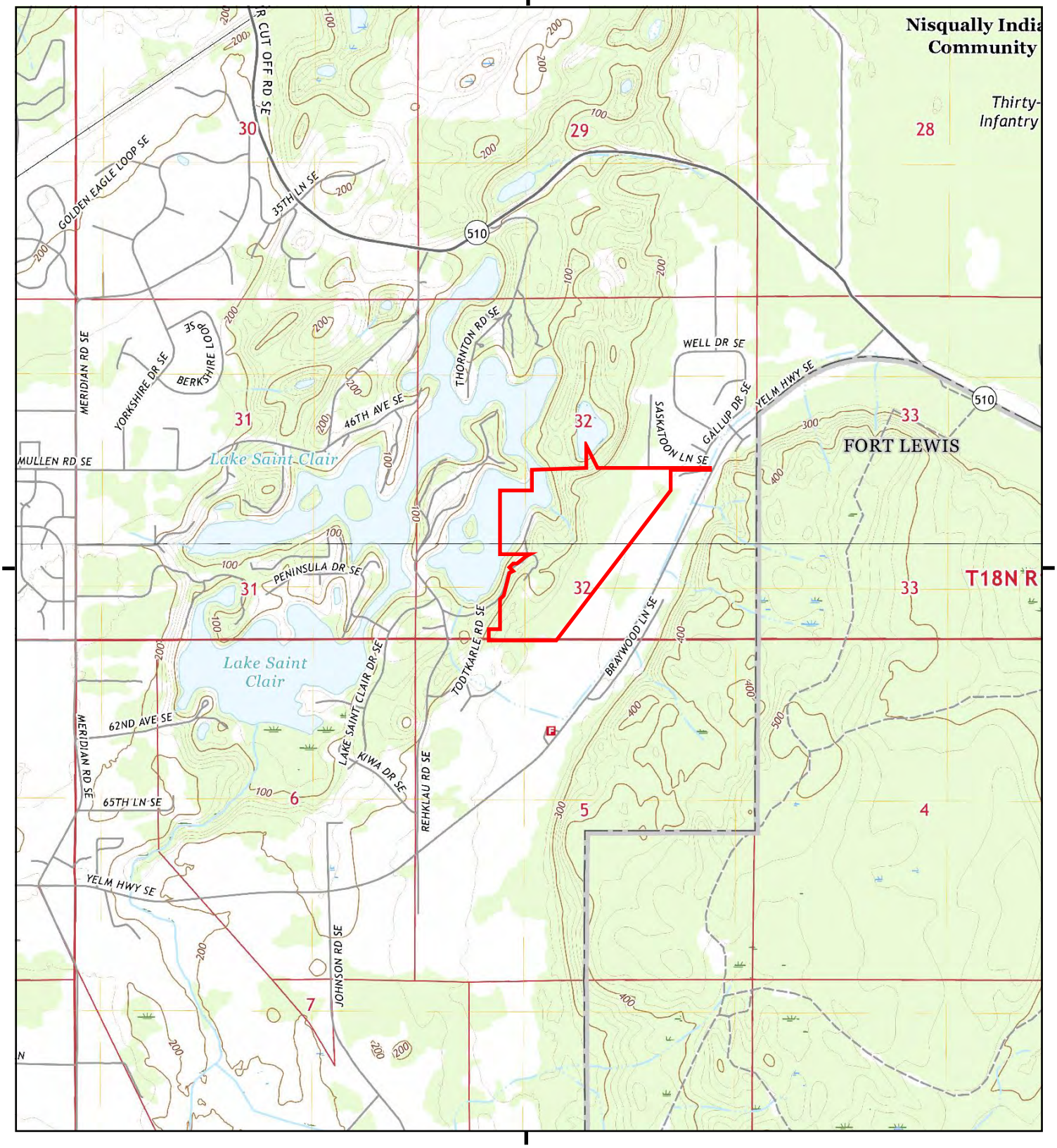
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1916 Source Sheets

Chehalis
1916
30-minute, 125000

Historical Topo Map

2020



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

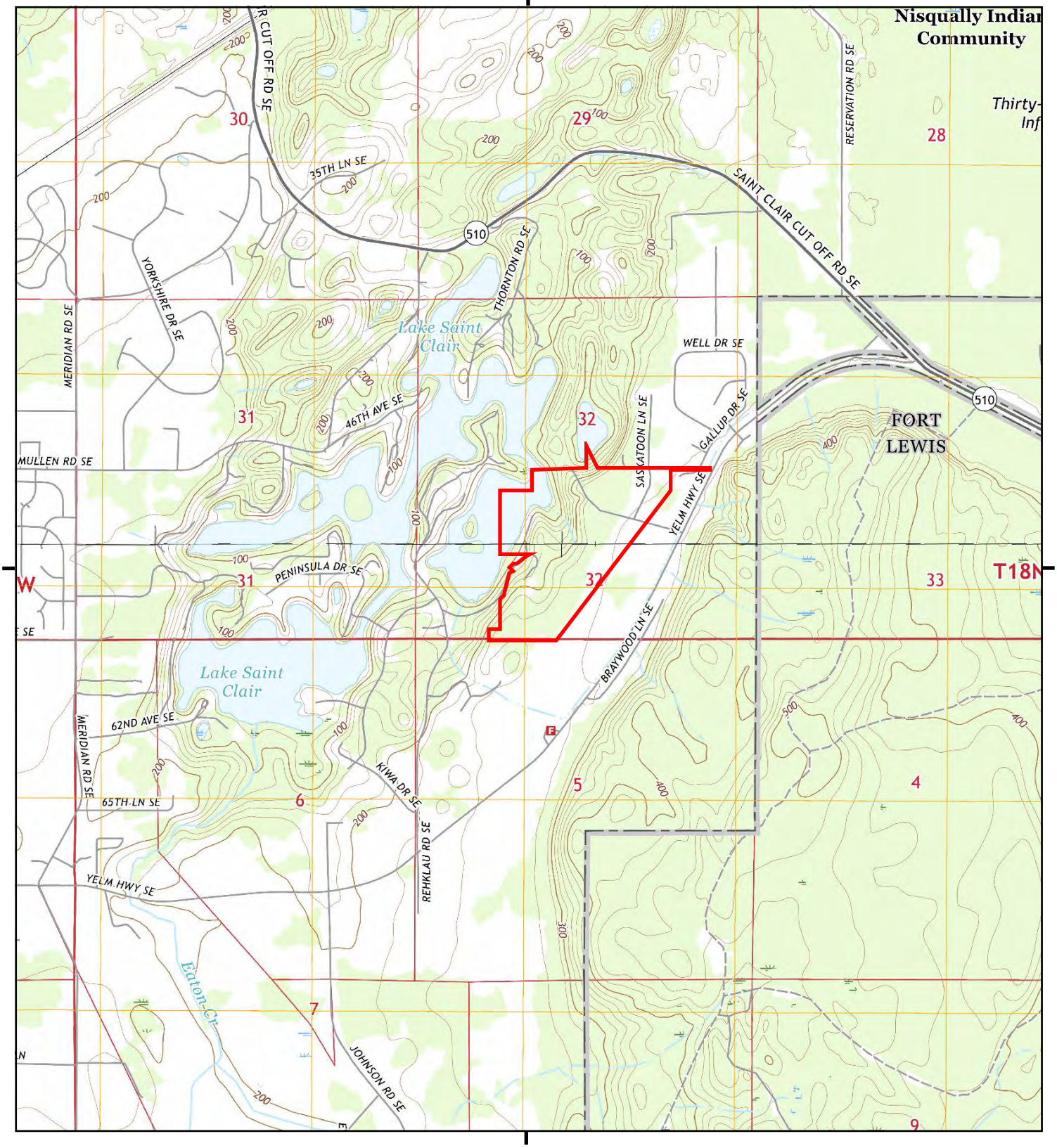
TP, Tenalquot Prairie, 2020, 7.5-minute
N, Nisqually, 2020, 7.5-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N

Historical Topo Map

2017



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

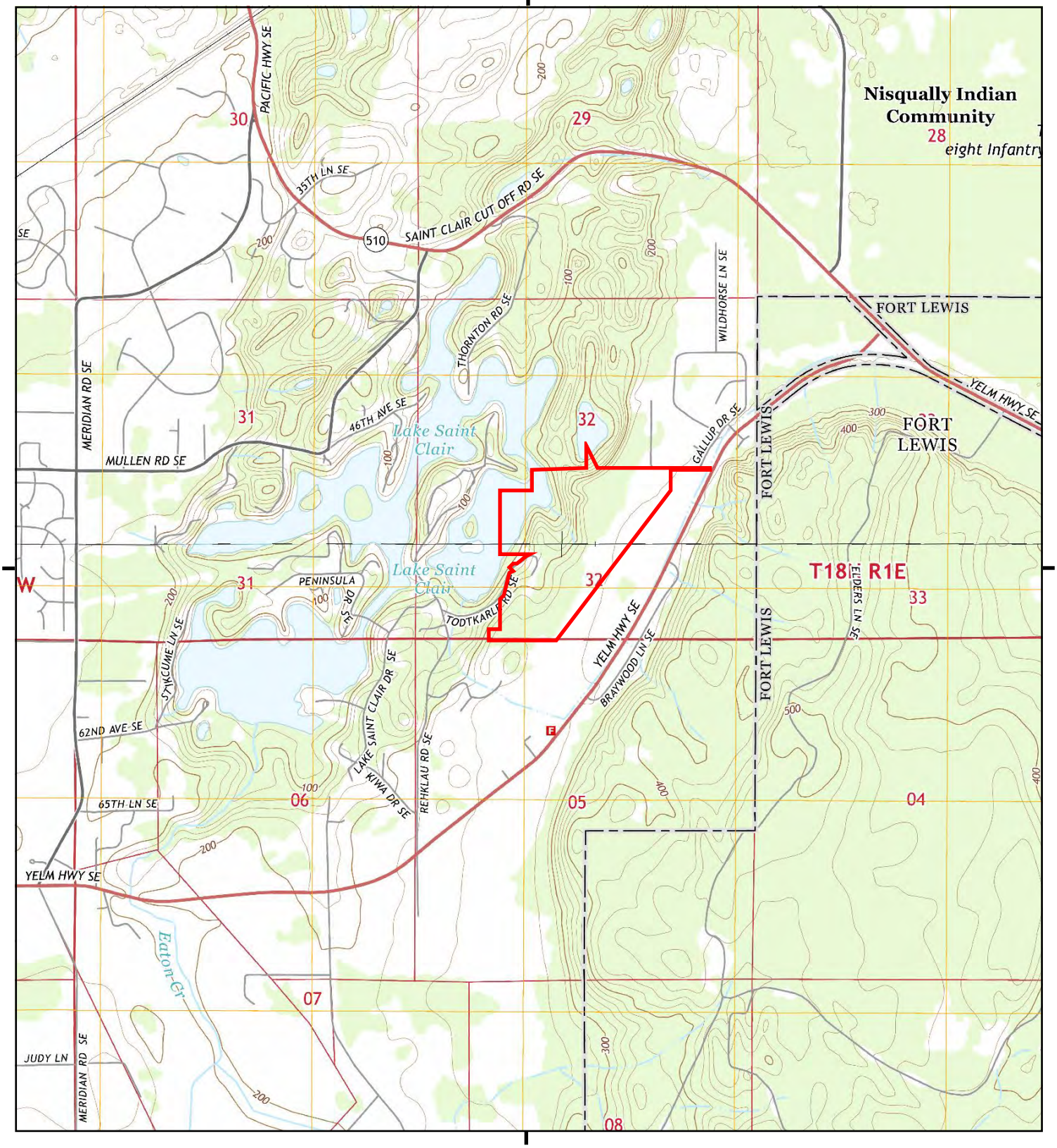
TP, Tenalquot Prairie, 2017, 7.5-minute
N, Nisqually, 2017, 7.5-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N

Historical Topo Map

2014, 2013



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

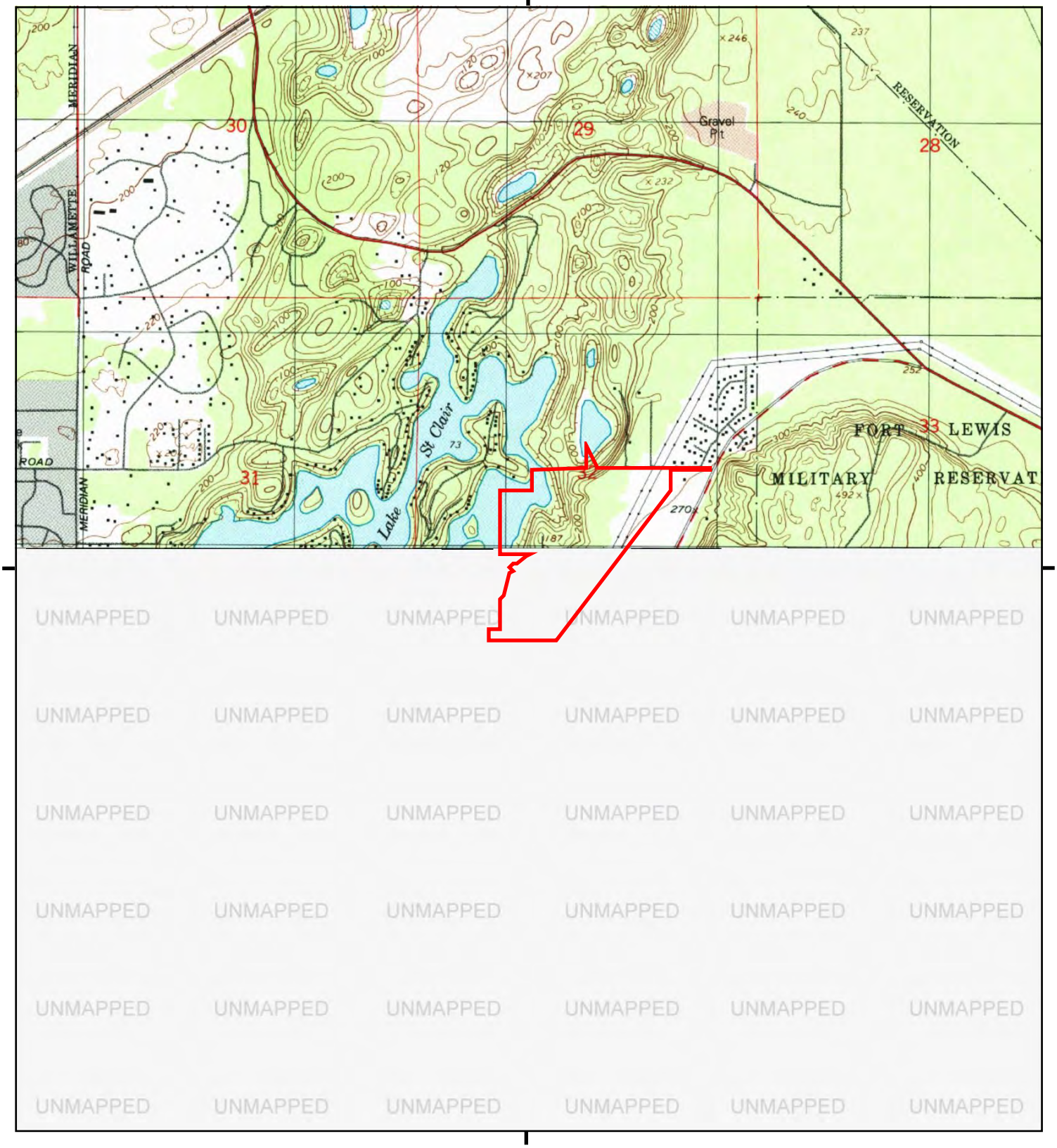
TP, Tenalquot Prairie, 2013, 7.5-minute
N, Nisqually, 2014, 7.5-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N

Historical Topo Map

1997



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

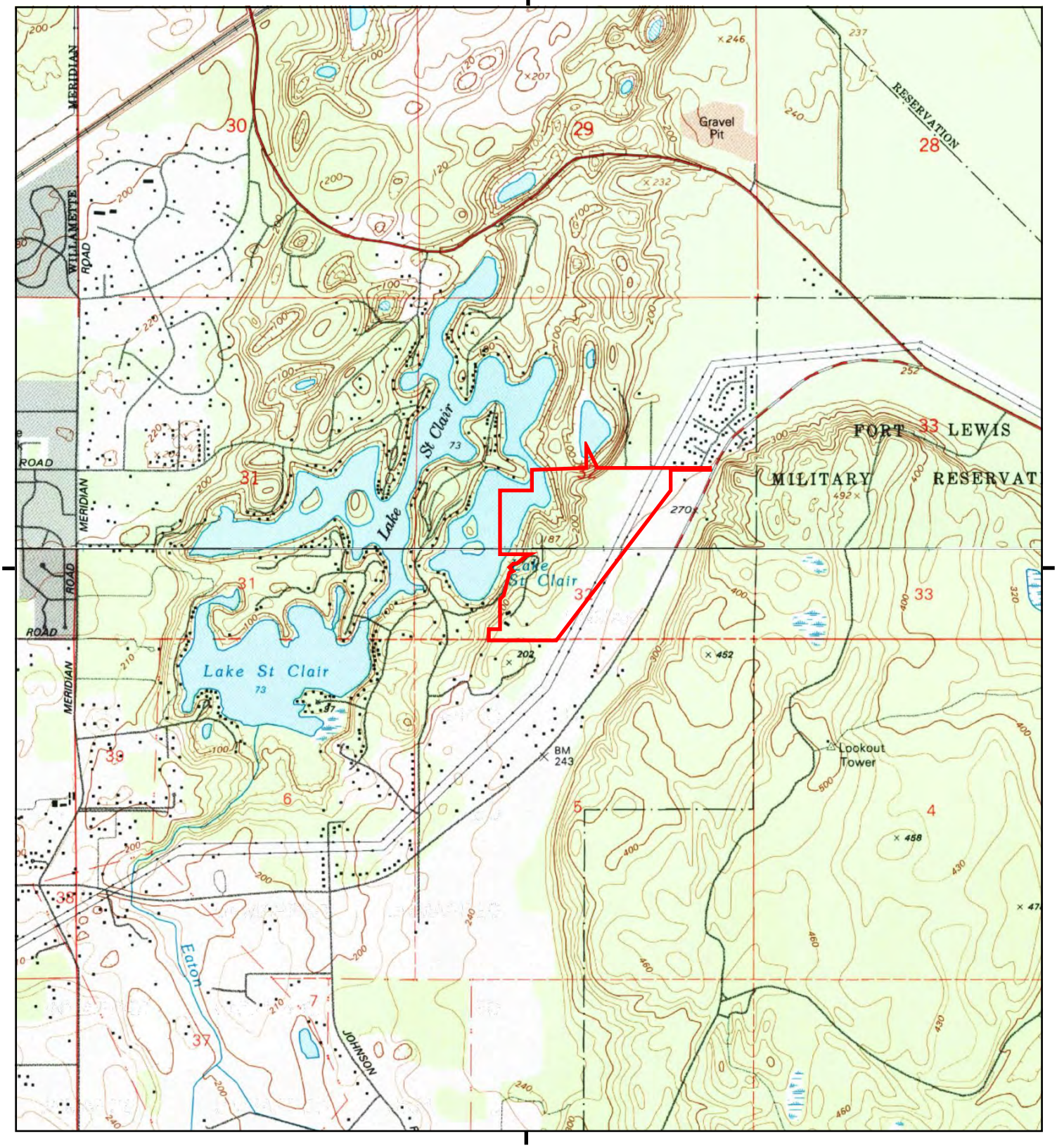
N, Nisqually, 1997, 7.5-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N

Historical Topo Map

1994, 1995



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

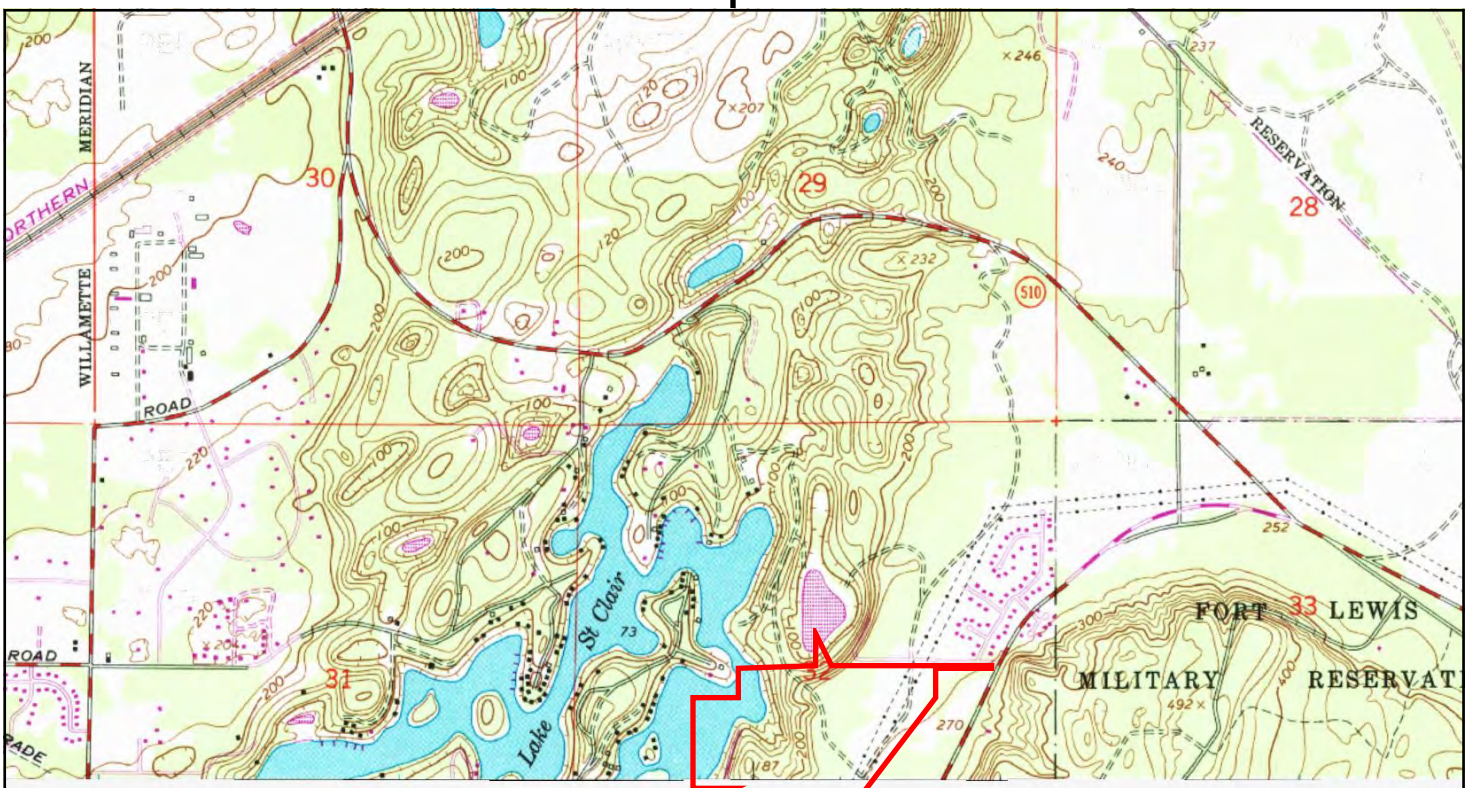
TP, Tenalquot Prairie, 1995, 7.5-minute
N, Nisqually, 1994, 7.5-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N

Historical Topo Map

1986



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

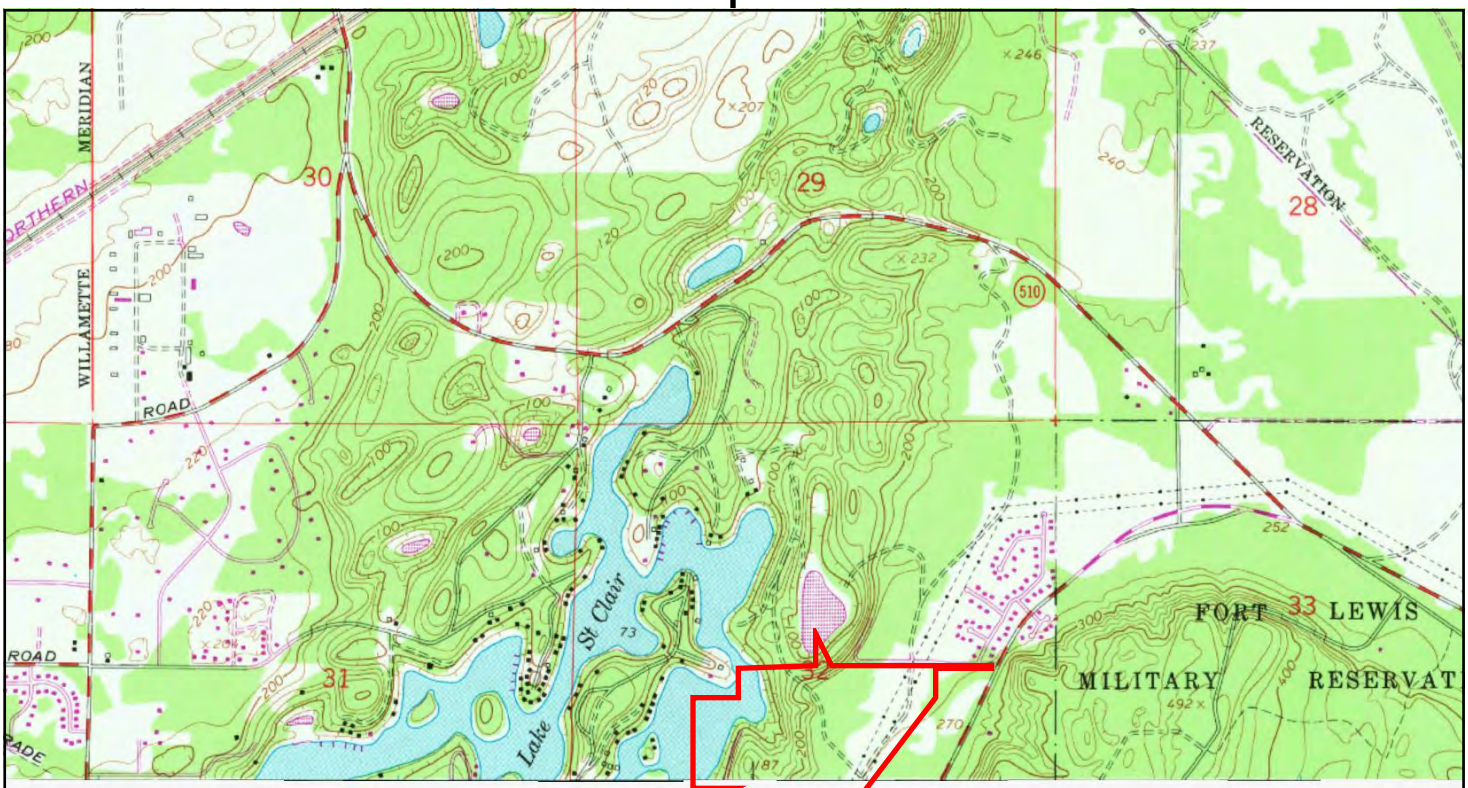
N, Nisqually, 1986, 7.5-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N

Historical Topo Map

1981



This report includes information from the following map sheet(s).

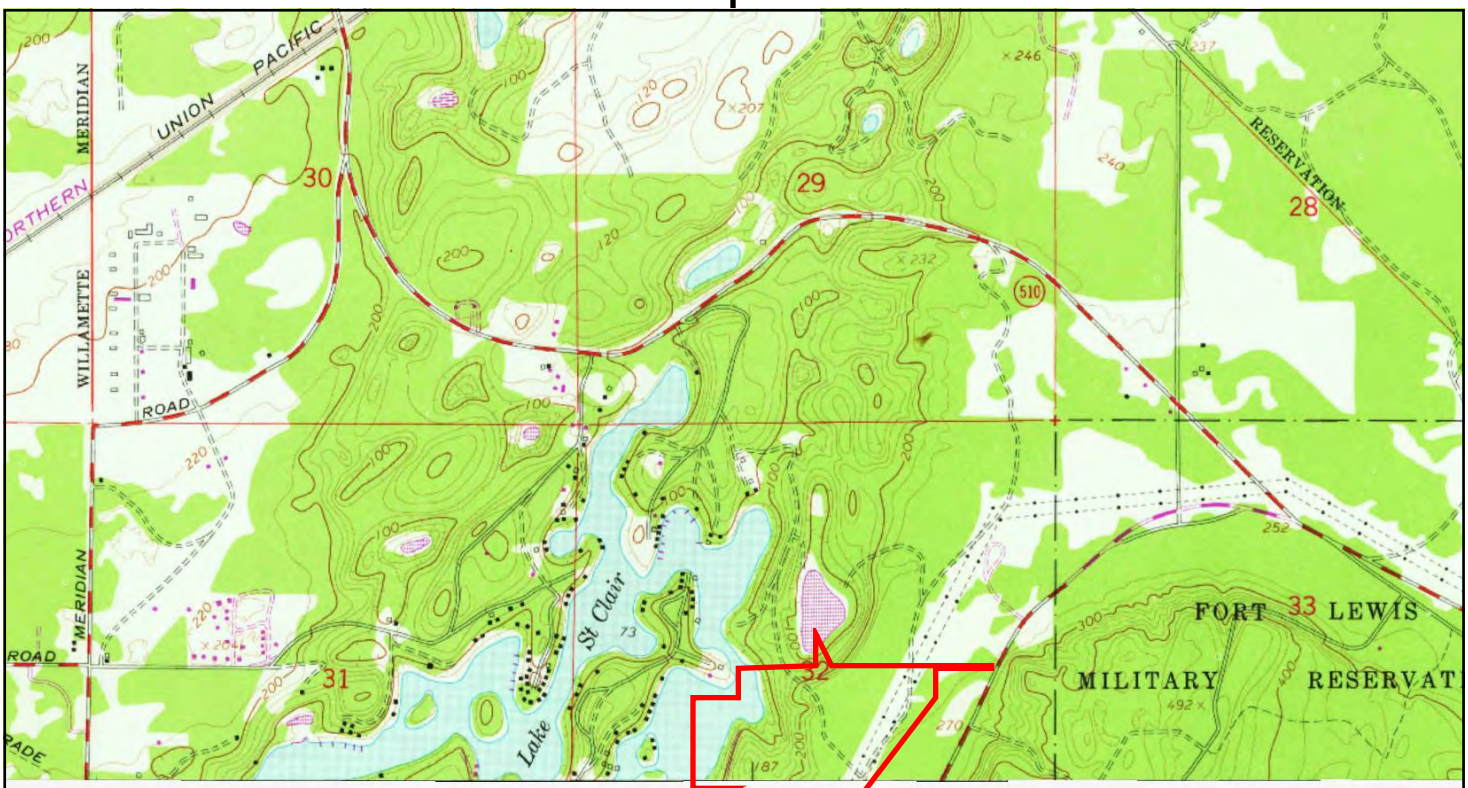
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

N, Nisqually, 1981, 7.5-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N



This report includes information from the following map sheet(s).

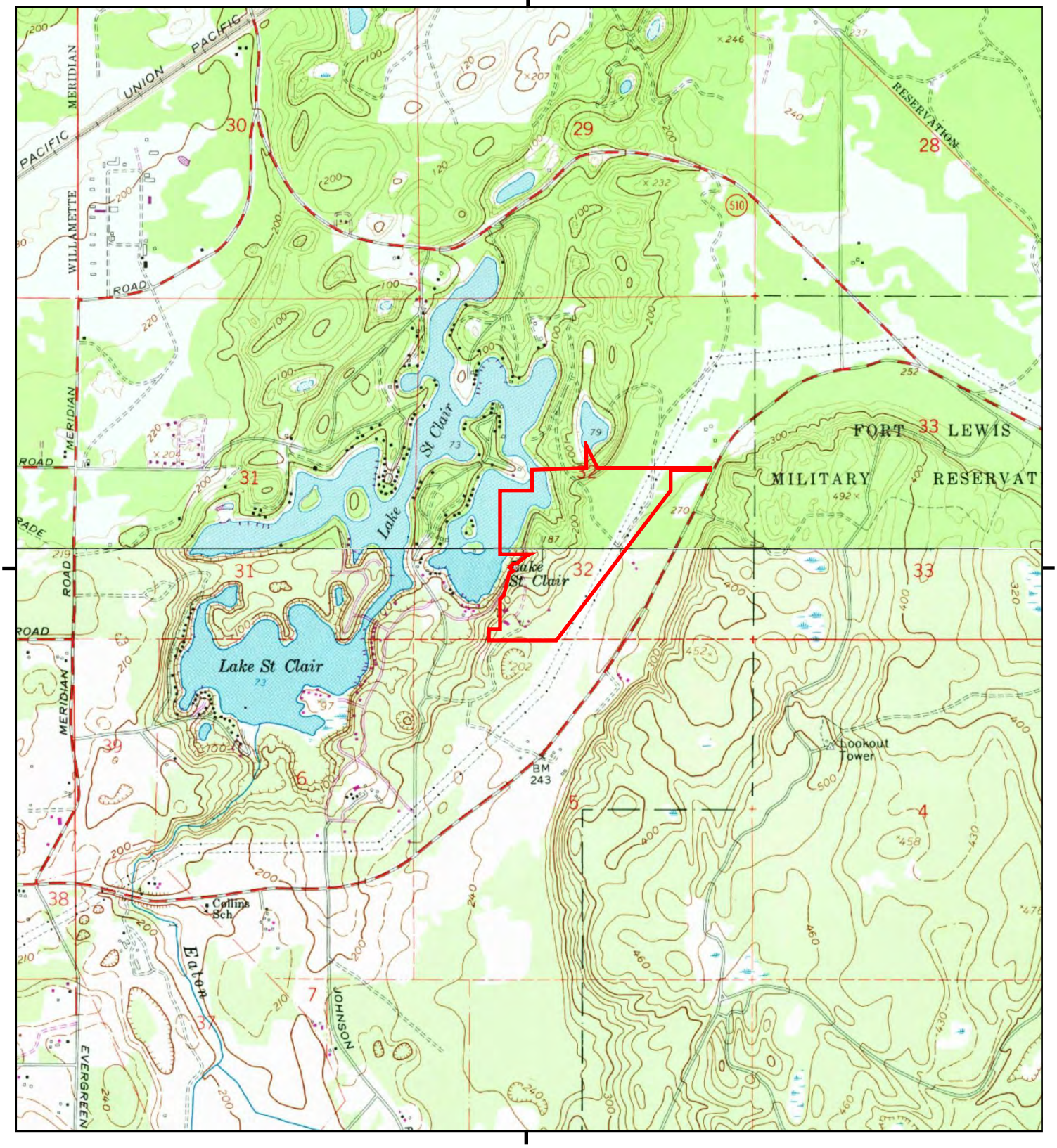
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

N, Nisqually, 1973, 7.5-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N



This report includes information from the following map sheet(s).

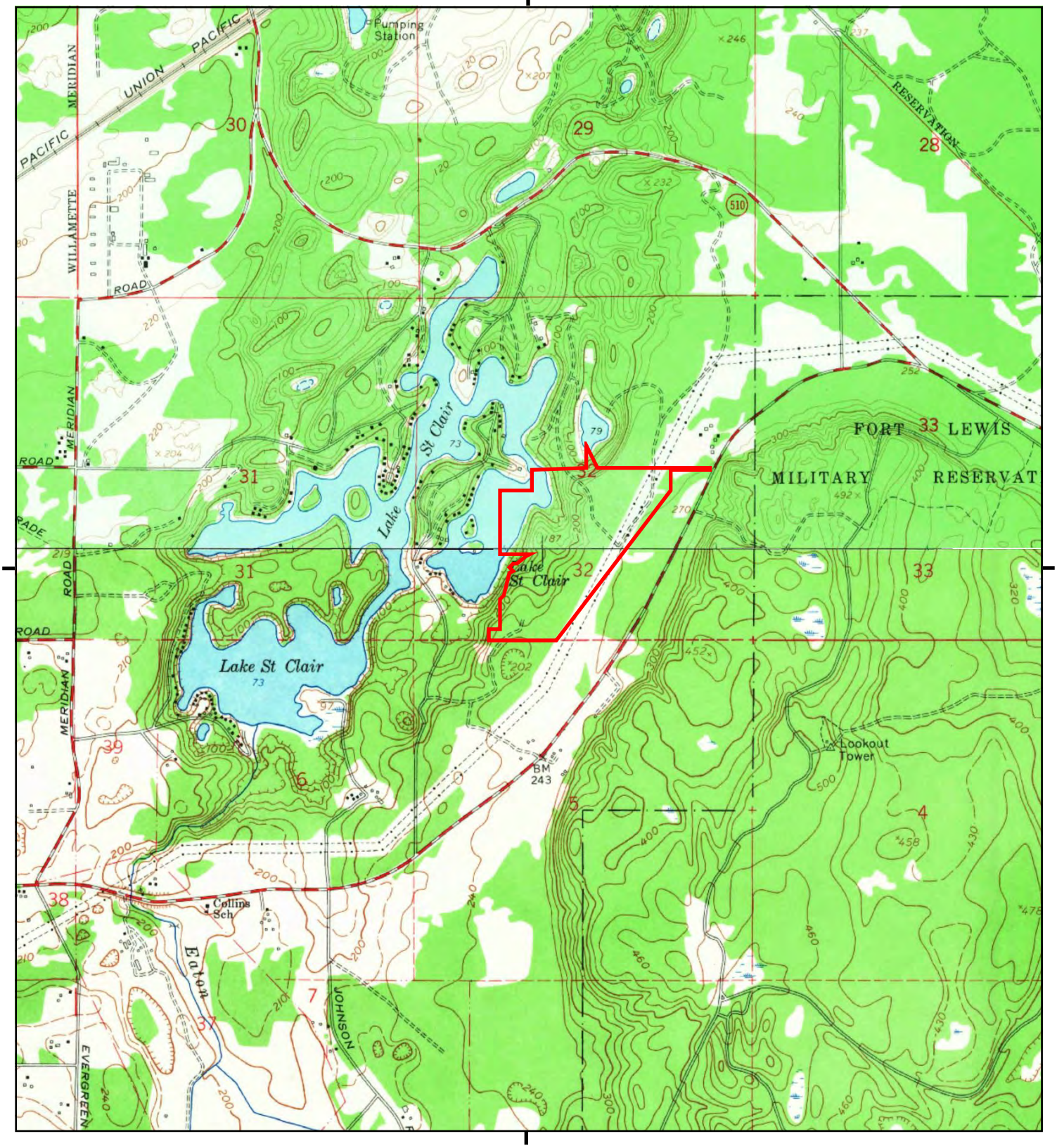
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Tenalquot Prairie, 1968, 7.5-minute
N, Nisqually, 1968, 7.5-minute
TP, Weir Prairie, 1968, 7.5-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

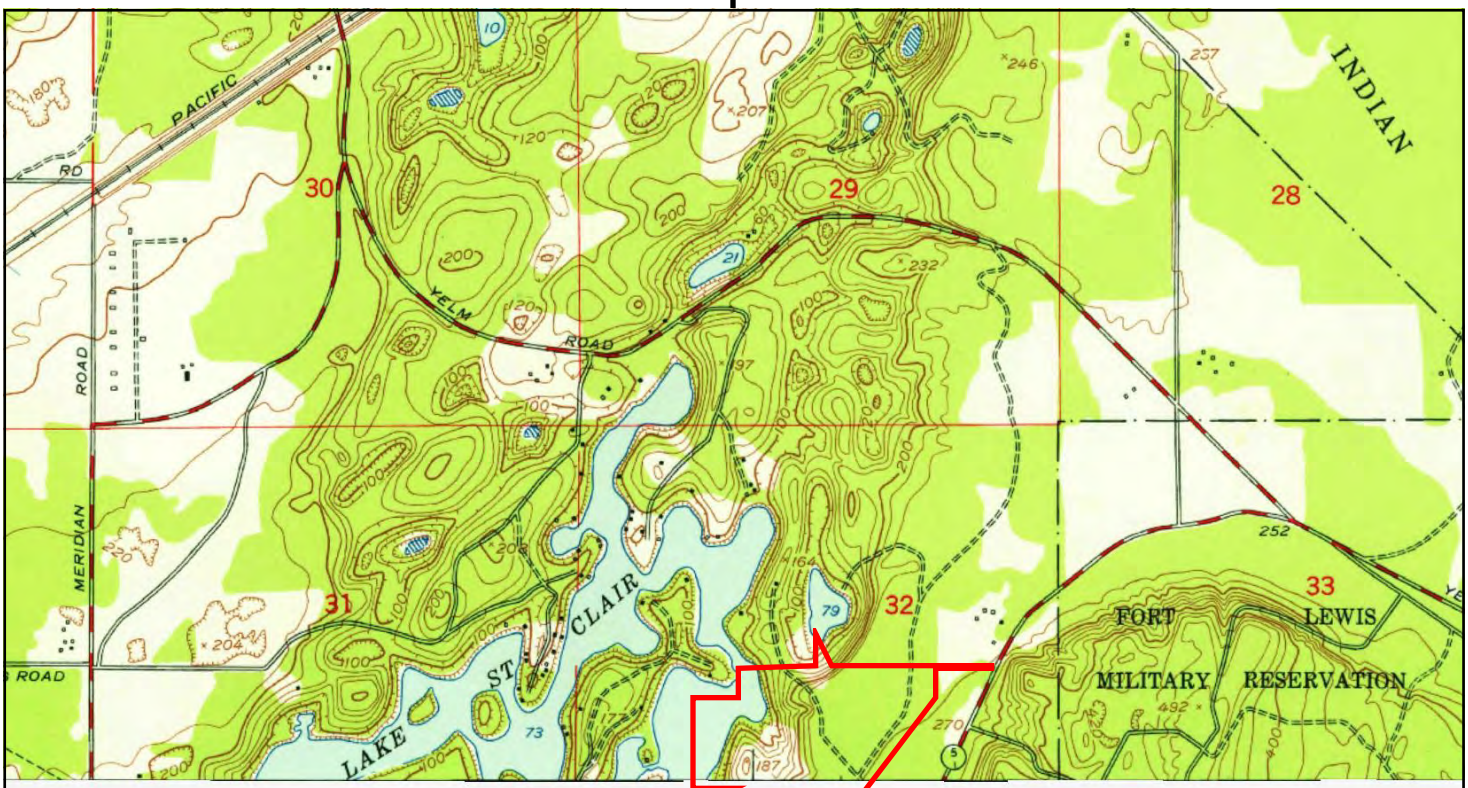
TP, Weir Prairie, 1959, 7.5-minute
N, Nisqually, 1959, 7.5-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N

Historical Topo Map

1948



This report includes information from the following map sheet(s).

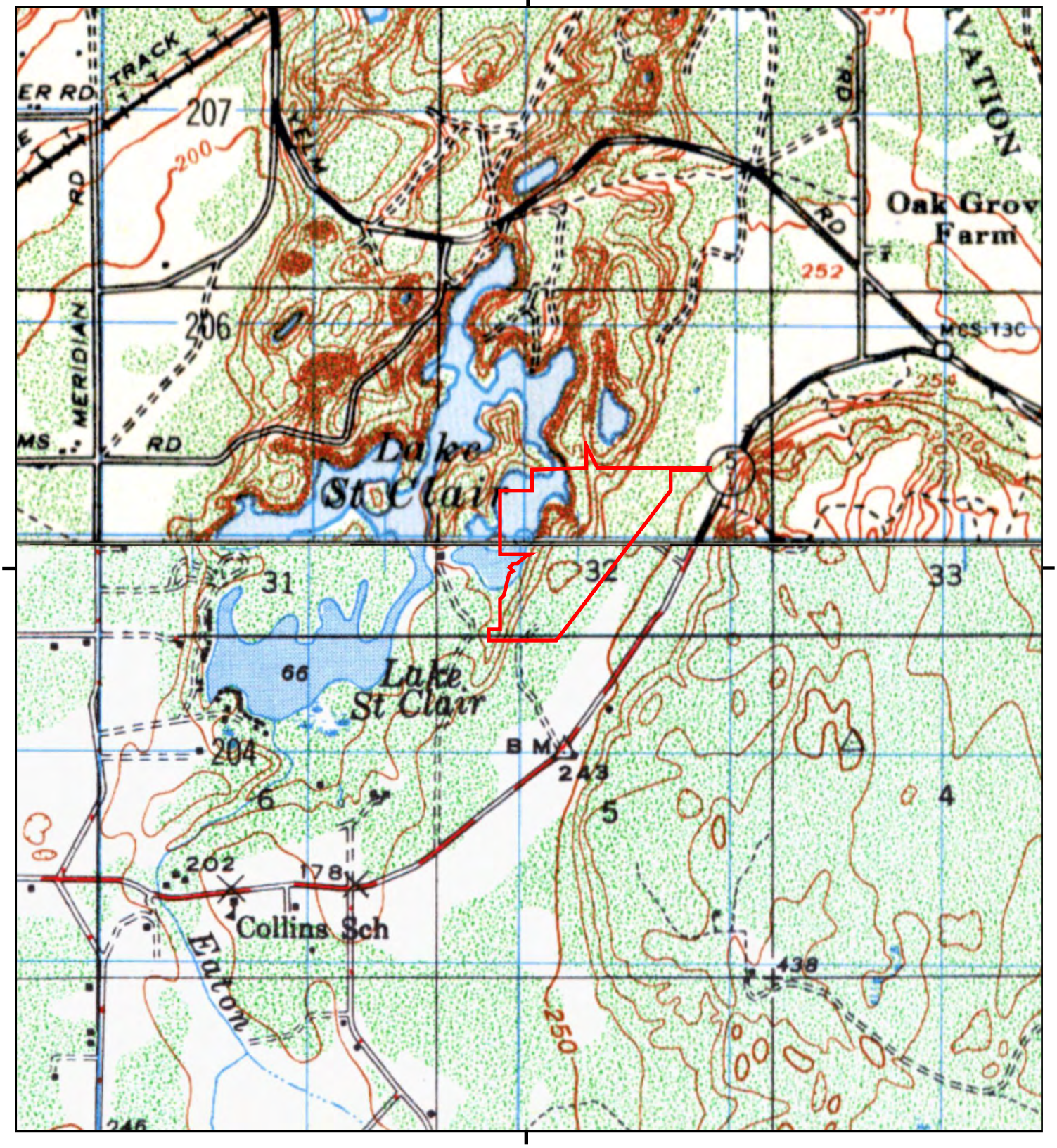
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

N, Nisqually, 1948, 7.5-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N



This report includes information from the following map sheet(s).

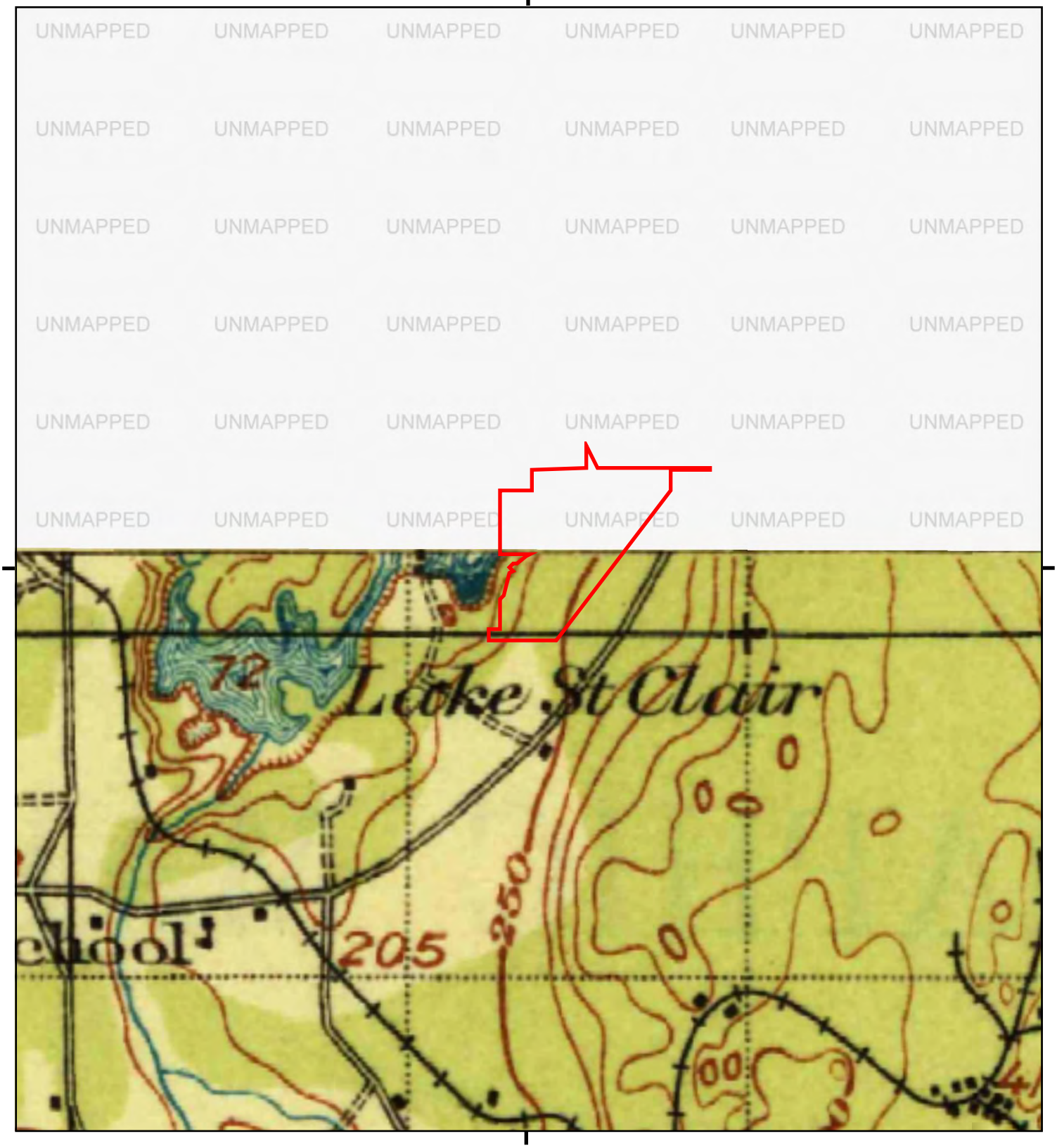
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, YELM, 1944, 15-minute
NE, ANDERSON ISLAND, 1944, 15-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Chehalis, 1916, 30-minute

SITE NAME: Medicine River Ranch Property
ADDRESS: 10747 TODTKARLE RD SE
Olympia, WA 98513
CLIENT: GeoEngineers, Inc.

N

Medicine River Ranch Property
10747 TODTKARLE RD SE
Olympia, WA 98513

Inquiry Number: 7415454.8
August 11, 2023

EDR Building Permit Report

Target Property and Adjoining Properties

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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SECTION

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E1527 - 21 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

EDR® Environmental Data Resources Inc

BUILD FAX PROPERTY HISTORY

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of GeoEngineers, Inc. on Aug 11, 2023.

TARGET PROPERTY

10747 TODTKARLE RD SE
Olympia, WA 98513

SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

RESEARCH SUMMARY

Building permits identified: **YES**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Thurston County

Year	*Source*	*TP*	*Adjoining*
2023	Thurston County, Development Services		
2022	Thurston County, Development Services	X	
2021	Thurston County, Development Services		
2020	Thurston County, Development Services		
2019	Thurston County, Development Services		X
2018	Thurston County, Development Services		
2017	Thurston County, Development Services		
2016	Thurston County, Development Services		
2015	Thurston County, Development Services		
2014	Thurston County, Development Services		
2013	Thurston County, Development Services		X
2012	Thurston County, Development Services		
2011	Thurston County, Development Services		
2010	Thurston County, Development Services		
2009	Thurston County, Development Services		
2008	Thurston County, Development Services		
2007	Thurston County, Development Services		
2006	Thurston County, Development Services		
2005	Thurston County, Development Services		
2004	Thurston County, Development Services		
2003	Thurston County, Development Services		
2002	Thurston County, Development Services		X
2001	Thurston County, Development Services		
2000	Thurston County, Development Services		
1999	Thurston County, Development Services		
1998	Thurston County, Development Services		
1997	Thurston County, Development Services		
1996	Thurston County, Development Services		X

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

Year	Source	TP	Adjoining
1995	Thurston County, Development Services		
1994	Thurston County, Development Services		
1993	Thurston County, Development Services		
1992	Thurston County, Development Services		
1991	Thurston County, Development Services		X
1990	Thurston County, Development Services		X

Name: JurisdictionName
Years: Years
Source: Source
Phone: Phone

BUILDING DEPARTMENT RECORDS SEARCHED

Name: Thurston County
Years: 1990-2023
Source: Thurston County, Development Services, OLYMPIA, WA
Phone: (360) 786-5490

Name: Lacey
Years: 2000-2010
Source: City of Lacey, Department of Building, Planning and Zoning, LACEY, WA
Phone: (360) 491-5642

Name: Mason County
Years: 1992-2023
Source: Mason County, Building Department, Shelton, WA
Phone: (360) 275-8733

Name: Olympia
Years: 1990-2023
Source: City of Olympia, Planning and Community Development Department, OLYMPIA, WA
Phone: (360) 753-8314

Name: Des Moines
Years: 1900-2023
Source: City of Des Moines, Planning and Building, SEATTLE, WA
Phone: (206) 870-6519

TARGET PROPERTY FINDINGS

TARGET PROPERTY DETAIL

10747 TODTKARLE RD SE
Olympia, WA 98513

10747 TODTKARLE RD SE

Date:	**3/31/2022**
Permit Type:	**Fire**
Description:	
Permit Description:	
Work Class:	New Construction
Proposed Use:	
Permit Number:	22103720
Status:	Issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

Date:	**3/31/2022**
Permit Type:	**Tank-Below Ground Fuel**
Description:	
Permit Description:	
Work Class:	Demolition
Proposed Use:	
Permit Number:	22103722
Status:	Issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

TODTKARLE RD SE

10730 TODTKARLE RD SE

Date:	**11/20/2013**
Permit Type:	**Mechanical**
Description:	
Permit Description:	
Work Class:	Repair / Maintenance
Proposed Use:	
Permit Number:	13113831
Status:	Issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

10732 TODTKARLE RD SE

Date:	**1/16/2019**
Permit Type:	**Mechanical**
Description:	
Permit Description:	
Work Class:	Replacement
Proposed Use:	
Permit Number:	19100569
Status:	Issued
Valuation:	$0.00
Contractor Company:	
Contractor Name:	

ADJOINING PROPERTY FINDINGS

Date:	**12/10/2002**
Permit Type:	**Residence Stick Built**
Description:	**RENEWAL OF 61733 FOR FINAL ONLY/3BDR SEP/S32-T18-R1W, Note: Per DS, adding file to parcel files.**
Permit Description:	
Work Class:	New Construction
Proposed Use:	
Permit Number:	02089161
Status:	Closed
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KARIE L HAMILTON

Date:	**9/4/1996**
Permit Type:	**Residence Stick Built**
Description:	**ALSO PLUMBING & MECHANICAL PERMITS ISSUED. LCP**
Permit Description:	
Work Class:	Convert
Proposed Use:	
Permit Number:	95061733
Status:	Cancelled
Valuation:	$0.00
Contractor Company:	
Contractor Name:	KARIE L HAMILTON

ADJOINING PROPERTY FINDINGS

10734 TODTKARLE RD SE

Date:	**6/26/1991**
Permit Type:	**Convert**
Description:	
Permit Description:	
Work Class:	New Construction
Proposed Use:	
Permit Number:	91042176
Status:	Cancelled
Valuation:	$0.00
Contractor Company:	
Contractor Name:	S LEE PETERSON

10735 TODTKARLE RD SE

Date:	**8/17/1990**
Permit Type:	**Plumbing**
Description:	
Permit Description:	
Work Class:	New Construction
Proposed Use:	
Permit Number:	90040461
Status:	Closed
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OLIVER C MC LAUGHLIN

ADJOINING PROPERTY FINDINGS

Date:	**8/16/1990**
Permit Type:	**Accessory Structure**
Description:	
Permit Description:	
Work Class:	Convert
Proposed Use:	
Permit Number:	90041382
Status:	Cancelled
Valuation:	$0.00
Contractor Company:	
Contractor Name:	OLIVER C MC LAUGHLIN

GLOSSARY

General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeymen:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

GLOSSARY

Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use (s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

Sample Building Permit Data

Date: Nov 09, 2000
Permit Type: Bldg -
New Permit Number: 101000000405
Status: Valuation: $1,000,000.00
Contractor Company: OWNER-BUILDER
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.

Medicine River Ranch Property
10747 TODTKARLE RD SE
Olympia, WA 98513

Inquiry Number: 7415454.5
August 12, 2023

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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SECTION

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2020	☑	☑	EDR Digital Archive
2017	☑	☑	Cole Information
2014	☑	☑	Cole Information
2010	☑	☑	Cole Information
2005	☑	☑	Cole Information
2000	☑	☑	Cole Information
1995	☑	☑	Cole Information
1992	☑	☑	Cole Information
1988	☐	☐	Polk's City Directory
1984	☐	☐	Polk's City Directory
1979	☐	☐	Polk's City Directory
1974	☐	☐	Polk's City Directory
1969	☐	☐	Polk's City Directory
1966	☐	☐	Polk's City Directory
1963	☐	☐	Polk's City Directory
1934	☐	☐	Polk's City Directory

FINDINGS

TARGET PROPERTY STREET

10747 TODTKARLE RD SE
Olympia, WA 98513

Year	*CD Image*	*Source*	
SE TODTKARLE RD			
2020	pg A2	EDR Digital Archive	
TODT KARLE RD SE			
2005	pg A17	Cole Information	
2000	pg A20	Cole Information	
1995	pg A22	Cole Information	
1992	pg A24	Cole Information	
1988	-	Polk's City Directory	Street not listed in Source
1984	-	Polk's City Directory	Street not listed in Source
1979	-	Polk's City Directory	Street not listed in Source
1974	-	Polk's City Directory	Street not listed in Source
1969	-	Polk's City Directory	Street not listed in Source
1966	-	Polk's City Directory	Street not listed in Source
1963	-	Polk's City Directory	Street not listed in Source
1934	-	Polk's City Directory	Street not listed in Source
TODTKARLE RD SE			
2020	pg A4	EDR Digital Archive	
2017	pg A8	Cole Information	
2014	pg A11	Cole Information	
2010	pg A14	Cole Information	

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
SASKATOON LN SE			
2020	pg. A1	EDR Digital Archive	
2017	pg. A7	Cole Information	
2014	pg. A10	Cole Information	
2010	pg. A13	Cole Information	
2005	pg. A16	Cole Information	
2000	pg. A19	Cole Information	
1995	-	Cole Information	Street not listed in Source
1992	-	Cole Information	Street not listed in Source
1988	-	Polk's City Directory	Street not listed in Source
1984	-	Polk's City Directory	Street not listed in Source
1979	-	Polk's City Directory	Street not listed in Source
1974	-	Polk's City Directory	Street not listed in Source
1969	-	Polk's City Directory	Street not listed in Source
1966	-	Polk's City Directory	Street not listed in Source
1963	-	Polk's City Directory	Street not listed in Source
1934	-	Polk's City Directory	Street not listed in Source
SE YELM HWY			
2020	pg. A3	EDR Digital Archive	
YELM HWY SE			
2020	pg. A5	EDR Digital Archive	
2017	pg. A9	Cole Information	
2014	pg. A12	Cole Information	
2010	pg. A15	Cole Information	
2005	pg. A18	Cole Information	
2000	pg. A21	Cole Information	
1995	pg. A23	Cole Information	

FINDINGS

Year	***CD Image***	***Source***	
1992	pg. A25	Cole Information	
1988	-	Polk's City Directory	Street not listed in Source
1984	-	Polk's City Directory	Street not listed in Source
1979	-	Polk's City Directory	Street not listed in Source
1974	-	Polk's City Directory	Street not listed in Source
1969	-	Polk's City Directory	Street not listed in Source
1966	-	Polk's City Directory	Street not listed in Source
1963	-	Polk's City Directory	Street not listed in Source
1934	-	Polk's City Directory	Street not listed in Source

City Directory Images

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

SASKATOON LN SE 2020

11146	Amy Harder
	Devin Harder
11202	Kevin Rundle
	Mary Freitas
11208	Susan Hendrix
	Tiffany Southard
11210	Catherine Beebe
	Chad Beebe
	Terri Purcell
11213	Katrin Seymour
	Thomas Quaidoo
11215	Bradley Williams
	Janet Williams
11217	Gayle Lemoine
	Gayle Moine
	John Lemoine
	John Moine
11220	Brian Kienenberger
	Jodie McDonie
11223	Joyce Vanderwerff
	Sarah Vanderwerff
11225	Brent Babcook
	Jennifer Shaw
	Nancy Babcook
	Robert Vanderhoof
	Terry Shaw

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

SE TODTKARLE RD 2020

10650 JEANNIE'S HAIR SALON

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

SE YELM HWY 2020

10934	RANDY'S DRYWALL REPAIR & HM
11702	SHAH VIVEK CCHP MD
12501	NATURAL RESOURCES DEPT
12507	NISQUALLY TRIBAL POLICE DEPT
12819	ELECTRIC CHARGING STATION
	NISQUALLY RED WIND CASINO
12820	AMERIGAS PROPANE EXCHANGE
	MEDICINE CREEK ENTERPRISE CORP
	MISQUALLI MARKETS LLC
	NISQUALLY POST & PRINT
	UPS AUTHORIZED SHIPPING PRVDR
12827	ATM
	NISQUALLY MARKET-YELM

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

TODTKARLE RD SE 2020

10619	Kelley Reynolds
	Owen Reynolds
	Richard Bowers
10620	Christopher Huss
	Julie Huss
	Julie Ledford
10626	Matthew Ledford
10628	Melissa Harrison
10638	Kelly Kathleen
	Nance Schaeffer
10645	Brenda Longmire
	Bruce Longmire
10650	Gerald Lord
	R Robinson
	Richard Robinson
10706	Thomas Champion
10728	Caryn Mickelson
	Linda Mickelson
10730	Norine Reyburn
10732	Cynthia Blair
10734	Bonnie Peterson
	Lee Peterson
	S Peterson
	Steven Peterson
10735	Citlalli Dicante
10747	Kay Smith

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

YELM HWY SE 2020

10922	Mark Gray
10925	Angela Lofland
	James Lofland
	Matthew Lofland
10934	Bonnie Spaeth
	Emma York-Spaeth
	Randy Spaeth
10938	Clarice Golden
	Leroy Golden
11008	James Lasher
	Marlisse Lasher
11014	David Lott
	Kayli Lott
	Lisa Lott
11020	David Rakestraw
	Susan Rakestraw
11130	Amanda Protti
	Jacob Protti
	Karen Protti
	Thomas Protti
11138	Angie Ellenbecker
	Rodney Ellenbecker
11142	Juan Martinez
	Leticia Martinez
	Lorenza Martinez
	Olga Martinez
11202	Laura Ruth
	Mario Ruth
	Sydney Ruth
11211	Deanna Mickelson
	Paul Mickelson
11243	Maria Carl
	Neal Carl
11247	Cynthia Iyall
	Richard Ivall
11249	Cynthia Iyall
11310	Elton Colvin
	Wayne Colvin
11330	Kevin Schmidt
11345	Bonnie Bedford
	David Bedford
12501	Amy Calahan
	Ashley Von Essen
	David Iyall
	Emily Mccartan
	Joyce Mccloud
	Tom Arnbrister
12703	Linda Lilley
12705	Jeffrey Yates
	Joene Yates

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

YELM HWY SE 2020 (Cont'd)

12705 Stacy Duke
12711 Crystal Yates
John Yates

Target Street	Cross Street	Source
-	✓	Cole Information

SASKATOON LN SE 2017

11202	RUNDLE, KEVIN G
11208	SOUTHARD, TIFFANY
11210	BEEBE, CHAD E
11215	WILLIAMS, BRADLEY T
11217	MOINE, JOHN
11220	KIENENBERGER, BRIAN D
11223	VANDERWERFF, JOY E
11225	BOOY, TIMOTHY J

Target Street	Cross Street	Source
✓	-	Cole Information

TODTKARLE RD SE 2017

10619	REYNOLDS, OWEN F
10620	BRANDT, PHILIP T
10625	TUGGLE, STEPHEN A
10638	DOYLE, DAWN
	OKELLY, KATHLEEN G
	SCHAEFFER, NANCE J
10645	LONGMIRE, BRUCE J
10650	ROBINSON, RICHARD S
10706	STEINECKER, DAVID N
10730	REYBURN, DENISE D
10732	BLAIR, CINDY P
10734	PETERSON, LEE
10735	VOISINE, NORM
10747	SMITH, ED

Target Street	Cross Street	Source
-	✓	Cole Information

YELM HWY SE 2017

10910	CREBS, CHRISTOPHER
	MCKERN, TIMOTHY M
10922	GRAY, MARK A
10925	LOFLAND, JAMES L
10934	SPAETH, RANDY R
10938	GOLDEN, LEROY T
11008	LASHER, JIM C
11014	LOTT, DAVID K
11020	RAKESTRAW, DAVID W
11130	PROTTI, JACOB T
11138	BOUFFARD, ROBERT B
11140	CHIAPPINO, JOE
11202	RUTH, MARIO S
11211	MICKELSON, PAUL B
11310	COLVIN, WAYNE C
11330	SCHMIDT, KEVIN R
11345	BEDFORD, BONNIE L
11702	NISQUALLY PUBLIC SAFETY
12501	NISQUALLY INDIAN TRIBE
12705	DUKE, STACY M
12819	DITRONICS FINANCIAL SERVICE LLC
	NISQUALLY INDIAN TRIBAL HEALTH
	NISQUALLY RED WIND CASINO
	RED WIND CASINO
12820	NISQUALLY BOARD OF ECONOMIC DEVELOPM
12827	KAMILCHE TRADING POST 1
	NISQUALLY REZ MART
	REZ EXPRESS
	SHELL
	SUBWAY

Target Street	Cross Street	Source
-	✓	Cole Information

SASKATOON LN SE 2014

11146	HARDER, DARREN
11202	BLACK, STACY L
11208	HENDRIX, MAURICE
11210	BEEBE, CHAD E
11211	OCCUPANT UNKNOWN,
11215	WILLIAMS, BRADLEY T
11217	LEMOINE, JOHN E
11220	KIENENBERGER, BRIAN D
11223	VANDERWERFF, JOY E
11225	BOOY, TIMOTHY J

Target Street	Cross Street	Source
✓	-	Cole Information

TODTKARLE RD SE 2014

10614	OCCUPANT UNKNOWN,
10619	REYNOLDS, OWEN F
10620	BRANDT, PHILIP J
10625	TUGGLE, STEPHEN A
10626	OCCUPANT UNKNOWN,
10628	OCCUPANT UNKNOWN,
10638	DOYLE, DAWN
	OKELLY, KATHLEEN G
	SCHAEFFER, NANCE J
10645	LONGMIRE, BRUCE J
10650	ROBINSON, RICHARD S
10704	KOLBERG, SUSAN M
10706	OCCUPANT UNKNOWN,
10726	OCCUPANT UNKNOWN,
10728	OCCUPANT UNKNOWN,
10730	HAMILTON, DEAN A
10732	BLAIR, CINDY P
10734	PETERSON, LEE
10735	VOISINE, NORM
10747	SMITH, ED

Target Street	Cross Street	Source
-	✓	Cole Information

YELM HWY SE 2014

10910	MCKERN, TIMOTHY M
10922	GRAY, MARK A
10925	LOFLAND, JAMES L
10928	OCCUPANT UNKNOWN,
10934	SPAETH, RANDY R
10938	GOLDEN, LEROY T
11008	LASHER, JIM C
	TAME YOUR MANE
11014	LOTT, DAVID K
11020	RAKESTRAW, DAVID W
11121	CASTILLO, AIDALICE
11130	PROTTI, JACOB T
11140	CHIAPPINO, JOE
11142	MARTINEZ, JUAN M
11202	RUTH, MARIO S
11211	MICKELSON, PAUL B
11243	OCCUPANT UNKNOWN,
11247	MORIGEAU, AMANDA M
11249	PEREZ, EMILIANO
11310	COLVIN, WAYNE C
11330	SCHMIDT, KEVIN R
11345	MORGAN, JOSEPH E
12501	NISQUALLY INDIAN TRIBE
12507	NISQUALLY INDIAN TRIBE
12705	DUKE, STACY M
	YATES, HEIDI M
12711	OCCUPANT UNKNOWN,
12807	NISQUALLY REZMART DELI
12819	DITRONICS FINANCIAL SVC LLC
	RED WING CASINO
12827	NISQUALLY MARKETS REZ

Target Street	Cross Street	Source
-	✓	Cole Information

SASKATOON LN SE 2010

11202	BLACK, STACY L
11208	WILLIAMS, JOHN C
11210	BEEBE, CHAD E
11211	HICKS, VINCENT
11215	WILLIAMS, BRADLEY T
11220	KIENENBERGER, BRIAN D
11223	VANDERWERFF, JOY E
11225	BOOY, TIMOTHY J

Target Street	Cross Street	Source
✓	-	Cole Information

TODTKARLE RD SE 2010

10619	REYNOLDS, OWEN F
10620	BRANDT, PHILIP J
10625	TUGGLE, STEPHEN A
10628	BROWNING, THOMAS L
10638	KATHY OKELLY TEACHING PRO
	OKELLY, KATHLEEN G
	SCHAEFFER, NANCE J
10645	LONGMIRE, BRUCE J
10650	LORD, GERALD O
10728	MICKELSON, KELSEY A
10730	HAMILTON, DEAN A
10732	BLAIR, CINDY
10734	PETERSON, STEVEN L
10747	SMITH, EDMAN P

Target Street	Cross Street	Source
-	✓	Cole Information

YELM HWY SE 2010

10922	HARDESTY, CHRIS A
10925	LOFLAND, JAMES L
10928	WINBECKLER, ROSEMARY
10934	SPAETH, RANDY R
10938	GOLDEN, LEROY T
11008	LASHER, JIM C
	TAME YOUR MANE
11014	LOTT, DAVID K
11020	RAKESTRAW, DAVID W
11121	CASTILLO, AIDALICE
11130	PROTTI, THOMAS E
11140	CHIAPPINO, STEVEN G
11142	MARTINEZ, JUAN M
11202	RUTH, MARIO S
11211	WATTS, WILLIAM T
11247	IYALL, DAVID J
11249	IYALL ALPACAS LLC
11310	COLVIN, WAYNE C
11330	SCHMIDT, KEVIN R
11345	BEDFORD, DAVID E
12501	NATURAL RESOURCES DEPT
12503	NISQUALLY AQUADITIC TCHNLGS
12649	NISQUALLY DAYCARE CTR
12703	NEEDHAM, EARL J
12705	BADGER, TACI
	PITRE, MARCUS
	YATES, ELI N
12711	YATES, JOHN B
12807	SUBWAY
12819	DITRONICS FINANCIAL SVC LLC
	NISQUALLY INDIAN TRIBE CASINO
	RED WIND CASINO
12827	NISQUALLY REZ MART

Target Street	Cross Street	Source
-	✓	Cole Information

SASKATOON LN SE 2005

11210	PURCELL, MATTHEW A
11211	SEYMOUR, K
11215	WILLIAMS, JANET L
11217	LEMOINE, JOHN E
11220	HAWKESWOOD, CLIFF
	PHONE MASTER
11223	VANDERWERFF, JOY E
11225	BOOY, TIMOTHY J

Target Street	Cross Street	Source
✓	-	Cole Information

TODT KARLE RD SE 2005

10619	REYNOLDS, OWEN F
10620	BRANDT, GLORIA L
10625	WILLIAMS, MICHAEL D
10628	FOLSOM, FREDERICK G
10635	OKELLY, KATHLEEN G
10638	TANGA G WOODWORKING
10650	LORD, GERALD O
10726	KLENKE, JOHN E
10728	MICKELSON, WILLIAM
10730	HAMILTON, DEAN A
10734	PETERSON, STEVEN L
10747	OATFIELD, RICHARD

Target Street	Cross Street	Source
-	✓	Cole Information

YELM HWY SE 2005

10910	BRANUM, DARREN L
	BROMAN, JIM
	PURE ENERGY INC
10922	HARDESTY, CHRISTOPHER A
10925	LOFLAND, JAMES L
10938	GOLDEN, LEROY T
11008	LASHER, JIM C
	TAME YOUR MANE
11014	LOTT, DAVID K
11020	RAKESTRAW, DAVID W
11130	PROTTI, THOMAS E
11140	CHIAPPINO, GEORGE J
	SOROPTIMIST INTRNTNL OF OLYMP
11142	MICKELSON, PAUL J
11202	RUTH, MARIO S
11211	WATTS, WILLIAM T
11243	CARL, NEAL A
11247	IYALL, C
11249	SKOOKUM SEAFOOD
11330	SCHMIDT, KEVIN R
12501	NISQUALLY RIVER FOUNDATION
12703	NEEDHAM, NIEL
12705	PITRE, MARCUS
	YATES, ELI N
12711	YATES, JOHN B
12807	NISQUALLY REZ MART
12819	NISQUALLY INDIAN TRIBE POLICE
	RED WINE CASINO
12827	AECON BUILDING
	COST OF WISCONSIN

Target Street	Cross Street	Source
-	✓	Cole Information

SASKATOON LN SE 2000

11215 FAIRBROTHER SUZANNE PH D
GUTHERIE, JOHN
SAGNER, RORY

Target Street	Cross Street	Source
✓	-	Cole Information

TODT KARLE RD SE 2000

10620	BRANDT, WILLIAM P
10626	DEUEL, LEONARD L
10628	FOLSOM, F G
10635	OKELLY, K
10638	SMITH, M M
10650	HUGUENIN, GENE
10706	DORR, JAMES M
10726	KLENKE, JOHN E
10728	MICKELSON, WILLIAM
10730	HAMILTON, DEAN A
10735	MCLAUGHLIN, OLIVER C
10747	OATFIELD, RICHARD

Target Street	Cross Street	Source
-	✓	Cole Information

YELM HWY SE 2000

10910	BURKE, BRIAN W
	DEGROFF, JAMES
	DJ ENTERTAINMENT UNLIMITED INCORPORATED
	MCKERN, TIMOTHY M
10922	LAUR, DAVID
10925	LOFLAND, JAMES L
10938	GOLDEN, LEROY
11008	LASHER, JIM
	TAME YOUR MANE
11020	HARP, SUSAN
	RAKESTRAW, DAVID
11130	PROTTI, THOMAS
11138	CHIAPPINO, STEVE
11142	MICKELSON, PAUL
11211	WATTS, WILLIAM T
11310	COLVIN, LAVONNE E
11401	GUTHRIE, JOHN
11422	VANDERWERFF, JOY
12501	NISQUALLY INDIAN TRIBE
12819	CASINO NISQUALLY INDIAN TRIBE
	NISQUALLY INDIAN TRIBE
	REDWIND CASINO NISQUALLY INDIAN TRIBE
12827	NISQUALLY REZ MART

Target Street	Cross Street	Source
✓	-	Cole Information

TODT KARLE RD SE 1995

10614	WOODS, DALE
10620	BRANDT, WILLIAM P
10625	MACHLAN, G R
10638	SCHAEFFER, NANCE J
10650	STOTT, TRACEY
10706	DORR, JAMES M
10720	BERNASCONI, JOHN E
10730	HAMILTON, DEAN A
10735	MCLAUGHLIN, OLIVER C
10747	OATFIELD, RICHARD

Target Street	Cross Street	Source
-	✓	Cole Information

YELM HWY SE 1995

10910	GIBBONS, FRANK R
	MATNEY, WILLIAM
10922	LAUR, DAVID
10925	COLEMAN, LYNN
	MACK, TIM
11008	LASHER, JIM
11014	LOTT, DAVID
11020	HARP, SUSAN
	RAKESTRAW, DAVID
11021	MORRISSEY, RICKEY
11310	COLVIN, ELTON G
11401	FARIBROTHER, SUZANNE
	PENDERGAST, M E
11422	VANDERWERFF, JOY
11429	HAWKESWOOD, CLIFF
12705	YATES, ELI

Target Street	Cross Street	Source
✓	-	Cole Information

TODT KARLE RD SE 1992

10614	WOODS, DALE
10620	BRANDT, WILLIAM P
10625	OKELLY, K
10626	STEVENS, ELDON
10628	DUELL, FLOYD
10650	STOTT, TRACEY
10706	DORR, JAMES M
10720	BERNASCONI, JOHN
10726	MALM, KENNETH L
10728	MICKELSON, WILLIAM H
10730	HAMILTON, DEAN A
10735	MCLAUGHLIN, OLIVER C

Target Street	Cross Street	Source
-	✓	Cole Information

YELM HWY SE 1992

10910	MATNEY, WILLIAM
	WRIGHT, JEFF
10922	LAUR, DAVID
11014	HEDRICK, JAMES W
11021	GALLUP, RONALD
11310	COLVIN, ELTON G
11401	LENAY, CYNTHIA
	OCONNELL, MARY B
12501	WALKER, H P
12705	WOOD, M
	YATES, ELI

Medicine River Ranch Property
10747 TODTKARLE RD SE
Olympia, WA 98513

Inquiry Number: 7415454.7
August 15, 2023

EDR Environmental Lien and AUL Search

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

10747 TODTKARLE RD SE
Medicine River Ranch Property
Olympia, WA 98513

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found ☐ Not Found ☒

RESEARCH SOURCE

Source 1:

Thurston Recorder
Thurston, WA

PROPERTY INFORMATION

Deed 1:

Type of Deed:	Statutory Warranty Deed
Title is vested in:	Nisqually Indian Tribe
Title received from:	Thurston County Title Co
Deed Dated	7/2/2020
Deed Recorded:	7/6/2020
Book:	NA
Page:	NA
Volume:	NA
Instrument:	4764277
Docket:	NA
Land Record Comments:	see exhibit
Miscellaneous Comments:	NA
Legal Description:	see exhibit
Legal Current Owner:	Nisqually Indian Tribe
Parcel # / Property Identifier:	21832340000
Comments:	see exhibit

Deed Exhibit 1

4764277 Pages: 5
07/06/2020 10:00 AM D
Thurston County, Washington
THURSTON COUNTY TITLE CO.

When recorded return to:

NISQUALLY INDIAN TRIBE
4820 SHE NAH NUM DR SE
OLYMPIA, WA 98513

Thurston County Treasurer
E007282 $17,434.00
07/06/2020 N Wiseman

STATUTORY WARRANTY DEED

TH24697

THURSTON COUNTY TITLE CO

The Grantor, **RICHARD R. OATFIELD and FLOELLA OATFIELD, husband and wife**

for and in consideration of **Ten Dollars and other valuable consideration**

in hand paid, conveys, and warrants to **NISQUALLY INDIAN TRIBE**

the following described real estate, situated in the County of Thurston, State of Washington:

LOTS 2, 3 AND 4 OF SHORT SUBDIVISION NO. SS-1893, AS RECORDED MARCH 27, 1984 UNDER AUDITOR'S FILE NO. 8403270064.

Abbreviated Legal: **LOTS 2, 3 & 4 SS-1893**
Tax Parcel Numbers(s): **218-32-340000 , 218-32-340002 , 218-32-340003 , 9980-13-23600**

SUBJECT TO: Those exceptions as shown on Exhibit "A" attached hereto and by this reference made a part hereof.

Dated: **July 2, 2020**

RICHARD R. OATFIELD

FLOELLA OATFIELD

STATE OF **Washington**

} ss.

COUNTY OF **Thurston**

I certify that I know or have satisfactory evidence that **RICHARD R. OATFIELD and FLOELLA OATFIELD** are the persons who appeared before me, and said persons acknowledged that they signed this instrument and acknowledged it to be their free and voluntary act for the uses and purposes mentioned in this instrument.

Dated: 7/2/2020

(signature of notary) Darla J. Wilkins
printed name of Notary:
Notary Public in and for the State of Washington
Residing at Olympia
My appointment expires: 9/15/2023

DARLA J. WILKINS
NOTARY PUBLIC #42995
STATE OF WASHINGTON
COMMISSION EXPIRES
SEPTEMBER 15, 2023

Exhibit "A"

Subject to:

EASEMENT AND THE TERMS AND CONDITIONS THEREOF:

GRANTEE:	PUGET SOUND POWER & LIGHT COMPANY, A MASSACHUSETTS CORPORATION
PURPOSE:	ELECTRIC TRANSMISSION AND DISTRIBUTION LINE
RECORDED:	January 28, 1946
AUDITOR'S FILE NO.:	402017
AREA AFFECTED:	LOT 4 AND OTHER PROPERTY

EASEMENT AND THE TERMS AND CONDITIONS THEREOF:

GRANTEE:	UNITED STATES OF AMERICA AND ITS ASSIGNS
PURPOSE:	TO ENTER AND ERECT, OPERATE, MAINTAIN, REPAIR, REBUILD, AND PATROL ONE OR MORE ELECTRIC POWER TRANSMISSION LINES AND APPURTENANT SIGNAL LINES, POLES, TOWERS, WIRES, CABLES, AND APPLIANCES NECESSARY IN CONNECTION THEREWITH
RECORDED:	November 06, 1952
AUDITOR'S FILE NO.:	512152
AREA AFFECTED:	LOT 4 AND OTHER PROPERTY

EASEMENT FOR INGRESS, EGRESS AND UTILITIES OVER, UNDER AND ACROSS THE NORTH 30 FEET OF THE EAST 683.5 FEET OF THE NORTH HALF OF THE SOUTHEAST QUARTER LYING WEST OF YELM ROAD AS GRANTED BY DEED RECORDED JULY 26, 1971 UNDER AUDITOR'S FILE NO. 847590 AND AS SHOWN ON THE FACE OF THE SHORT SUBDIVISION MAP. (AFFECTS LOT 4)

EASEMENT FOR INGRESS, EGRESS AND UTILITIES OVER, UNDER AND ACROSS A 60 FOOT WIDE STRIP AS GRANTED BY DEED RECORDED JULY 26, 1971 UNDER AUDITOR'S FILE NO. 847590 AND AS SHOWN ON THE FACE OF THE SHORT SUBDIVISION MAP. (AFFECTS LOT 4)

EASEMENT OR QUASI-EASEMENT, INCLUDING THE TERMS, COVENANTS AND PROVISIONS THEREOF, AS GRANTED BY INSTRUMENT;

RECORDED:	January 09, 1984
AUDITOR'S FILE NO.:	8401090039
IN FAVOR OF :	COUNTY OF THURSTON, STATE OF WASHINGTON
FOR:	THE RIGHT TO MAKE NECESSARY SLOPES FOR CUTS OR FILLS UPON THAT PORTION OF SAID PREMISES ABUTTING TODTKARLE RD

DECLARATION OF SHORT SUBDIVISION AND COVENANTS;

RECORDED:	March 27, 1984
AUDITOR'S FILE NO.:	8403270064

CONDITIONS OF APPROVAL SHOWN ON THE FACE OF THE SHORT SUBDIVISION MAP, AS FOLLOWS:

A) EACH LOT IS APPROVED FOR ONE SINGLE-FAMILY RESIDENCE PER LOT ON INDIVIDUAL WELLS.

B) A DESIGNED ON-SITE SEWAGE DISPOSAL SYSTEM WILL BE REQUIRED PRIOR TO BUILDING ON LOT 1.

60 FOOT WIDE EASEMENT FOR INGRESS, EGRESS AND UTILITIES AS SHOWN ON THE FACE OF THE SHORT SUBDIVISION MAP.

ANY QUESTION OR DISPUTE ABOUT FENCELINES, OR ABOUT OWNERSHIP OF THE LAND LYING BETWEEN THE FENCE AND THE RECORD BOUNDARY, THE LOCATION OF WHICH IS SHOWN ON SURVEY RECORDED March 27, 1984 UNDER FILE NO. 8403270064. (AFFECTS LOT 4)

EASEMENT AND THE TERMS AND CONDITIONS THEREOF:

GRANTEE:	PUGET SOUND POWER & LIGHT COMPANY, A CORPORATION
PURPOSE:	ELECTRIC TRANSMISSION AND DISTRIBUTION LINE
RECORDED:	September 21, 1984
AUDITOR'S FILE NO.:	8409210094
AREA AFFECTED:	LOTS 2 AND 4

EASEMENT AND THE TERMS AND CONDITIONS THEREOF:

GRANTEE:	PACIFIC NORTHWEST BELL TELEPHONE COMPANY, A WASHINGTON CORPORATION, ITS SUCCESSORS AND ASSIGNS
PURPOSE:	THE RIGHT, PRIVILEGE AND AUTHORITY TO PLACE, CONSTRUCT, MAINTAIN, INSPECT, RECONSTRUCT, REPAIR, REPLACE, REMOVE AND KEEP OBSTACLES CLEAR FROM GRANTEE'S FACILITIES CONSISTING UNDERGROUND COMMUNICATION LINES
RECORDED:	November 08, 1984
AUDITOR'S FILE NO.:	8411080057
AREA AFFECTED:	THIS AND OTHER PROPERTY

EASEMENT AND THE TERMS AND CONDITIONS THEREOF:

GRANTEE:	PUGET SOUND POWER & LIGHT COMPANY, A WASHINGTON CORPORATION
PURPOSE:	ELECTRIC TRANSMISSION AND DISTRIBUTION LINE
RECORDED:	October 20, 1987
AUDITOR'S FILE NO.:	8710200107
AREA AFFECTED:	LOT 4

TERMS AND CONDITIONS OF INSTRUMENT RECORDED April 08, 1992 UNDER FILE NO. 9204080111, REGARDING PROPER OPERATION AND MAINTENANCE OF THE ON-SITE SEWAGE DISPOSAL SYSTEM. (AFFECTS LOT 4)

EASEMENT AND THE TERMS AND CONDITIONS THEREOF:

GRANTEE:	PUGET SOUND ENERGY, INC., A WASHINGTON CORPORATION
PURPOSE:	TRANSMISSION, DISTRIBUTION AND SALE OF ELECTRICITY
RECORDED:	November 10, 2014
AUDITOR'S FILE NO.:	4416903
AREA AFFECTED:	LOT 4

ANY PROHIBITION OR LIMITATION ON THE USE, OCCUPANCY OR IMPROVEMENT OF THE LAND RESULTING FROM THE RIGHTS OF THE PUBLIC OR RIPARIAN OWNERS TO USE ANY WATERS WHICH MAY COVER THE LAND OR TO USE ANY PORTION OF THE LAND WHICH IS NOW OR MAY FORMERLY HAVE BEEN COVERED BY WATER.

Medicine River Ranch Property
10747 TODTKARLE RD SE
Olympia, WA 98513

Inquiry Number: 7415454.6
August 11, 2023

The EDR Property Tax Map Report

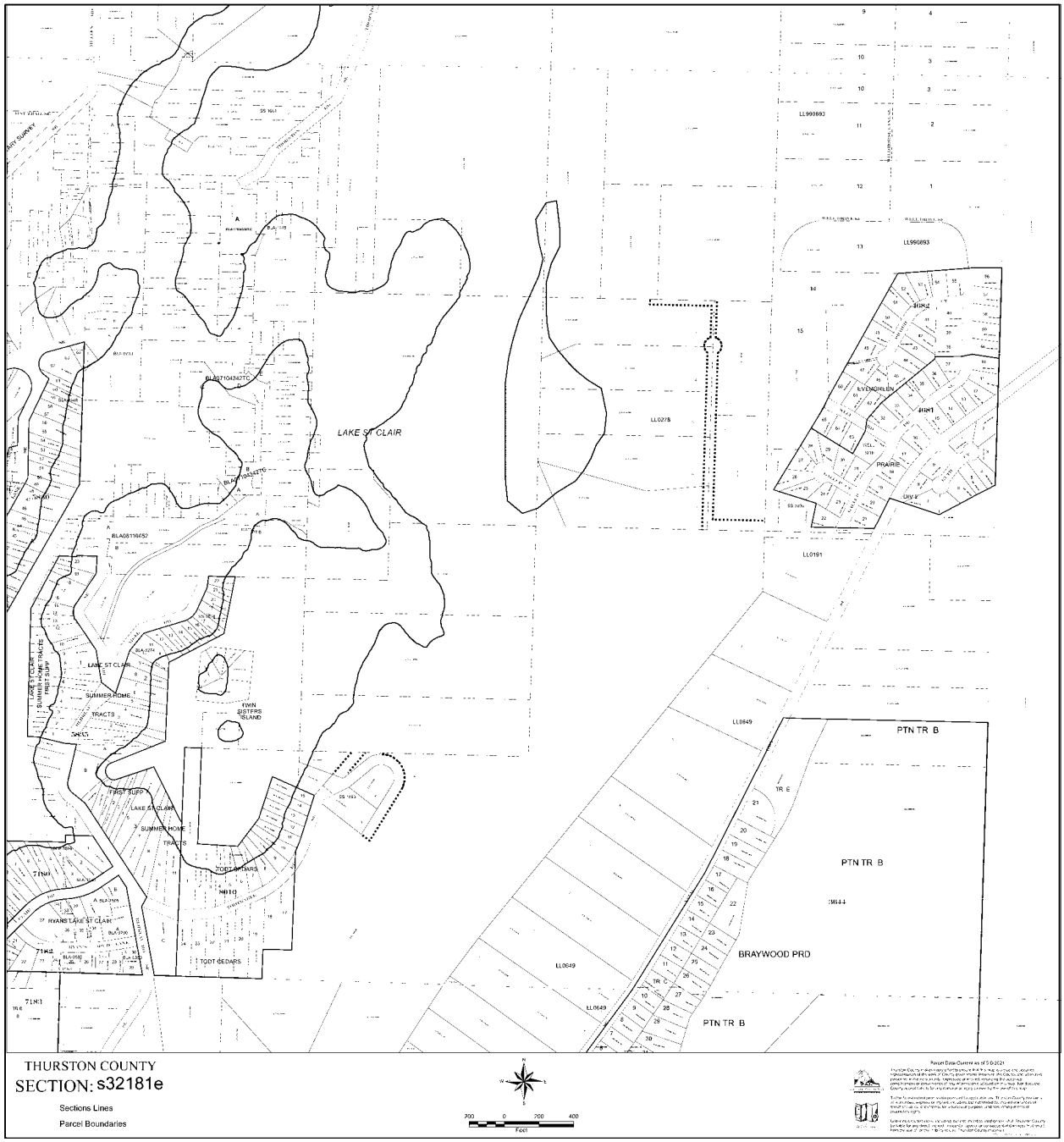
EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.


LAKE ST CLAIR
LL027B
LL990893
LL990892
LL0191
LL0649
EVERGREEN
PRAIRIE
DIV 4
LAKE ST CLAIR
SUMMER HOME TRACTS
FIRST SUPP
TWIN SISTERS ISLAND
TODT GARDENS
PTN TR B
TR E
TR C
BRAYWOOD PRD
THURSTON COUNTY
SECTION: s32181e
Sections Lines
Parcel Boundaries
200 0 200 400
Feet

Thurston County Assessor

Parcel Number: 21832310000

Date: 9/14/2023

Situs Address:

Sect/Town/Range: 32 18 1E

Owner: NISQUALLY INDIAN TRIBE
Address: 4820 SHE NAH NUM DR SE
OLYMPIA, WA 98513

Taxpayer: NISQUALLY INDIAN TRIBE
Address: 4820 SHE NAH NUM DR SE
OLYMPIA, WA 98513

Abbreviated Legal: 32-18-1E 15.30 AC NE SW S 800F LY E OF LK ST CLAIR LESS S33

Size: 15.30 Acres
UseCode: 91 Undeveloped Land
TCA Number: 220
Neighborhood: 24Q2
Property Type: LND
Taxable: YES
Active Exemptions: Tribal Lands for Government Services
School District: YELM S.D. #2

Market Values

Tax Year	**2024**	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**
Assessment Year	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**
Market Value Land	$222,900	$170,100	$199,100	$136,700	$96,500	$74,600	$77,200	$88,000	$67,200	$210,100
Market Value Buildings										
Market Value Total	**$222,900**	**$170,100**	**$199,100**	**$136,700**	**$96,500**	**$74,600**	**$77,200**	**$88,000**	**$67,200**	**$210,100**

Land Characteristics

Land Flag 9150
Lot Square Footage Not Listed
Lot Acreage 15.3
Effective Frontage 1002
Effective Depth 1
Water Source Not Listed
Sewer Source Not Listed

Land Influence(s)

ST-STEEP-TOPO
NR-NO-ROAD
LB-BELOW-AVG-LK
W2-20%-WETLAND

Sales

Sale Date:	03/25/2015	11/12/2014	11/12/2014
Price:	$247,490		
Excise:	726729	725412	725490
Sale Type:	QUIT CLAIM DEED	QUIT CLAIM DEED	QUIT CLAIM DEED
Recording Number:	4436520	4417441	4417941
Seller:	LACEY ROTARY FOUNDATION	CARLE GEORGE	
Buyer:	NISQUALLY INDIAN TRIBE	LACEY ROTARY FOUNDATION	LACEY ROTARY FOUNDATION
Multiple Parcel Sale:	Y	Y	Y

Sale Date:	10/25/2012
Price:	
Excise:	518248
Sale Type:	QUIT CLAIM DEED
Recording Number:	4299102
Seller:	CARLE TRUSTEE GEORGE
Buyer:	WALLACE TRUSTEE DAVID
Multiple Parcel Sale:	Y

Office of the Assessor

Steven J. Drew, Assessor
3000 Pacific Ave SE, Olympia WA 98501
Customer Service (360)867-2200 -- Fax (360)867-2201 -- TDD (360)754-2933

Thurston County Assessor

Parcel Number: 21832310100

Date: 9/14/2023

Situs Address:

Owner:	NISQUALLY INDIAN TRIBE
Address:	4820 SHE NAH NUM DR SE OLYMPIA, WA 98513
Taxpayer:	NISQUALLY INDIAN TRIBE
Address:	4820 SHE NAH NUM DR SE OLYMPIA, WA 98513
Abbreviated Legal:	32-18-1E 10A S4 NE SW

Sect/Town/Range:	32 18 1E
Size:	10.00 Acres
UseCode:	91 Undeveloped Land
TCA Number:	220
Neighborhood:	24Q2
Property Type:	LND
Taxable:	YES
Active Exemptions:	Tribal Lands for Government Services
School District:	YELM S.D. #2

Market Values

Tax Year	**2024**	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**
Assessment Year	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**
Market Value Land	$282,600	$212,700	$228,000	$184,300	$186,100	$148,100	$152,800	$180,500	$142,050	$217,750
Market Value Buildings										
Market Value Total	**$282,600**	**$212,700**	**$228,000**	**$184,300**	**$186,100**	**$148,100**	**$152,800**	**$180,500**	**$142,050**	**$217,750**

Land Characteristics

Land Flag	9150
Lot Square Footage	Not Listed
Lot Acreage	10
Effective Frontage	324
Effective Depth	1
Water Source	Not Listed
Sewer Source	Not Listed

Land Influence(s)

LB-BELOW-AVG-LK
ST-STEEP-TOPO

Sales

Sale Date:	03/25/2015	11/12/2014	11/12/2014
Price:	$247,490		
Excise:	726729	725412	725490
Sale Type:	QUIT CLAIM DEED	QUIT CLAIM DEED	QUIT CLAIM DEED
Recording Number:	4436520	4417441	4417941
Seller:	LACEY ROTARY FOUNDATION	CARLE GEORGE	
Buyer:	NISQUALLY INDIAN TRIBE	LACEY ROTARY FOUNDATION	LACEY ROTARY FOUNDATION
Multiple Parcel Sale:	Y	Y	Y

Office of the Assessor

Steven J. Drew, Assessor

3000 Pacific Ave SE, Olympia WA 98501

Customer Service (360)867-2200 -- Fax (360)867-2201 -- TDD (360)754-2933

Thurston County Assessor

Parcel Number: 21832310200

Date: 9/14/2023

Situs Address:

Owner: NISQUALLY INDIAN TRIBE
Address: 4820 SHE NAH NUM DR SE
OLYMPIA, WA 98513

Taxpayer: NISQUALLY INDIAN TRIBE
Address: 4820 SHE NAH NUM DR SE
OLYMPIA, WA 98513

Abbreviated Legal: Section 32 Township 18 Range 1E Quarter NE SW EXCEPTING THEREFROM THE SOUTH 800 FEET. ALSO EXCEPTING THEREFROM: BEGINNING AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF THE SOUTHWEST

Sect/Town/Range: 32 18 1E

Size: 11.10 Acres
UseCode: 91 Undeveloped Land
TCA Number: 220
Neighborhood: 24Q2
Property Type: LND
Taxable: YES
Active Exemptions: Tribal Lands for Government Services
School District: YELM S.D. #2

Market Values

Tax Year	**2024**	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**
Assessment Year	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**
Current Use Land										$1,250
Current Use Buildings										
Current Use Total										**$1,250**
Market Value Land	$186,200	$138,600	$155,500	$114,800	$77,100	$66,300	$68,600	$78,600	$56,250	$11,100
Market Value Buildings										
Market Value Total	**$186,200**	**$138,600**	**$155,500**	**$114,800**	**$77,100**	**$66,300**	**$68,600**	**$78,600**	**$56,250**	**$11,100**

Land Characteristics

Land Flag	9150
Lot Square Footage	Not Listed
Lot Acreage	11.1
Effective Frontage	Not Listed
Effective Depth	Not Listed
Water Source	Not Listed
Sewer Source	Not Listed

Land Influence(s)

ST-STEEP-TOPO
W4-40%-WETLAND
NR-NO-ROAD
LB-BELOW-AVG-LK

Sales

Sale Date:	03/25/2015	11/12/2014	11/12/2014
Price:	$247,490		
Excise:	726729	725412	725490
Sale Type:	QUIT CLAIM DEED	QUIT CLAIM DEED	QUIT CLAIM DEED
Recording Number:	4436520	4417441	4417941
Seller:	LACEY ROTARY FOUNDATION	CARLE GEORGE	
Buyer:	NISQUALLY INDIAN TRIBE	LACEY ROTARY FOUNDATION	LACEY ROTARY FOUNDATION
Multiple Parcel Sale:	Y	Y	Y

Sale Date:	10/25/2012
Price:	
Excise:	518248
Sale Type:	QUIT CLAIM DEED
Recording Number:	4299102
Seller:	CARLE TRUSTEE GEORGE
Buyer:	WALLACE TRUSTEE DAVID
Multiple Parcel Sale:	Y

Office of the Assessor
Steven J. Drew, Assessor
3000 Pacific Ave SE, Olympia WA 98501
Customer Service (360)867-2200 -- Fax (360)867-2201 -- TDD (360)754-2933

Thurston County Assessor

Parcel Number: 21832340000

Date: 9/14/2023

Situs Address:	10747 SE TODTKARLE RD	**Sect/Town/Range:**	32 18 1E
Owner:	NISQUALLY INDIAN TRIBE	**Size:**	68.72 Acres
Address:	4820 SHE NAH NUM DR SE OLYMPIA, WA 98513	**UseCode:**	11 Single Unit
		TCA Number:	185
		Neighborhood:	24Q1
Taxpayer:	NISQUALLY INDIAN TRIBE	**Property Type:**	RES
Address:	4820 SHE NAH NUM DR SE OLYMPIA, WA 98513	**Total Living Units:**	1
		Taxable:	YES
		Active Exemptions:	None
Abbreviated Legal:	32-18-1E PT SE SW & SW SW KA LOT 4 SS-1893 8A LESS	**Fire District:**	FIRE DISTRICT #03
		School District:	YELM S.D. #2
		Water Source:	WELL
		Sewer Type:	SEPTIC

Market Values

Tax Year	**2024**	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**
Assessment Year	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**
Market Value Land	$555,900	$400,600	$356,200	$206,200	$310,400	$242,400	$348,400	$302,000	$272,550	$256,500
Market Value Buildings	$265,500	$300,700	$217,700	$233,300	$234,300	$239,300	$194,600	$182,100	$164,700	$156,300
Market Value Total	**$821,400**	**$701,300**	**$573,900**	**$439,500**	**$544,700**	**$481,700**	**$543,000**	**$484,100**	**$437,250**	**$412,800**

Residential Structures

Year Built	1964	**Fireplaces/Wood Stoves**	2
Construction	RAMBLER	**Heat Type**	FORCED-AIR
Construction Quality	FAIR	**Fuel Type**	OIL
Physical Condition	AVERAGE	**Foundation Type**	CONCRETE
Number of Bedrooms	3	**Exterior Wall Type**	TEX1-11/PWD
Full Baths	1	**Roofing Material**	COMPOSITION
Partial Baths	1		

Residence Square Footage	
Main Finished Area	1352
Basement Square Footage	
Basement Area	1946
Attached Garage Square Footage	
Attached Garage Sqft	594
Misc Structures	
Covered Porch	528
Cover	243

Detached Structures

Structure	Year Built	Square Feet	Quality	Condition
SHOP	1963	3500	FAIR	AVERAGE
UTILITY-BLDG	1963	360	FAIR	AVERAGE

Land Characteristics

Land Flag	9150	**Land Influence(s)**	EA-EASEMENT
Lot Square Footage	Not Listed		
Lot Acreage	68.72		
Effective Frontage	Not Listed		
Effective Depth	Not Listed		
Water Source	Well		
Sewer Source	Septic		

Sales

Sale Date:	07/02/2020
Price:	$1,030,000
Excise:	E007282
Sale Type:	STATUTRY WARNTY DEED
Recording Number:	4764277
Seller:	OATFIELD RICHARD R & FLOELLA J
Buyer:	NISQUALLY INDIAN TRIBE
Multiple Parcel Sale:	Y

The Assessor's Office maintains property records on approximately 112,000 parcels in Thurston County for tax purposes. Though records are updated regularly, the accuracy and timeliness of published data cannot be guaranteed. Any person or entity that relies on information obtained from this website does so at his or her own risk. Neither Thurston County nor the Assessor will be held liable for damage or losses caused by use of this information. ***All critical information should be independently verified.***

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Thurston County Assessor

Parcel Number: 21832340002

Date: 9/14/2023

Situs Address:	10735 TODTKARLE RD SE	**Sect/Town/Range:**	32 18 1E
Owner:	NISQUALLY INDIAN TRIBE	**Size:**	0.75 Acres
Address:	4820 SHE NAH NUM DR SE OLYMPIA, WA 98513	**UseCode:**	18 Other Residential
		TCA Number:	185
		Neighborhood:	24Q1
Taxpayer:	NISQUALLY INDIAN TRIBE	**Property Type:**	MOB
Address:	4820 SHE NAH NUM DR SE OLYMPIA, WA 98513	**Taxable:**	YES
		Active Exemptions:	None
		Fire District:	FIRE DISTRICT #03
Abbreviated Legal:	32-18-1E PT SE SW KA LOT 2 SS-1893	**School District:**	YELM S.D. #2
Associations:	99801323600 NISQUALLY INDIAN TRIBE	**Water Source:**	PUBLIC
		Sewer Type:	SEPTIC

Market Values

Tax Year	**2024**	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**
Assessment Year	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**
Market Value Land	$202,600	$131,800	$141,600	$89,600	$72,500	$61,400	$84,000	$75,700	$69,500	$65,400
Market Value Buildings	$44,200	$71,200	$54,400	$51,300	$53,700	$67,100	$81,300	$54,300	$50,100	$51,100
Market Value Total	**$246,800**	**$203,000**	**$196,000**	**$140,900**	**$126,200**	**$128,500**	**$165,300**	**$130,000**	**$119,600**	**$116,500**

Detached Structures

Structure	Year Built	Square Feet	Quality	Condition
UTILITY-BLDG	1985	315	AVERAGE	AVERAGE
FRAME-GARAGE	1985	960	AVERAGE	AVERAGE
SHOP	1991	864	AVERAGE	AVERAGE
LEAN-TO	1990	240	FAIR	AVERAGE

Land Characteristics

Land Flag	1100	**Land Influence(s)**	No Influences Listed
Lot Square Footage	32670		
Lot Acreage	0.75		
Effective Frontage	Not Listed		
Effective Depth	Not Listed		
Water Source	Public		
Sewer Source	Septic		

Sales

Sale Date:	07/02/2020	08/15/2003
Price:	$1,030,000	$100,000
Excise:	E007282	315472
Sale Type:	STATUTRY WARNTY DEED	REAL ESTATE CONTRACT
Recording Number:	4764277	3567961
Seller:	OATFIELD RICHARD R & FLOELLA J	MC LAUGHLIN OLIVER
Buyer:	NISQUALLY INDIAN TRIBE	OATFIELD RICHARD R & FLOELLA J
Multiple Parcel Sale:	Y	Y

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Thurston County Assessor

Parcel Number: 21832340003

Date: 9/14/2023

Situs Address:

Owner: NISQUALLY INDIAN TRIBE
Address: 4820 SHE NAH NUM DR SE
OLYMPIA, WA 98513

Taxpayer: NISQUALLY INDIAN TRIBE
Address: 4820 SHE NAH NUM DR SE
OLYMPIA, WA 98513

Abbreviated Legal: 32-18-1E PT SE SW KA LOT 3 SS-1893

Sect/Town/Range: 32 18 1E

Size: 1.00 Acres
UseCode: 91 Undeveloped Land
TCA Number: 220
Neighborhood: 24Q1
Property Type: LND
Taxable: YES
Active Exemptions: None
School District: YELM S.D. #2

Market Values

Tax Year	**2024**	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**
Assessment Year	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**
Market Value Land	$152,800	$102,000	$125,400	$82,100	$77,900	$65,700	$90,000	$81,100	$73,700	$69,350
Market Value Buildings										
Market Value Total	**$152,800**	**$102,000**	**$125,400**	**$82,100**	**$77,900**	**$65,700**	**$90,000**	**$81,100**	**$73,700**	**$69,350**

Land Characteristics

Land Flag	1100	**Land Influence(s)**	No Influences Listed
Lot Square Footage	43560		
Lot Acreage	1		
Effective Frontage	Not Listed		
Effective Depth	Not Listed		
Water Source	Not Listed		
Sewer Source	Not Listed		

Sales

Sale Date:	07/02/2020	08/15/2003
Price:	$1,030,000	$100,000
Excise:	E007282	315472
Sale Type:	STATUTRY WARNTY DEED	REAL ESTATE CONTRACT
Recording Number:	4764277	3567961
Seller:	OATFIELD RICHARD R & FLOELLA J	MC LAUGHLIN OLIVER
Buyer:	NISQUALLY INDIAN TRIBE	OATFIELD RICHARD R & FLOELLA J
Multiple Parcel Sale:	Y	Y

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Sec. or Plat 32-18-1E Subdiv. Pt Lot NE-SW Blk. I. No.

NOTES

LEGAL DESCRIPTION	I. No.	ACRES LESS	ACRES BAL.
			26.40
~~NE¼-SW¼~~ ~~less the N 200 ft~~	3102	~~4~~ 11.10	15.30
~~Less 3.60 A~~			~~23.65~~ ~~AC CORR (W) 4-16-82~~
~~Less 10 A~~			
SO 800 FT LY E " " LK ST CLAIR			
LESS SO 330 F			
38 1002 W.F.			

Date	SALES PRICE	Record	LEGAL OWNER	TAX YEAR	TIMBER ACRES	IMP. ACRES	UNIMP. ACRES	TIMBER VALUE	W.F. VALUE	IMP. VALUE	UNIMP. VALUE	TOTAL	IMPS.	
	Prob	8424	Carle, Monganita V estate	89								76100		JS
		389 292	Carle, George H ½ int.	92								76700		3/09 JH 9/6/
		653 545	Carle, George H Trustee ½ int	93								99600	0	3/09
		658 204	Carle, (← To Allied) Monganita V Trustee ½ int	94								99600	0	3/09
		709 281	Carle George H	95								99600	0	3/09
				96								99600	0	3/09
				97								115000	0	09
				~~1977~~										
				1978										
				1979										
				1980		10.30	5.00					37,500 ~~64,400~~		TM
				1981										
				1982										
				1983										
				1984								76,500		ST

Address

Picture No.

State Fire: 5

PLAT	BLK	LOT	SEG	DLC	CODE NO.	RNG	T	SEC	4	16	LOT	SEG
						21	8	32	3	1		

Tax Code No.: 220

2183231000

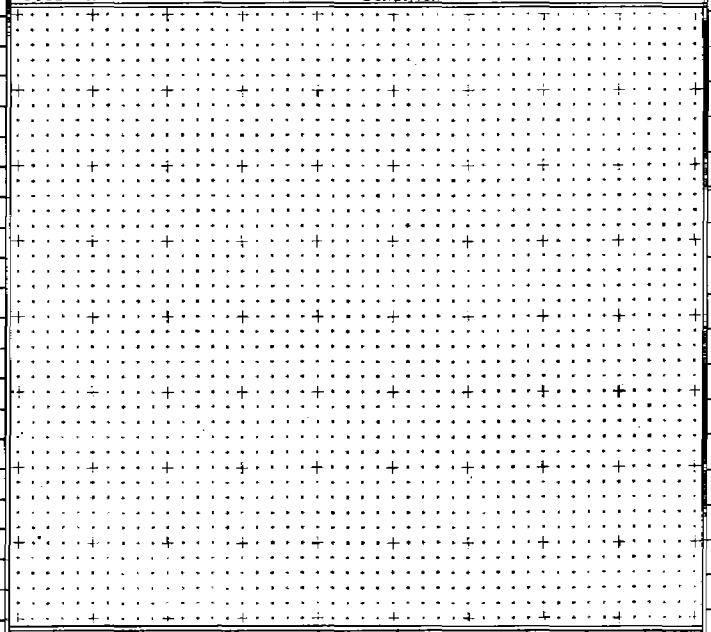
BUILDING	STORIES	1	½	2	A	B
Dwelling	No. Rooms					
Duplex	No. Baths					
	No. Bedrooms					
FOUNDATION	**PARTITIONS**					
Conc. 6 8 10	Plaster					
Concrete Blk.	Drywall					
Piers	Wood Panel					
EXT. WALLS						
	CEILING					
ROOF	Plaster					
Flat	Drywall					
Hip	Compo.					
Gable	Plywood					
	Tile					
Built-up	Paper					
Shingles	Wood Panel					
Shakes						
Composition	**FLOORS**					
	Single					
	Double					
CONSTRUCTION	Softwood					
Single	Hardwood					
Double	Plywood					
Block	Carpet					
Insulation	Tile					
	Concrete					
	Linoleum					
HEATING						

FIREPLACE	**PLUMBING**		
	Toilet		Shower Stall
	Tub		Tub Shower
Forced	Lav.		Sink
Gravity	Laundry Fac.		
Floor or Wall	Garbage Disp.		
	Dishwasher		
Hot Water	Hot Water Heater		
Baseboard			
Floor Rad.	**BASEMENT**		**EXTRAS**
Electric	None		B.I. Oven
Wall Units	Full		B.I. Range
Baseboard	Part		Hood and Fan
Glass Panel	No. Rooms		Drop-In
Ceiling Rad.	Class Rooms		
Floor Rad.			

Year Built Class

Year Re-Mod. Permit

Used For Condition



Rate Adj.	−	+	Base Rate			
			Variation			
			Adj. Base Rt.			
			Square Feet			
			Perimeter			
TOTAL						
Rate Variation						

REMARKS

ADDITIONAL BUILDINGS	First	Second	Third	Fourth
Garage				
TOTAL				
Attic				
Upper Stories				
Basement				
Basement Rooms				
Heating				
Plumbing				
Fireplace				
Attached Garage				
TOTALS				
Base Cost				
Reproduction Cost				
Local Multiplier				
Depreciation %				
% Complete				
Present Value				
Additional Buildings				
Total Present Value				
Total Assessed Value %				

Appraised by

19	19
19	19
19	19

Sec. or Plat 32-18-1E Subdiv. Lot S½-NE-SW Blk. I. No. 1

NOTES

LEGAL DESCRIPTION	I. No.	ACRES LESS	ACRES BAL.
S½-NE¼-SW¼			10 00
334' W.F. NE 16 SW 1/4 + 1320 BB			

Date	SALES PRICE	Record	LEGAL OWNER	TAX YEAR	TIMBER ACRES	IMP. ACRES	UNIMP. ACRES	TIMBER VALUE	W.F. VALUE	IMP. VALUE	UNIMP. VALUE	TOTAL	IMPS.	
			Wilson, Frances M.	89								49600		JS
	1688	354 363	Carle, George H.	92								49600		3/09
6-74		653 544	Carle, George H Trustee	93								64400	0	31/09
		709 281	Carle, George H.	94								64400	0	31/09
				95								64400	0	31/09
				96								64400	0	31/09
				97								74400	0	09
				1977										
				1978										
				1979										
				1980								24500		TM
				1981										
				1982										
				1983										
				1984								50000		ST

Address

Picture No.

State Fire: L

Tax Code No.: 220

PLAT	BLK	LOT	SEG	DLC	CODE NO.
	1				

RNG	T	SEC	4	16	LOT	SEG
21	8	32	3	1	01	1 – 4

TRICK & MURRAY, SEATTLE 21938

2183231000

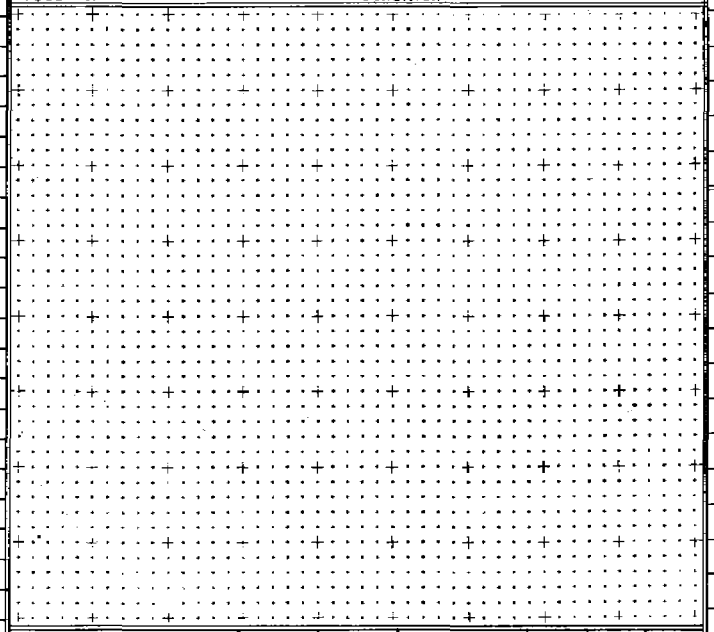
BUILDING	STORIES	1	½	2	A	B
Dwelling	No. Rooms					
Duplex	No. Baths					
	No. Bedrooms					
FOUNDATION	**PARTITIONS**					
Conc. 6 8 10	Plaster					
Concrete Blk.	Drywall					
Piers	Wood Panel					
EXT. WALLS						
	CEILING					
ROOF	Plaster					
Flat	Drywall					
Hip	Compo.					
Gable	Plywood					
	Tile					
Built-up	Paper					
Shingles	Wood Panel					
Shakes						
Composition	**FLOORS**					
	Single					
	Double					
CONSTRUCTION	Softwood					
Single	Hardwood					
Double	Plywood					
Block	Carpet					
Insulation	Tile					
	Concrete					
	Linoleum					
HEATING						

FIREPLACE	**PLUMBING**			
		Toilet		Shower Stall
		Tub		Tub Shower
Forced		Lav.		Sink
Gravity		Laundry Fac.		
Floor or Wall		Garbage Disp.		
		Dishwasher		
Hot Water		Hot Water Heater		
Baseboard				
Floor Rad.	**BASEMENT**		**EXTRAS**	
Electric		None		B. I. Oven
Wall Units		Full		B. I. Range
Baseboard		Part		Hood and Fan
Glass Panel		No. Rooms		Drop-In
Ceiling Rad.		Class Rooms		
Floor Rad.				

Year Built Class

Year Re-Mod. Permit

Used For Condition



Rate Adj.	−	+	Base Rate			
			Variation			
			Adj. Base Rt.			
			Square Feet			
			Perimeter			
TOTAL						
Rate Variation						

REMARKS

ADDITIONAL BUILDINGS	First	Second	Third	Fourth
Garage				
TOTAL				
Attic				
Upper Stories				
Basement				
Basement Rooms				
Heating				
Plumbing				
Fireplace				
Attached Garage				
TOTALS				
Base Cost				
Reproduction Cost				
Local Multiplier				
Depreciation %				
% Complete				
Present Value				
Additional Buildings				
Total Present Value				
Total Assessed Value %				

Appraised by

19	19
19	19
19	19

Sec. or Plat 32-18-1E   Lot   Blk.   Subdiv. NE-SW   SS #   LOT #

LEGAL DESCRIPTION	No.	ACRES Less		Bal.		NOTES
~~The W 200 ft of S 1000 ft~~	Jun 91			11	10	2-15-80
LYG E OF ELY BDY LK ST.CLAIR				~~2~~	~~75~~	~~4-15-81~~ NOT FOUNDED
LESS S 800						
DESIGNATED 21-81						
1105416 Sec						

Date	Sales Price	Record	RECORD OF OWNERSHIP	Tax Year	Timber Acres	Timber Value	Total Acres	Land Value	Imp. Value	App.
		709 281	Carle, Morganita V.	81		4642	11.10	1080 ~~27800~~		Sec SEa
			Carle, George H.					1140		
				83				990		MC
				84				1020		JH
				85			11.10	1070	0	DB
				86			11.10	1060		
				87			11.10	990		
				88			11.10	900		DB
				89				840		03/04
				90				840 / 56300		04-09
				91				900		03-04
				92				950		03/04
				93				1040		03/04
				94				1120		03/04
				95				1210		03/04

See Sheet #2

State Fire

Address

Picture No.

SEN. CIT. #____ YR.____

PARCEL NO. 2 1 8 3 2 3 1 0 2

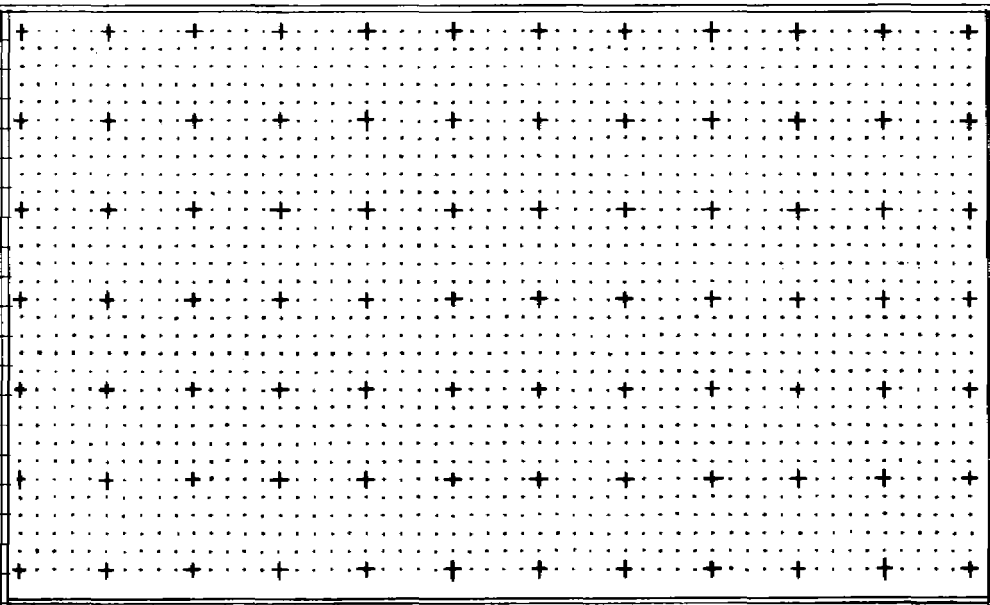
Check Digit

Tax Code Area 220

15M-Prompt Print-Olympia-4/79

218323102000 +

BUILDING	
	Dwelling
	Duplex
FOUNDATION	
	Conc. 6 8 10
	Conc. Block
	Post
EXT. WALLS	
ROOF-TYPE	
ROOF-COVER	
CONSTRUCTION	
	Single
	Double
	Block
	Metal
HEATING	
	Forced
	Electric BB
	Hot Water
	Floor or Wall
	Fireplace
BASEMENT	
	None
	Full
	Part
	No. Rooms
	Class Rooms
PLUMBING	
	Toilet
	Tub
	Lav.
	Shower Stall
	Tub Shower
	Sink
	Laundry Fac.
	Hot Water Htr.



STORIES	1	½	2	A	B
No. Rooms					
No. Baths					
No. Bdrs.					
PARTITIONS					
Plaster					
Drywall					
Wood Panel					
CEILING					
Plaster					
Dry Wall					
FLOORS & COVER					
Hardwood					
Carpet					
Tile					
Concrete					
Linoleum					

Year Built			**Quality**					
Year Re-Mod.			**Permit**					
Used For			**Condition**					
Rate Adj.	–	+	**Base Rate**					
			Variation					
			Adj.Base Rt.					
			Quality Factor					
			SQUARE FEET-1st					
			2nd					
			B					
			TOTAL					
TOTAL								
Rate Variation								

REMARKS

MOBILE HOME-REAL	YR.	YR.	YR.	YR.
Addtl Bldgs.				
TOTAL				
Upper Stories				
Basement				
Basement Rooms				
Plumbing				
Fireplace				
Attached Garage				
R-O, H&F, DW, GD				

TOTALS				
Base Cost				
Reproduction Cost				
Local Multiplier				
Depreciation %				
% Complete				
Present Value				
Addtl Bldgs.				
Total Present Value				

Appraised by	Appraised by
19	19
19	19

MOBILE HOMES - PERSONAL (ONLY)					
Make	Year				
Size	Code				
Ser #					
P.P. #					

Lot Blk.

Sec. or Plat Subdiv. SS # LOT # Sheet #2

LEGAL DESCRIPTION	No.	ACRES Less	ACRES Bal.	NOTES

Date	Sales Price	Record	RECORD OF OWNERSHIP	Tax Year	Imp. Acres	Unimp. Acres	Land Value	Imp. Value	App.	Reason	Notes
				96			1330	~~0~~	03/04		
				97			1470	0		04	

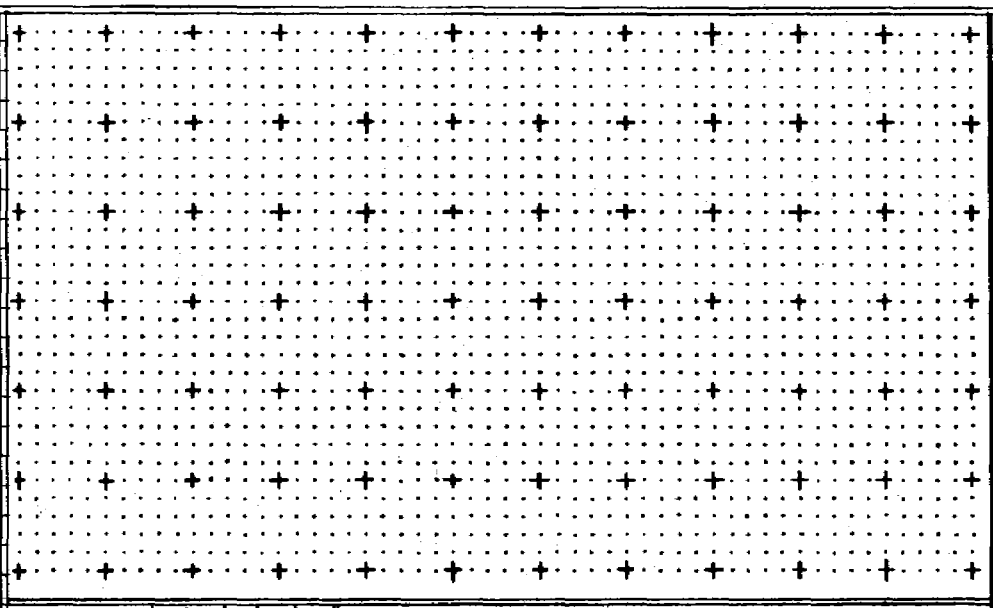
21 8 32 3 10 20 0

PARCEL NO.

Tax Code Area

Capitol City Press – Olympia

BUILDING	
	Dwelling
	Duplex
FOUNDATION	
	Conc. 6 8 10
	Conc. Block
	Post
EXT. WALLS	
ROOF-TYPE	
ROOF-COVER	
CONSTRUCTION	
	Single
	Double
	Block
	Metal
HEATING	
	Forced
	Electric BB
	Hot Water
	Floor or Wall
	Fireplace
BASEMENT	
	None
	Full
	Part
	No. Rooms
	Class Rooms
PLUMBING	
	Toilet
	Tub
	Lav.
	Shower Stall
	Tub Shower
	Sink
	Laundry Fac.
	Hot Water Htr.



STORIES	1	½	2	A	B
No. Rooms					
No. Baths					
No. Bdrs.					
PARTITIONS					
Plaster					
Drywall					
Wood Panel					
CEILING					
Plaster					
Dry Wall					
FLOORS & COVER					
Hardwood					
Carpet					
Tile					
Concrete					
Linoleum					

Year Built		Quality		
Year Re-Mod.		Permit		
Used For		Condition		
Rate Adj.	–	+	Base Rate	
			Variation	
			Adj.Base Rt.	
			Quality Factor	
			SQUARE FEET-1st	
			2nd	
			B	
			TOTAL	
TOTAL				
Rate Variation				

REMARKS

MOBILE HOME-REAL	YR.	YR.	YR.	YR.
Addtl Bldgs.				
TOTAL				
Upper Stories				
Basement				
Basement Rooms				
Plumbing				
Fireplace				
Attached Garage				
R-O, H&F, DW, GD				

TOTALS				
Base Cost				
Reproduction Cost				
Local Multiplier				
Depreciation %				
% Complete				
Present Value				
Addtl Bldgs.				
Total Present Value				

Appraised by	Appraised by
19	19
19	19

MOBILE HOMES - PERSONAL (ONLY)					
Make	Year				
Size	Code				
Ser #					
P.P. #					

Lot Blk.

Sec. or Plat 32-18-1E Subdiv. SS # 1893 LOT # 4 Sheet 1 of 2

LEGAL DESCRIPTION	No.	ACRES Less	ACRES Bal.	NOTES
		19	51	Continued to 21832 3401, 3402, 93, 94, 1301, 4104
		71	44	Per SS-1893, 4/30/85 JK
Rd 1239/24		68	72	5/1/85 Sq JK
				@2800 per

Date	Sales Price	Record	½ INT: HARTMAN TO HINKSON 1436-347 RECORD OF OWNERSHIP	Tax Year	Timber Acres	Timber Value	Unimp. Acres	Imp. Acres	Total Acres	Land Value	Imp. Value	App.
		548 122	McLaughlin, Oliver C.	85			72.27	2.24	79.51	225,000	66700	JK
5/92	300,000	1939 401	-Oatfield, Richard R & Floella	85			68.72	2.72	71.44	202500	66700	JK
				85			66.00	2.72	68.72	194900	66700	
				86			66.00	2.72	68.72	194900	73200	TM
				86			66.00	2.72	68.72	194,900	66,700	TM
				87						194,900	66,700	KR
				89						174300	69900	J.S.
				92						188600	82600	3/89
				93						244500	93200	31/09
				94						209000	100600	31/09
				95						226300	101700	31/09
				96						226300	106600	31/09
				1997						235000	111500	09

Address _____

Picture No. _____

State Fire — See Unimp. Acres

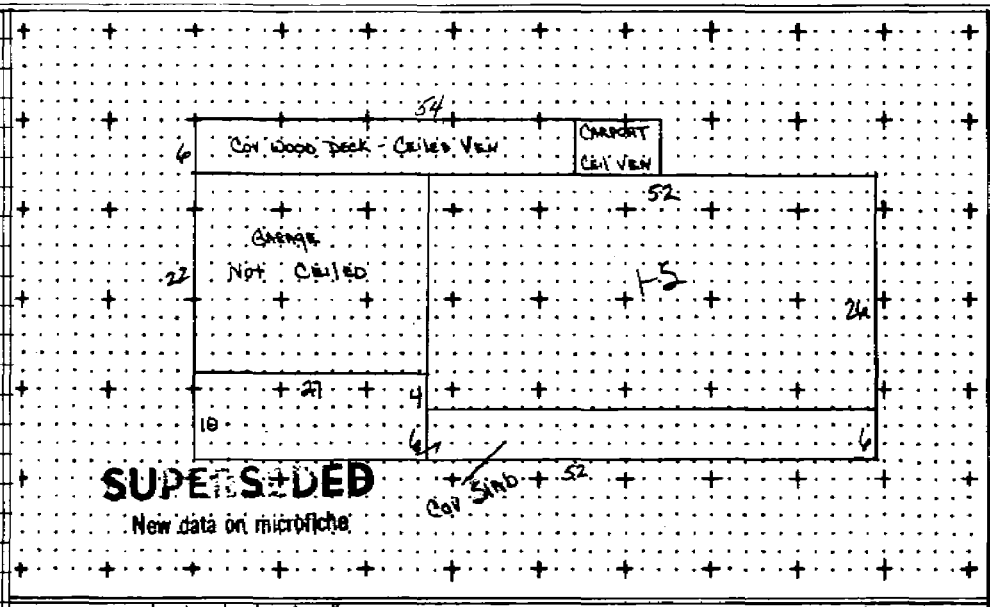
PARCEL NO. 2 1 8 3 2 3 4

Tax Code Area 185

Prompt Print-Olympia

21832340000

BUILDING
✓ Dwelling
Duplex
FOUNDATION
✓ Conc. 6 8 10
Conc. Block
Post
EXT. WALLS
✓ CEDAR
ROOF-TYPE
✓ GABLE
ROOF-COVER
✓ Pat. Shing.
CONSTRUCTION
Single
Double
Block
Metal
✓ Frame
HEATING
✓ Forced Oil
Electric BB
Hot Water
Floor or Wall
✓ Fireplace
BASEMENT
None
Full
✓ Part 26 x 52
No. Rooms
Class Rooms
✓ CC FIR
PLUMBING
2 Toilet
1 Tub
2 Lav.
Shower Stall
Tub Shower
1 Sink
✓ Laundry Fac.
✓ Hot Water Htr.
8 Fixtures



STORIES	1	½	2	A	B
No. Rooms	5				
No. Baths	1½				
No. Bdrs.					
PARTITIONS					
Plaster 80%	✓				
Drywall					
Wood Panel					
CEILING					
Plaster					
Dry Wall					
FLOORS & COVER					
Hardwood					
Carpet	✓				
Tile					
Concrete					
Linoleum	✓				
Soft	✓				

Year Built	1964		Quality	Fair
Year Re-Mod.			Permit	
Used For	Dwelling		Condition	Ave

Rate Adj.	–	+					
Heat			Base Rate	23.36			
Floors		1.41	Variation	1.41			
			Adj. Base Rt.	24.77			
			Quality Factor				
			SQUARE FEET-1st	1352			
			2nd				
			B				
			TOTAL				
TOTAL		1.41					
Rate Variation							

REMARKS

2/83 Owner home - entered - Add MF given for cracked bsmt ST

MOBILE HOME-REAL	YR. 84	YR.	YR.	YR.
Addtl Bldgs.				
CC. 270 SF x 1.70	300			
Sheet #2	15,530			
TOTAL	15830			
Upper Stories				
Basement 1352 @ 5.67	7665			
Basement Rooms (cracked)				
Plumbing x 1	370			
Fireplace	1400			
Attached Garage 594 @ 8.26	4905			
R-O (H&F) (DW) GD	110			
Cov-w-deck	970			
Cov-CC-Pch 312 SF @ 3.00	935			
TOTALS	16955			
Base Cost 1352 @ 44.77	93490			
Reproduction Cost	49845			
Local Multiplier 1.20	59815			
Market Factor 15%	8970			
% Complete				
Present Value	50845			
Addl. Bldgs.	15830			
Total Present Value	66675			
Value Exemptions				
Taxable Value	66700			

MOBILE HOMES - PERSONAL (ONLY)				
Make	Year			
Size	Code			
Ser. #				
P.P. #				
Appraised by		Appraised by		
ST 2/8	19 83			19
	19			19

Lot Blk. #2183234 Sheet 2 of 2

Sec. or Plat Subdiv. SS # LOT #

LEGAL DESCRIPTION	No.	ACRES Less	ACRES Bal.	NOTES

McLaughlin, Oliver C.

Date	Sales Price	Record	RECORD OF OWNERSHIP	Tax Year	Timber Acres	Timber Value	Unimp. Acres	Imp. Acres	Total Acres	Land Value	Imp. Value	App.

Prompt Print-Olympia

Address

Picture No.

– Continued –

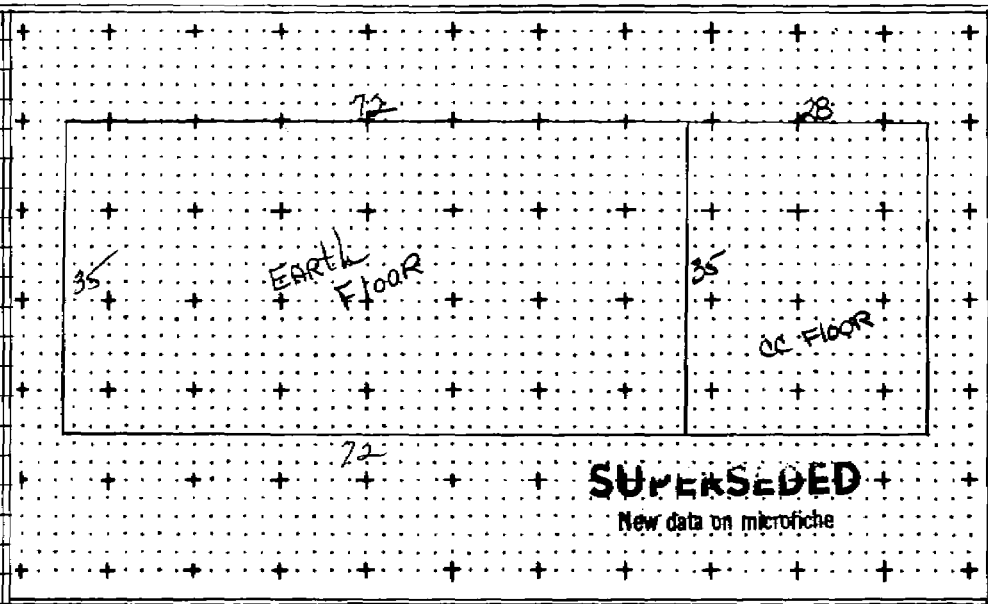
State Fire

See Unimp. Acres

Tax Code Area 185

PARCEL NO. 2 1 8 3 2 3 4

BUILDING	
	Dwelling
	Duplex
✓	Mch Sked
FOUNDATION	
	Conc. 6 8 10
	Conc. Block
✓	Post
EXT. WALLS	
ROOF-TYPE	
✓	Gable
ROOF-COVER	
CONSTRUCTION	
✓	Single
	Double
	Block
	Metal



SUPERSEDED
New data on microfiche

HEATING	
	Forced
	Electric BB
	Hot Water
	Floor or Wall
	Fireplace
BASEMENT	
✓	None
	Full
	Part
	No. Rooms
	Class Rooms
PLUMBING	
	Toilet
	Tub
	Lav.
	Shower Stall
	Tub Shower
	Sink
	Laundry Fac.
	Hot Water Htr.

STORIES	1	½	2	A	B
No. Rooms	2				
No. Baths					
No. Bdrs.					
PARTITIONS					
Plaster					
Drywall					
Wood Panel					
CEILING					
Plaster					
Dry Wall					
FLOORS & COVER					
Hardwood					
Carpet					
Tile					
Concrete	✓				
Linoleum					
Earth	✓				

Year Built 1963 — Quality Sked-Class D
Year Re-Mod. — Permit
Used For Mch. Sked — Condition AVE

Rate Adj.	–	+	Base Rate
			Variation
			Adj. Base Rt.
			Quality Factor
			SQUARE FEET-1st
			2nd
			B
			TOTAL
TOTAL			
Rate Variation			

REMARKS
2/83 Used Oregon Farm manual

MOBILE HOME-REAL	YR. 84	YR.	YR.	YR.
Addtl Bldgs.				
Clover Shed				
12x30 = 360 # @ 4.55	1640			
Feeder Shed				
12x75 = 900 # @ 3.10	2790			
12x24 feeder shed hay Shed	895			
Hay Shed 12x40 = 480 @ 3.12	1490			
= 1645 + cc. 480 x 7.0 = 335 =				
1980 = 4915 x 1.8 = 3260 - 25% dep	6815			
TOTAL				
Upper Stories				
Basement				
Basement Rooms				
Plumbing				
Fireplace				
Attached Garage				
R-O, H&F, DW, GD				
CC flr	-1000			

TOTALS				
	-1000			
Base Cost 3500 # @ 3.25	11375			
Reproduction Cost	10375			
Local Multiplier 1.20	12450			
Market Factor .30 %	3735			
% Complete				
Present Value	8715			
Addl. Bldgs.	6815			
Total Present Value	15530			
Value Exemptions				
Taxable Value	15,530			

MOBILE HOMES - PERSONAL (ONLY)					
Make	Year				
Size	Code				
Ser. #					
P.P. #					
Appraised by		Appraised by			
ST 2/8	1983				19
	19				19

Lot Blk.

Sec. or Plat Subdiv. SS # LOT # Sheet 2

LEGAL DESCRIPTION	No.	ACRES Less	ACRES Bal.	NOTES

Date	Sales Price	Record	RECORD OF OWNERSHIP	Tax Year	Timber Acres	Timber Value	Unimp. Acres	Imp. Acres	Total Acres	Land Value	Imp. Value	App.

Prompt Print-Olympia

Address

Picture No.

State Fire — See Unimp. Acres

2 1 8 3 2 3 4

PARCEL NO.

Tax Code Area

BUILDING | Dwelling | Duplex | FOUNDATION | Conc. Bl | Conc. 6 | Post | EXT. WALL | ROOF-TYPE | ROOF-COVER | CONSTRUCTION | Single | Double | Block | Metal | HEATING | Forced | Electric | Hot Water | Floor or | Fireplace | BASEMENT | None | Full | Part | No. Room | Class Room | PLUMBING | Toilet | Tub | Lav. | Shower S | Tub Show | Sink | Laundry | Hot Water

MC LAUGHLIN, OLIVER C
10735 TODTKARLE RD. SE
OLYMPIA, WA 98503

12/09/86
20:35
CARD 1 OF 3
THURSTON COUNTY

PARCEL: 21632340000
ALTERNATE KEY: 2162546
TODTKARLE RD 10735 SE
OLYMPIA 98503

RESIDENTIAL

LAND LINE 01 THRU 01 OF 01

Line		Land Use	Type	Frontage	Depth	Zoning	Rights	Classified Use Value
01	9120	OVER 5	AC	0	0			0

Line	Number Units	Rate	Depth Adj.	Location	Shape	Physical	Just Value
01	1.00	1.00	100%	100%	100%	100%	1

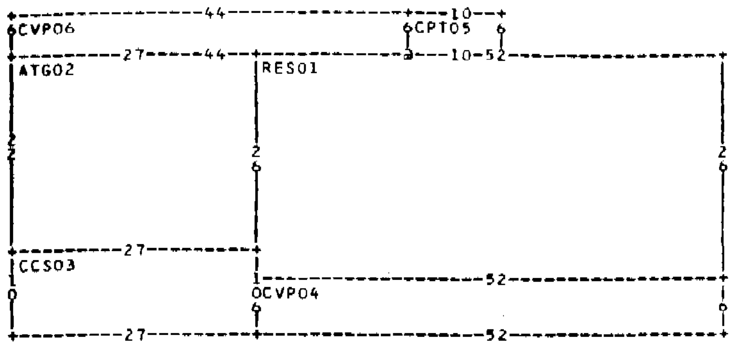
NEIGHBORHOOD 0573 SECTION 32-18-1E 100 %
TOTAL CLASSIFIED 0
TOTAL JUST VALUE 1

Replacement Cost New This Building	Depreciation	Indicated Value
01 65,523	9,828	55,695

VALUE OF BUILDINGS	(07/14/86)	76,249
VALUE OF MISC. IMPR.	(08/06/85)	8,017
VALUE OF LAND	(00/00/00)	1
VALUE BY COST METHOD	(07/14/86)	84,267
MARKET INDEX ADJUSTMENT	( )	0
VALUE BY MKT. ADJD. COST METHOD	( )	84,267

CURRENT VALUE

TAX YEAR	85	USE CODE	91140
TCA	185	APPR. NUM	12
LAND VALUE			194,900
BUILDING VALUE			73,200
NEW CONTR VALUE			
TOTAL VALUE			268,100
IMPROVED ACRES			2.72
UNIMPROVED ACRES			66.00
TOTAL ACRES			68.72



SCALE = 1:0001

RES01=U26R52D26L52.04
ATG02=L27U22R27D22.
CCS03=D10L27U10R27.04
CVP04=R52D6L52U6.U26R17
CPT05=U6R10D6L10.
CVP06=U6L44D6R44.

BUILDING	01 OF 03	QUALITY GRADE	150 FAIR	IMPROVEMENT TYPE	R1 SINGLE F
EFF. AGE GROUP	1 ALL RESI	YEAR BUILT	1964	FUNCTNL. OBSOLESCENCE	15%
CONDITION	A AVERAGE	SP. ARCH. CODE	E S.F.RES	LOCATION OBSOLESCENCE	0%
APPRAISED BY	012	APPRAISED ON	01/01/85	PERIMETER	156.0
(TED MAY)		NEXT REVIEW	02/00		

										Floor Area
RES	01	02	SIDING OR SHIN	1.0	64	N	100	0		1,352.0
ATG	02	00		1.0	64	N	0	0		594.0
CCS	03	00		1.0	64	N	0	0		270.0
CVP	04	00		1.0	64	N	0	0		312.0
CPT	05	00		1.0	64	N	0	0		60.0
CVP	06	00		1.0	64	N	0	0		264.0

ROOF TYPE	01	GABLE		
ROOF COVER	01	ASPHALT SHINGL		
HEATING TYPE	01	FORCED AIR		
HEATING SOURCE	03	OIL		
FOUNDATION	1	CONCRETE		
INTERIOR FINISH	03	CARPET		
	03	DRYWALL		
BEDROOMS	0			
BATH: 4-FIXTURES	0		3-FIXTURES	1
2-FIXTURES	1		EXTRA FIXTURES	3
FIREPLACES	1		AIR CONDITIONING	NO
BUILT-IN KITCHEN	NO		GARBAGE DISPOSAL	NO
COMPACTOR	NO		DISHWASHER	YES
INTERCOM	NO		VACUUM	NO
SECURITY	NO			

Improvement Type		Number of Units	Unit Type	Life	Year In	Quality Grade	Length	Width	Depreciated Value
FPI		1.00	EA	50	1964	2	0.0	0.0	742
MIS	X	360.00	SF	50	1963	2	12.0	30.0	1,582
MIS	X	900.00	SF	50	1963	2	12.0	75.0	2,690
MIS	X	288.00	SF	50	1963	2	12.0	24.0	863
MIS	X	480.00	SF	50	1963	2	12.0	40.0	1,437
FSF		1.00	EA	15	1985	2	0.0	0.0	703

NEIGHBORHOOD NO DATA
LAND USE
IMPROVEMENT TYPE
QUALITY GRADE
NUMBER OF STORIES
EXTERIOR WALL TYPE
EFFECTIVE AGE GROUP
NUMBER OF BEDROOMS
NUMBER OF BATHROOMS
GARAGE/CARPORT
AIR CONDITIONING (Y/N)
BASEMENT (Y/N)
LIVING AREA
NUMBER OF LAND UNITS

COMPARABLE SALES SELECTED BY
ON
PARCEL:
SALE PRICE ON
O.R. BOOK PAGE

NET ADJUSTMENT
INDICATED VALUE

998013238 GOLDENWEST/SOMERSET 1984 44X24 SN5437
ACREAGE DECREASE: 79.51 TO 71.44 (SS-1893(6-18-84 MB
1ST MIS= 12X30 PLAINER SHED. 2ND MIS= 12X75 FEEDER SHED.
3RD MIS= 12X24 FEEDER SHED. 4TH MIS= 12X40 HAY SHED & CC
SLAB. USED OREGON FARM MANUAL.
SEG: PER SS-1893 6-26-85 MB
PICKED UP NEW GARAGE. T.M. 7/85.

04	28241	B	04/86	03/86	1152	RO BARN
03	27416	B		09/85	58224	R
02	26136	B	07/85	02/85	1300	RE NEW ENCLOSED WOODSHED
01	25445	B	07/85	09/84	7296	RE GAR

04		00		
03		00		
02		00		
01		00		

GROSS MONTHLY RENT
GROSS RENT MULTIPLIER
INDICATED VALUE

1900	0	0	0	0	0	0

SPECIFIED BY TED MAY
VALUATION CODE 00 ON 01/01/85 84,267

Lot Blk.

Sec. or Plat Subdiv. SS # LOT # Sheet 3

LEGAL DESCRIPTION	No.	ACRES Less	ACRES Bal.	NOTES

Date	Sales Price	Record	RECORD OF OWNERSHIP	Tax Year	Timber Acres	Timber Value	Unimp. Acres	Imp. Acres	Total Acres	Land Value	Imp. Value	App.

Prompt Print-Olympia

Address

Picture No.

State Fire: See Unimp. Acres

2 1 8 3 2 3 4

PARCEL NO.

Tax Code Area

MC LAUGHLIN, OLIVER C
10735 TODTKARLE RD. SE
OLYMPIA, WA 98503

12/09/86
20:36
CARD 2 OF 3
THURSTON COUNTY
RESIDENTIAL

PARCEL:21332340000
ALTERNATE KEY: 2162546
TODTKARLE RD 10735 SE
OLYMPIA 98503

Replacement Cost New This Building	Depreciation	Indicated Value
02 21,133	6,339	14,794

VALUE OF BUILDINGS ( )
VALUE OF MISC. IMPR. ( )
VALUE OF LAND ( )
VALUE BY COST METHOD ( )
MARKET INDEX ADJUSTMENT ( )
VALUE BY MKT. ADJ. COST METHOD ( )

NEIGHBORHOOD 0373 SECTION 32-18-1E
100
TOTAL CLASSIFIED 0
TOTAL JUST VALUE 1

CURRENT VALUE

TAX YEAR	85	USE CODE	91140
TCA	185	APPR. NUM	12
LAND VALUE			194,900
BUILDING VALUE			73,200
NEW CONTR VALUE			
TOTAL VALUE			268,100
IMPROVED ACRES			2.72
UNIMPROVED ACRES -			66.00
TOTAL ACRES			68.72

SHP02 (sketch: 100 x 35)

RES01=U1R1D1L1.
SHP02=U35R100D35L100.

SCALE = 1:0001

BUILDING 02 OF 03
EFF. AGE GROUP 1 ALL RESI
CONDITION A AVERAGE
APPRAISED BY ( )
QUALITY GRADE 150 FAIR
YEAR BUILT 1963
SP. ARCH. CODE F S.F.RES
APPRAISED ON
NEXT REVIEW
IMPROVEMENT TYPE MB MISCELLA
FUNCTNL. OBSOLESCENCE 30%
LOCATION OBSOLESCENCE 0%
PERIMETER 4.0

RES	01	02	SIDING OR SHIN	1.0	63	N	0	0	1.0
SHP	02	02	SIDING OR SHIN	1.0	63	N	0	0	3,500.0

ROOF TYPE 01 GABLE
ROOF COVER 00
HEATING TYPE 00
HEATING SOURCE 00
FOUNDATION 5 WOOD PIERS
INTERIOR FINISH 05 CONCRETE ONLY
BEDROOMS 0
BATH: 4-FIXTURES 0
3-FIXTURES 0
2-FIXTURES 0
EXTRA FIXTURES 0
FIREPLACES 0
BUILT-IN KITCHEN NO
COMPACTOR NO
INTERCOM NO
SECURITY NO
AIR CONDITIONING NO
GARBAGE DISPOSAL NO
DISHWASHER NO
VACUUM NO

NEIGHBORHOOD
LAND USE
IMPROVEMENT TYPE
QUALITY GRADE
NUMBER OF STORIES
EXTERIOR WALL TYPE
EFFECTIVE AGE GROUP
NUMBER OF BEDROOMS
NUMBER OF BATHROOMS
GARAGE/CARPORT
AIR CONDITIONING (Y/N)
BASEMENT (Y/N)
LIVING AREA
NUMBER OF LAND UNITS

COMPARABLE SALES SELECTED BY
ON
PARCEL:
SALE PRICE ON O.R. BOOK PAGE
NET ADJUSTMENT
INDICATED VALUE

GROSS MONTHLY RENT
GROSS RENT MULTIPLIER
INDICATED VALUE

SPECIFIED BY
VALUATION CODE ON

Lot Blk.

Sec. or Plat Subdiv. SS # LOT # Sheet 4

LEGAL DESCRIPTION	No.	ACRES Less	ACRES Bal.	NOTES

Date	Sales Price	Record	RECORD OF OWNERSHIP	Tax Year	Timber Acres	Timber Value	Unimp. Acres	Imp. Acres	Total Acres	Land Value	Imp. Value	App.

Prompt Print-Olympia

Address

Picture No.

State Fire: See Unimp. Acres

PARCEL NO. 2 1 8 3 2 3 4

Tax Code Area

9

BUILDING | Dwelling | Duplex | FOUNDATION | Conc. 6 8 | Conc. Blo | Post | EXT. WALL | ROOF-TYPE | ROOF-COV | CONSTRUC | Single | Double | Block | Metal | HEATING | Forced | Electric B | Hot Water | Floor or W | Fireplace | BASEMENT | None | Full | Part | No. Room | Class Roo | PLUMBING | Toilet | Tub | Lav. | Shower St | Tub Show | Sink | Laundry | Hot Water

MC LAUGHLIN, OLIVER C
10735 TOOTKARLE RD. SE
OLYMPIA, WA 98503

12/09/86
20:36
CARD 3 OF 3
THURSTON COUNTY

RESIDENTIAL

PARCEL:21832340000
ALTERNATE KEY: 2162546
TOOTKARLE RD 10735 SE
OLYMPIA 98503

Line	Land Use	Type	Frontage	Depth	Zoning	Notes	Classified Use Value

Line	Number Units	Rate	Depth Adj.	Location	Shape	Physical	Just Value
			%	%	%	%	

NEIGHBORHOOD 0573 SECTION 32-18-1E TOTAL CLASSIFIED 0
SIZE 100 % TOTAL JUST VALUE 1

Replacement Cost New This Building	Depreciation	Indicated Value
03 9,930	4,170	5,760

VALUE OF BUILDINGS ( ) ....
VALUE OF MISC. IMPR. ( ) ....
VALUE OF LAND ( ) ....
VALUE BY COST METHOD ( ) ....
MARKET INDEX ADJUSTMENT ( ) ....
VALUE BY MKT. ADJD. COST METHOD ( ) ....

CURRENT VALUE

TAX YEAR	85	USE CODE	91140
TCA	185	APPR. NUM	12
LAND VALUE			194,900
BUILDING VALUE			73,200
NEW CONTR VALUE			
TOTAL VALUE			268,100
IMPROVED ACRES			2.72
UNIMPROVED ACRES			66.00
TOTAL ACRES			68.72

DTG02 (sketch 24 x 40 x 24 x 40)

SCALE = 1:0001

RES01=01R1D1L1.
DTG02=040R24U40L24.

BUILDING 0 OF 03 QUALITY GRADE 150 FAIR IMPROVEMENT TYPE HB MISCELLA
EFF. AGE GROUP 1 ALL RESID YEAR BUILT 1985 FUNCTNL. OBSOLESCENCE 4%
CONDITION N NEW SF. ARCH. CODE F S.F.RES LOCATION OBSOLESCENCE 0%
APPRAISED BY ( ) APPRAISED ON PERIMETER 4.0
NEXT REVIEW

RES 01	01	T1-11	1.0	85	N	0	0		1.0
DTG 02	01	T1-11	1.0	85	N	0	0		960.0

ROOF TYPE 01 GABLE
ROOF COVER 01 ASPHALT SHINGL
HEATING TYPE 00
HEATING SOURCE 00
FOUNDATION 2 CONCRETE BLOCK
INTERIOR FINISH 00
BEDROOMS 0
BATH: 4-FIXTURES 0 3-FIXTURES 0
2-FIXTURES 0 EXTRA FIXTURES 0
FIREPLACES 0 AIR CONDITIONING NO
BUILT-IN KITCHEN NO GARBAGE DISPOSAL NO
COMPACTOR NO DISHWASHER NO
INTERCOM NO VACUUM NO
SECURITY NO

Improvement Type	Number of Units	Unit Type	Useful Life	Year In	Quality Grade	Length	Width	Depreciated Value

NEIGHBORHOOD
LAND USE
IMPROVEMENT TYPE
QUALITY GRADE
NUMBER OF STORIES
EXTERIOR WALL TYPE
EFFECTIVE AGE GROUP
NUMBER OF BEDROOMS
NUMBER OF BATHROOMS
GARAGE/CARPORT
AIR CONDITIONING (Y/N)
BASEMENT (Y/N)
LIVING AREA
NUMBER OF LAND UNITS

COMPARABLE SALES SELECTED BY
ON
PARCEL
SALE PRICE ON
O.R. BOOK PAGE
NET ADJUSTMENT
INDICATED VALUE

GROSS MONTHLY RENT
GROSS RENT MULTIPLIER
INDICATED VALUE

SPECIFIED BY
VALUATION CODE ON

Lot Blk.

Sec. or Plat 32-18-1E Subdiv. Pt SE-SW SS #1893 LOT # 2

LEGAL DESCRIPTION	No.	ACRES Less	ACRES Bal.	NOTES
			75	04/30/85 JK

Date	Sales Price	Record	RECORD OF OWNERSHIP	Tax Year	Timber Acres	Timber Value	Unimp. Acres	Imp. Acres	Total Acres	Land Value	Imp. Value	App.
			McLaughlin, Oliver	85				.75		2100		
				86				.75		2,100	6,500	TM
				87						8500	6500	NR
				89						15700	6200	JS
				92						11400	10000	31/09
				92						11400	19000	31-05
				93						11400	19100	31/09
				94						11400	20500	31/09
				95						11400	19600	31/09
				96						11400	20500	31/09
				1997						11800	21400	09

Prompt Print-Olympic

Address

Picture No.

9980/3236

2 1 8 3 2 3 4 0 0 0 2

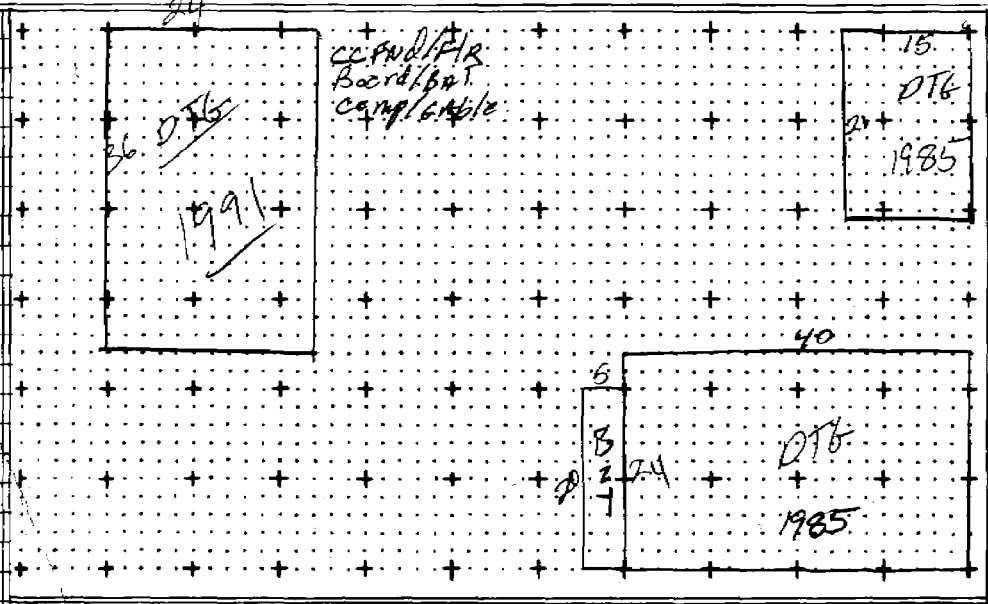
PARCEL NO.

State Fire: See Unimp. Acres

Tax Code Area: 185

2183234 0002

BUILDING	
	Dwelling
	Duplex
FOUNDATION	
	Conc. 6 8 10
	Conc. Block
	Post
EXT. WALLS	
ROOF-TYPE	
ROOF-COVER	
CONSTRUCTION	
	Single
	Double
	Block
	Metal
HEATING	
	Forced
	Electric BB
	Hot Water
	Floor or Wall
	Fireplace
BASEMENT	
	None
	Full
	Part
	No. Rooms
	Class Rooms
PLUMBING	
	Toilet
	Tub
	Lav.
	Shower Stall
	Tub Shower
	Sink
	Laundry Fac.
	Hot Water Htr.



STORIES	1	½	2	A	B
No. Rooms					
No. Baths					
No. Bdrs.					
PARTITIONS					
Plaster					
Drywall					
Wood Panel					
CEILING					
Plaster					
Dry Wall					
FLOORS & COVER					
Hardwood					
Carpet					
Tile					
Concrete					
Linoleum					

Year Built			Quality					
Year Re-Mod.			Permit					
Used For			Condition					
Rate Adj.	–	+	Base Rate					
			Variation					
			Adj. Base Rt.					
			Quality Factor					
			SQUARE FEET-1st					
			2nd					
			B					
			TOTAL					
TOTAL								
Rate Variation								

REMARKS

SUPERSEDED

New data on microfiche

1984 Somerset 4424 9981 3236

MOBILE HOME-REAL	YR.	YR.	YR.	YR.
Addtl Bldgs.				
TOTAL				
Upper Stories				
Basement				
Basement Rooms				
Plumbing				
Fireplace				
Attached Garage				
R-O, H&F, DW, GD				

TOTALS				
Base Cost				
Reproduction Cost				
Local Multiplier				
Market Factor %				
% Complete				
Present Value				
Addl. Bldgs.				
Total Present Value				
Value Exemptions				
Taxable Value				

MOBILE HOMES - PERSONAL (ONLY)				
Make	Year			
Size	Code			
Ser. #				
P.P. #				
Appraised by		Appraised by		
	19			19
	19			19

Lot Blk.

Sec. or Plat Subdiv. Pt SE-SW SS # 1893 LOT # 3

LEGAL DESCRIPTION	No.	ACRES Less	ACRES Bal.	NOTES
			1.00	11/20/85 JK

Date	Sales Price	Record	RECORD OF OWNERSHIP	Tax Year	Timber Acres	Timber Value	Unimp. Acres	Imp. Acres	Total Acres	Land Value	Imp. Value	App.
			McLaughlin	85				1.00		2800		JK
				87						8500		NR
				89						8500		JS
				92						9400		31/89
				93						9400	0	31/09
				94			0	1.00		9400	0	31/09
				1995			DNR 1.00	0		9400	0	31/09
				96						9400	0	31/89
				1997						9800	0	09

Address

Picture No.

State Fire — See Unimp. Acres

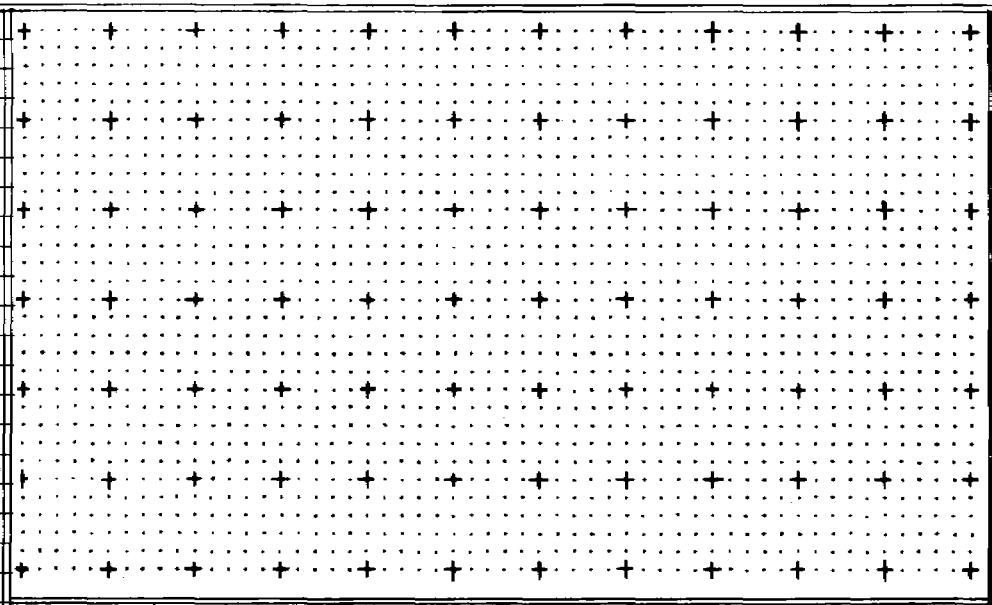
PARCEL NO. 2 1 8 3 2 3 4 0 0 0 3

Tax Code Area: ~~185~~ 220

Prompt Print-Olympia

21832340003

BUILDING	
	Dwelling
	Duplex
FOUNDATION	
	Conc. 6 8 10
	Conc. Block
	Post
EXT. WALLS	
ROOF-TYPE	
ROOF-COVER	
CONSTRUCTION	
	Single
	Double
	Block
	Metal
HEATING	
	Forced
	Electric BB
	Hot Water
	Floor or Wall
	Fireplace
BASEMENT	
	None
	Full
	Part
	No. Rooms
	Class Rooms
PLUMBING	
	Toilet
	Tub
	Lav.
	Shower Stall
	Tub Shower
	Sink
	Laundry Fac.
	Hot Water Htr.



STORIES	1	½	2	A	B
No. Rooms					
No. Baths					
No. Bdrs.					
PARTITIONS					
Plaster					
Drywall					
Wood Panel					
CEILING					
Plaster					
Dry Wall					
FLOORS & COVER					
Hardwood					
Carpet					
Tile					
Concrete					
Linoleum					

Year Built			Quality					
Year Re-Mod.			Permit					
Used For			Condition					
Rate Adj.	–	+	Base Rate					
			Variation					
			Adj. Base Rt.					
			Quality Factor					
			SQUARE FEET-1st					
			2nd					
			B					
			TOTAL					
TOTAL								
Rate Variation								

REMARKS

MOBILE HOME-REAL	YR.	YR.	YR.	YR.
Addtl Bldgs.				
TOTAL				
Upper Stories				
Basement				
Basement Rooms				
Plumbing				
Fireplace				
Attached Garage				
R-O, H&F, DW, GD				
TOTALS				
Base Cost				
Reproduction Cost				
Local Multiplier				
Market Factor %				
% Complete				
Present Value				
Addl. Bldgs.				
Total Present Value				
Value Exemptions				
Taxable Value				

MOBILE HOMES - PERSONAL (ONLY)				
Make	Year			
Size	Code			
Ser. #				
P.P. #				
Appraised by		Appraised by		
	19			19
	19			19

Sec. or Plat 32-18-1E Lot Subdiv. Blk. I. No.

NOTES

LEGAL DESCRIPTION	I. No.	ACRES LESS	ACRES BAL.
			43
Com most Ely cor L13 Todt Cedars			
N70° W 103.51F, N01°18'56"W 114.62F,			
S83°48'21"E 201.1F, S38°25'07"W 163.13F to Beg.			
114.62FW/F			

Date	SALES PRICE	Record	LEGAL OWNER	TAX YEAR	TIMBER ACRES	IMP. ACRES	UNIMP. ACRES	TIMBER VALUE	W.F. VALUE	IMP. VALUE	UNIMP. VALUE	TOTAL	IMPS.	
		548 126	Hartman, Melba M.	89								27900		JS
4-75	12000	685 159	Bourne, Marvin L. - TF1780/57	92								33900		31/09
11/90	80000	1780 58	Case C.D. III & Donna	93								50900	0	31/09
9/96	62,500	0305-5779	Hamilton, Karie L	94								50900	0	31/09
				95								50900	0	31/09
				96								50900	0	31/09
				97								58400	0	09
				1977										
				1978										
				1979										
				1980								17400		TM
				1981										
				1982										
				1983										
				1984		.43	~~.43~~					27,100		ET

Address

Picture No.

State Fire

PLAT	BLK	LOT	SEG	DLC	CODE NO.	RNG	T	SEC	4 16	LOT	SEG
						2 1	8	3 2	3 4	0 3	-

Tax Code No. 185 ~~220~~

6

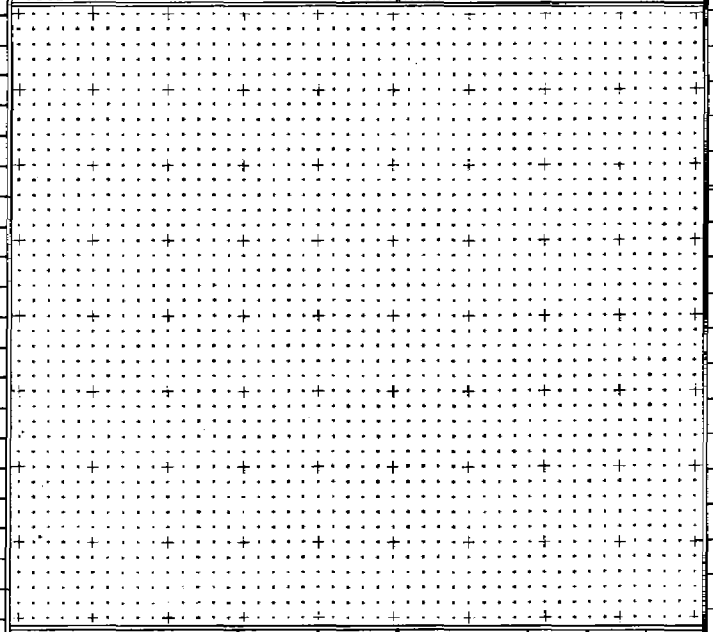
BUILDING	STORIES	1	½	2	A	B
Dwelling	No. Rooms					
Duplex	No. Baths					
	No. Bedrooms					
FOUNDATION	**PARTITIONS**					
Conc. 6 8 10	Plaster					
Concrete Blk.	Drywall					
Piers	Wood Panel					
EXT. WALLS						
	CEILING					
ROOF	Plaster					
Flat	Drywall					
Hip	Compo.					
Gable	Plywood					
	Tile					
Built-up	Paper					
Shingles	Wood Panel					
Shakes						
Composition	**FLOORS**					
	Single					
	Double					
CONSTRUCTION	Softwood					
Single	Hardwood					
Double	Plywood					
Block	Carpet					
Insulation	Tile					
	Concrete					
	Linoleum					
HEATING						

FIREPLACE	**PLUMBING**			
	Toilet		Shower Stall	
	Tub		Tub Shower	
Forced	Lav.		Sink	
Gravity	Laundry Fac.			
Floor or Wall	Garbage Disp.			
	Dishwasher			
Hot Water	Hot Water Heater			
Baseboard				
Floor Rad.	**BASEMENT**		**EXTRAS**	
Electric	None		B. I. Oven	
Wall Units	Full		B. I. Range	
Baseboard	Part		Hood and Fan	
Glass Panel	No. Rooms		Drop-In	
Ceiling Rad.	Class Rooms			
Floor Rad.				

Year Built Class

Year Re-Mod. Permit

Used For Condition



Rate Adj.	−	+	Base Rate			
			Variation			
			Adj. Base Rt.			
			Square Feet			
			Perimeter			
TOTAL						
Rate Variation						

REMARKS

ADDITIONAL BUILDINGS	First	Second	Third	Fourth
Garage				
TOTAL				
Attic				
Upper Stories				
Basement				
Basement Rooms				
Heating				
Plumbing				
Fireplace				
Attached Garage				
TOTALS				
Base Cost				
Reproduction Cost				
Local Multiplier				
Depreciation %				
% Complete				
Present Value				
Additional Buildings				
Total Present Value				
Total Assessed Value %				

Appraised by

19	19
19	19
19	19

APPENDIX D
Previous UST Removal Documents

THURSTON COUNTY

CO Lakeridge Drive SW
ympia, WA 98502
50) 786-5490

To Schedule an Inspection call (360)628-3409

Issue Date: 3/31/22

By: [signature]

THURSTON COUNTY DEVELOPMENT SERVICES
FIRE CODE PERMIT

4/15/2011 [illegible]
675 Gallon

22-103720 BC

Nonresidential

Sub Type: Fire

Site: 10747 TODTKARLE RD SE OI

Parcel: 21832340000

Applicant: Langseth Environmental Serv

Owner: NISQUALLY INDIAN TRIBE

INSPECTIONS

ire Alarm	Fire Sprinkler Underground
ood and Duct	Fire Sprinkler
ents	Firework Stands
)ther [signature] TCFMO 28 Apr 2022	

THURSTON COUNTY
WASHINGTON
SINCE 1852

2000 Lakeridge Drive SW
Olympia, WA 98502
(360) 786-5490

To Schedule an Inspection call (360)628-3409

Issue Date: 3/31/22

By: [signature]

THURSTON COUNTY DEVELOPMENT SERVICES
FIRE CODE PERMIT

300 Gallon

22-103722 BC

Nonresidential

Sub Type: Tank-Below Ground Fuel

Site: 10747 TODTKARLE RD SE OI

Parcel: 21832340000

Applicant: Langseth Environmental Serv

Owner: NISQUALLY INDIAN TRIBE

INSPECTIONS

Fire Alarm	Fire Sprinkler Underground
Hood and Duct	Fire Sprinkler
Tents	Firework Stands
Other [illegible]	

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Chain of Custody Record

www.LibbyEnvironmental.com

Date: 4-28-22 Page: 1 of 1

Client: Northern Env.
Project Manager: Brent Ruhl
Address:
Project Name: Nisqually Tribe
City: State: Zip:
Location: 10747 Tod Kark Rd. SE City, State: Olympia
Phone: 253-536-1961 Fax:
Collector: Brent Ruhl Date of Collection: 4-28-22
Client Project #
Email: LongsethEnviro@gmail.com

Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260	PCE & Daughter Prod	NWTPH-Gx	BTEX (8260) / (8021)	NWTPH-HCID	NWTPH-Dx /	PCB 8082	MTCA 5 Metals	RCRA 8 Metals	c PAH 8270	PAH 8270	Semi Vol 8270			Field Notes
1 under Rem 300 gal ust	6'	9:10	Soil	4oz Jar					+										
2 under Rem 425 gal ust	7'	10:30	Soil	4oz Jar					+										
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			

Relinquished by:	Date / Time	Received by:	Date / Time
Brent Ruhl	4-28-22 2:09		4-28-22 1409
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N
Cooler Temp.		°C
Sample Temp.		°C
Total Number of Containers		

Remarks:

TAT: 24HR 48HR (5-DAY)

LEGAL ACTION CLAUSE: *In the event of default of payment and/or failure to pay, Client agrees to pay the costs of collection including court costs and reasonable attorney fees to be determined by a court of law.*

Distribution: White - Lab, Yellow - Originator

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

NISQUALLY TRIBE PROJECT
Northern Environmental
Olympia, Washington
Libby Project # L22D100

Analyses of Diesel (NWTPH-Dx) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)
Method Blank	5/2/2022	99	nd
Under Rem 300 Gal Ust	5/2/2022	87	nd
Under Rem 425 Gal Ust	5/2/2022	int	2400
Practical Quantitation Limit			50

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Randolph Kraus

Pump and Rinse Certification

Date: 4.28.22 **Job:** 67231

To Whom It May Concern:

This letter is to certify that the following tank(s), sized at 300gal. + 300 gal., have been pumped and rinsed for removal.

Work was performed at:

Address 10747 Todtkarle Rd SE Olympia WA 98513

For:

Nisqually Tribe

Please note that this letter does not certify that the above tank(s) have been cleaned for disposal or that it (they) should be considered gas-free.

Sincerely,

Northern Environmental Services

253.503.3096

Langseth
ENVIRONMENTAL SERVICES, INC.

DISPOSAL CERTIFICATION

May 5, 2022

Sharilynn Boelk, MBA/Sr. Project Manager
Building Department
Government of the Nisqually Indian Tribe
4820 She Nah Num Dr. SE
Olympia, WA 98513

To whom it may concern,

This is to certify that Northern Environmental LLC d/b/a Langseth Environmental Services has received the following tank for cleaning and disposal in accordance with all federal, state, and local rules/regulations.

One (1) 300-Gallon Underground Diesel Oil Storage Tank sized at 38" x 60"

Date Received: April 28, 2022

Date Cleaned: April 28, 2022

Date of Disposal: April 28, 2022

Method of Disposal: Scrap Steel (Schnitzer Steel)

Tank Location: 10747 Todtkarle Rd. SE
Olympia, WA 98513

If you have any questions or request for services, please feel free to contact this office at (253) 536-6961.

Sincerely,

Tom Langseth
Site Assessor and Decommissioning Supervisor

7517 Portland Avenue, Suite A, Tacoma, WA 98404 • Phone: (253) 536-6961 • Fax: (253) 548-0201
LangsethEnviro@gmail.com

Langseth
ENVIRONMENTAL SERVICES, INC.

DISPOSAL CERTIFICATION

May 5, 2022

Sharilynn Boelk, MBA/Sr. Project Manager
Building Department
Government of the Nisqually Indian Tribe
4820 She Nah Num Dr. SE
Olympia, WA 98513

To whom it may concern,

This is to certify that Northern Environmental LLC d/b/a Langseth Environmental Services has received the following tank for cleaning and disposal in accordance with all federal, state, and local rules/regulations.

One (1) 425-Gallon Underground Diesel Oil Storage Tank sized at 45.5" x 60"

Date Received: April 28, 2022

Date Cleaned: April 28, 2022

Date of Disposal: April 28, 2022

Method of Disposal: Scrap Steel (Schnitzer Steel)

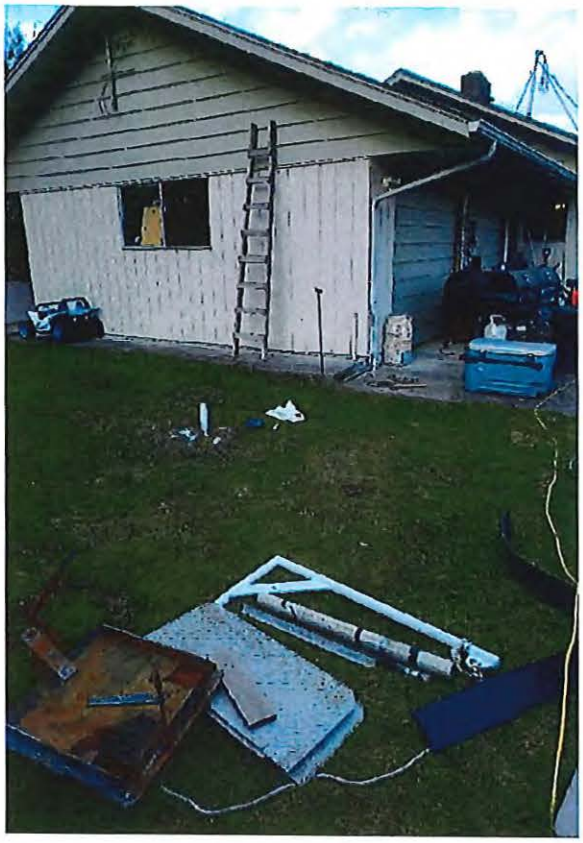
Tank Location: 10747 Todtkarle Rd. SE
Olympia, WA 98513

If you have any questions or request for services, please feel free to contact this office at (253) 536-6961.

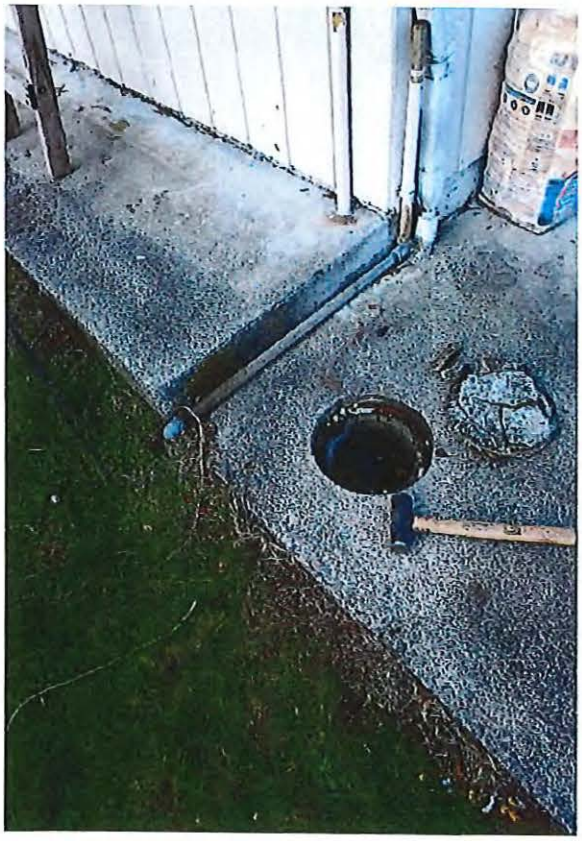
Sincerely,

Tom Langseth
Site Assessor and Decommissioning Supervisor

7517 Portland Avenue, Suite A, Tacoma, WA 98404 • Phone: (253) 536-6961 • Fax: (253) 548-0201
LangsethEnviro@gmail.com

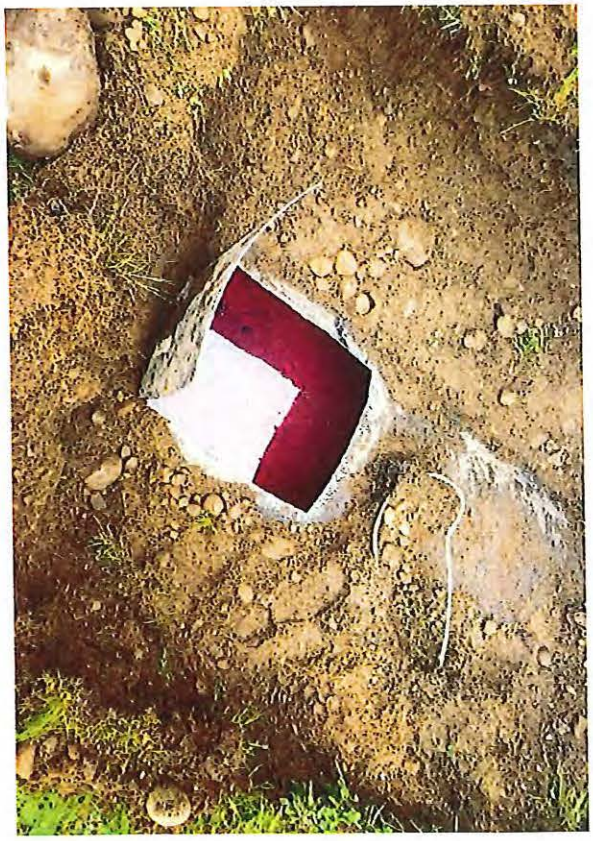


Looking north at southwest end of home. UST locations noted.

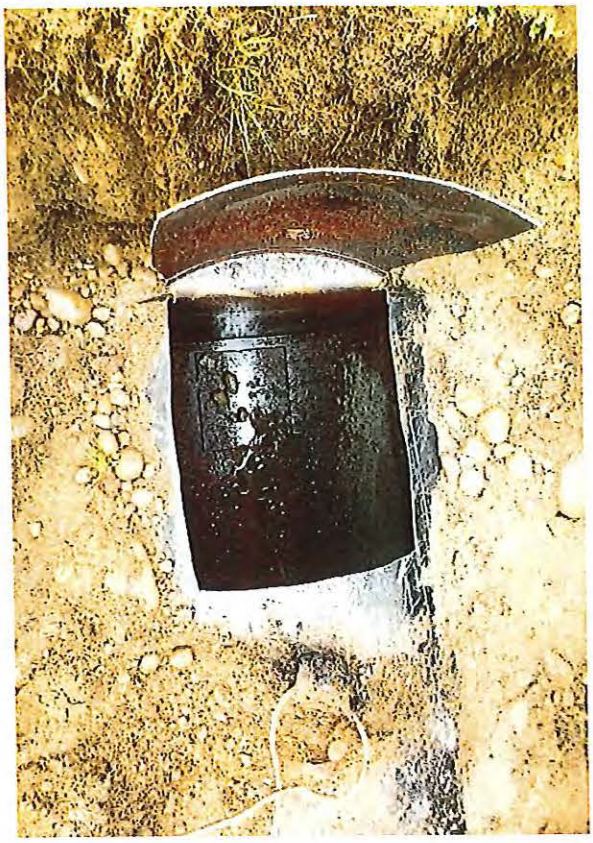


Looking south at UST #2 under concrete driveway and UST #1 in yard area.

Looking west at UST #1 exposed for removal and concrete removal over UST #2.



UST #1 exposed prior to pump out.

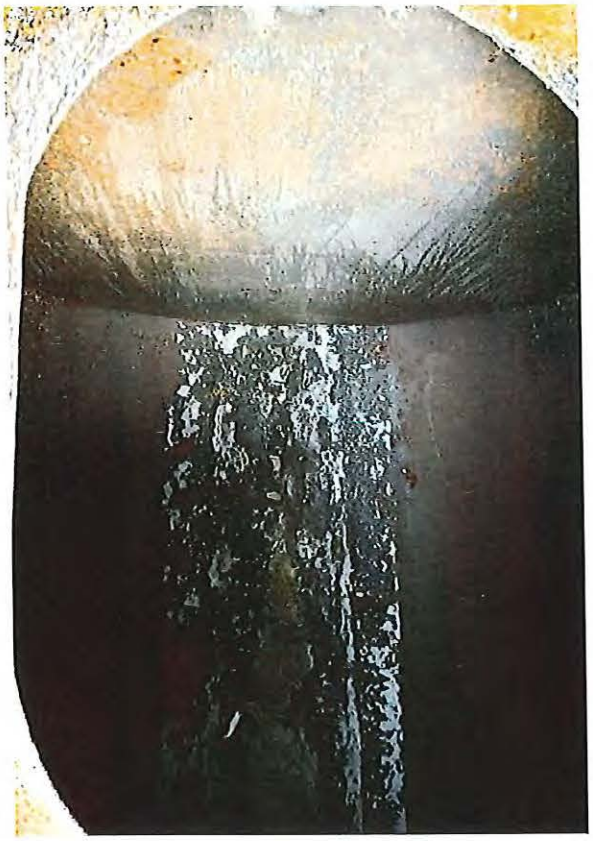


UST #1 following pump and rinse.

UST #1. No pinholes and/or steel or weld failures noted.

Looking south at exposed top of UST #2.

UST #2 pump and rinse.



UST #2 subsequent to pumping and triple rinse.

Removal of UST #2 sized at 425 gallons (45.5" x 60").

Looking east at UST #2 pit area following removal. Note water line on east end of pit.

Looking southwest at final UST pit areas to grade.

APPENDIX E
Environmental Professional Resumes

JESSICA ROBERTSON, LG, ENVIRONMENTAL GEOLOGIST

Education

M.S., Geology, Central Washington University
B.A., Chemistry-Geology, Whitman College

Registration

Licensed Geologist: WA (#2570)

Experience

Jessica has been an environmental geologist in Washington State since 2002 and has specialized in completion of Phase I ESAs and related due diligence studies since 2003, completing approximately 1,000 Phase I ESA reports since that time. She is well versed in the requirements of American Society for Testing and Materials (ASTM) Standard E 1527-13 for Phase I ESAs and the U.S. Environmental Protection Agency's (EPAs) Federal Standard 40 CFR Part 312 "Standards and Practices for All Appropriate Inquiries (AAI)." Jessica is an historical research specialist who can efficiently acquire historical information from the many different resources needed to compile a thorough Phase I ESA, and has the experience to interpret that information into useful conclusions for the client. Jessica has performed a wide variety of assessment and cleanup activities, including corridor studies and hazardous materials discipline reports, Phase II ESAs, groundwater and soil sampling, remedial excavations and drilling explorations. Many of her projects are in the development and transportation markets, and she has completed Phase I ESAs and related tasks for a wide range of sites, including 1,000-acre undeveloped forest land parcels, large urban city blocks with over 100 years of industrial and commercial development history, and miles-long transportation corridors through widely varying neighborhoods.

Example Project Experience

Sound Transit, Alignment Hazardous Materials Survey, Phase I ESAs, Phase II ESAs and Hazardous Building Material Surveys; Federal Way Link Extension, Washington

GeoEngineers completed environmental services during due diligence and acquisition of properties for the Federal Way Link Extension project, a 7.8-mile extension to an existing light rail line. Jessica had primary responsibility for the completion of the Alignment Hazardous Materials Survey for the entire alignment and was a key team member for completion of over 150 individual project Phase I ESAs.

Catalyst Public Schools, Phase I ESA and Sub-Slab Vapor and Air Sampling Evaluation; Bremerton, Washington

Jessica served as project manager providing due diligence services for a proposed school property. Initial Phase I ESA research identified oil beneath the building slab as well as additional historical concerns. Sub-slab vapor and air sampling was subsequently completed to assess the potential for vapor intrusion concern for potential school use.

Snohomish County Airports, Paine Field Maintenance Complex Phase I ESA; Everett, Washington

Jessica served as project manager providing a Phase I ESA of three airport maintenance buildings at Paine Field/Snohomish County Airport. The three buildings were variably used for airport facility maintenance, equipment fueling, fire station, and military standby purposes. The complex and extensive history of the site required careful research from multiple governmental sources to evaluate the significance of over a dozen recognized environmental conditions (RECs) associated with the property.

TERRY MCPHETRIDGE, LG, LHG, PRINCIPAL ENVIRONMENTAL GEOLOGIST

Education

B.S., Geology, San Diego State University

Registration

Licensed Geologist/Hydrogeologist: WA (#1020)

Registered Geologist: OR (#G1618)

Professional Geologist: ID (#978)

Experience

Terry has more than 30 years of experience providing environmental consulting specializing in environmental due diligence, remedial investigations, feasibility studies, site investigations/cleanups of soil and groundwater at contaminated sites in accordance with MTCA and RCRA regulations, and UST regulations, and environmental compliance issues related to RCRA and hazardous waste regulations. Terry has served as Principal in Charge on small and large projects that include conducting Phase I and Phase II ESAs on undeveloped and developed commercial and industrial properties, site and remedial investigations, and operations and maintenance of remediation systems. Terry has provided environmental services for private and public entities involving due diligence property acquisitions along linear corridors for rail improvement and roadway widening. He understands the due diligence and investigation components of the property acquisition phase—such as soil and groundwater monitoring, remedial activities, and soil/groundwater handling and management during and following construction activities—and how these relate to the construction phase of the project.

Project Experience

- Pierce County, Canyon Road East Northerly Extension Phase I and II ESAs, Puyallup, Washington
- Pierce County, Marsyla Property, Phase I and Phase II ESAs, Sumner, Washington
- YMCA, New Sumner YMCA Facility UST Removal - Environmental Subsurface Investigation and Remedial Action, Sumner, Washington
- Pierce County, Browns Point - UST Removal Services, Tacoma, Washington
- Puyallup River Bridge Replacement Project, Environmental Services, Orting, Washington
- University of Washington, Tacoma, Remedial Investigation/Feasibility Study, Tacoma, Washington
- City of Tacoma, Pacific Plaza Building, Phase I and II ESAs, UST Decommissioning and Remedial Action Services, Tacoma, Washington
- Nisqually Indian Tribe, 847 and 835 Old Pacific Highway Phase I ESA; Olympia, Washington

Phase II Environmental Site Assessment

Nisqually Indian Tribe Horse Ranch Property
10747 SE Todtkarle Road
Olympia, Washington

for
Nisqually Indian Tribe

November 27, 2023

GeoEngineers
Earth Science + Technology

Phase II Environmental Site Assessment

Nisqually Indian Tribe Horse Ranch Property
10747 SE Todtkarle Road
Olympia, Washington

for
Nisqually Indian Tribe

November 27, 2023

GeoEngineers

1101 South Fawcett Avenue, Suite 200
Tacoma, Washington 98402
253.383.4940

Phase II Environmental Site Assessment

Nisqually Indian Tribe Horse Ranch Property
10747 SE Todtkarle Road
Olympia, Washington

File No. 0277-056-00

November 27, 2023

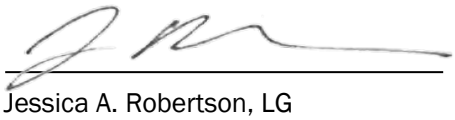
Prepared for:

Nisqually Indian Tribe
4820 She-Nah-Num Drive SE
Olympia, Washington 98513

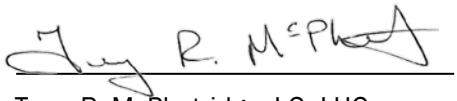
Attention: Joe Cushman

Prepared by:

GeoEngineers, Inc.
1101 South Fawcett Avenue, Suite 200
Tacoma, Washington 98402
253.383.4940



Jessica A. Robertson, LG
Environmental Geologist



Terry R. McPhetridge, LG, LHG
Principal

MAB: JAR:TSD:TRM:ch

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1.0 INTRODUCTION

This report presents the findings of the Phase II Environmental Site Assessment (ESA) performed for the Nisqually Indian Tribe on the Horse Ranch Property (Medicine River Ranch) located at 10735 and 10747 Todtkarle Road SE in Olympia, Washington. The 72-acre property (Thurston County Parcel numbers 21832340000, 21832340002, and 21832340003) is currently developed with a house, mobile home, barns and related structures for use as a horse ranch. Two heating oil USTs were removed from the southeast corner of the house in April 2022. The purpose of this investigation was to evaluate soil condition in the areas of the former USTs. The property is referred to herein as the "subject property." The subject property is shown relative to surrounding physical features on the Vicinity Map, Figure 1. The layout of the subject property and surrounding properties is shown on the Site Plan, Figure 2. An area of detail showing the location of former USTs near the house is shown on Figure 3.

1.1. Phase I ESAs

A Phase I ESA was completed on the subject property and summarized in the report titled "Phase I Environmental Site Assessment Nisqually Indian Tribe Horse Ranch Property" dated October 9, 2023. The recognized environmental condition (REC)[1] identified during the Phase I ESA is briefly summarized below.

- **Previous Underground Storage Tank (UST) System(s).** Two residential heating oil UST systems (300-gallon and 425-gallon capacity) were removed from the southeast corner of the house in April 2022. A soil sample collected from beneath the former 300-gallon UST location did not contain detectable concentrations of diesel-range petroleum hydrocarbons. However, diesel-range petroleum hydrocarbons were detected at a concentration of 2,400 milligrams per kilogram (mg/kg), greater than the Model Toxics Control Act (MTCA) Method A cleanup level of 2,000 mg/kg in the soil sample collected from beneath the former 425-gallon UST. Over-excavation of the diesel-contaminated soil beneath the former 425-gallon UST location was not reported. The extent of residual contamination in soil is unknown in the vicinity of the former 425-gallon UST and considered an REC to the subject property.

2.0 SCOPE OF SERVICES

The purpose of the investigation was to evaluate soil conditions in the vicinity of the former USTs.

The scope of services was as follows:

1. Coordinated subject property access with the Nisqually Indian Tribe and current residents.
2. Prepared a health and safety plan for our representatives in accordance with Washington Administrative Code (WAC) 296-24.

[1] Recognized Environmental Conditions are defined in ASTM E1527-21: "(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment;; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. A de minimis condition is not a recognized environmental condition."

3. Subcontracted with a private utility locating firm to mark the locations of underground utilities on the subject property and contacted the public utilities notification service to mark public utilities in the rights of way and easements.
4. Retained a drilling subcontractor to advance eight soil borings using direct-push drilling methods at the site. Soil samples were collected during the drilling activities for chemical analysis. Groundwater was not encountered.
5. Submitted soil samples for chemical analysis of petroleum hydrocarbon identification by Washington State Department of Ecology- (Ecology) approved method NWTPH-HCID (three samples), gasoline-range petroleum hydrocarbons by Ecology-approved method NWTPH-Gx (seven samples), diesel- and lube oil-range petroleum hydrocarbons by Ecology-approved method NWTPH-Dx (nine samples), benzene, ethylbenzene, toluene and xylenes (BETX) by United States Environmental Protection Agency (EPA) Method 8021B (one sample). The soil samples were submitted to the laboratory requesting standard 7-working day turnaround based on field screening.
6. Placed the investigation-derived waste (soil and decontamination rinse water) generated during the exploration activities into labeled drums for permitted disposal off-site.
7. Evaluated the data with respect to Ecology's MTCA cleanup levels.
8. Prepared this report that summarizes the Phase II ESA results.

3.0 SUBSURFACE SAMPLING INVESTIGATION FINDINGS

3.1. Subsurface Sampling Activities

Eight borings (B-1 through B-8) were completed within the area of the former two heating oil USTs to depths of approximately 15 feet below ground surface (bgs) using a direct-push drill rig on November 1, 2023. The approximate boring locations are shown on Figure 2.

Soil samples were collected from the ground surface to approximately 15 feet bgs in the eight borings. Soil samples were field screened for evidence of petroleum hydrocarbons and volatile organics using visual, water sheen and headspace vapor screening methods.

3.2. Soil and Groundwater Conditions

Material observed in the eight borings was mainly comprised of fine to coarse sand with silt and gravel, interbedded with poorly graded fine to coarse gravel. The two borings located within the footprint of the USTs removed in April 2022 consisted of fill material to approximately 10 feet bgs; apparent native material at these boring locations was a brown silty sand interbedded with a fine to coarse sand with silt and fine to medium gravel. Groundwater was not observed in the eight borings. Soil samples were visually classified in general accordance with ASTM D-2488. Field procedures and exploration boring logs are presented in Appendix A.

Field screening results are shown on Table 1. In general, no sheen to a slight sheen was observed on the soil samples. Samples collected at boring B-4, just east of former east UST location, exhibited a slight sheen transitioning to moderate sheen at approximately 7 feet bgs. Samples collected at boring B-8, just west of the location of the former west UST, exhibited a slight sheen with a heavy sheen at approximately 5.5 feet

bgs. Because the presence of a sheen indicates the potential presence of petroleum hydrocarbons, chemical analyses targeted the samples collected at depths in each boring with the highest sheen.

Low concentrations of photoionizable vapors were observed in the samples based on field measurements indicating the potential presence of volatile organic compounds. Measurements were less than 1.0 parts per million (ppm) with the exception of the sample collected from boring B-8 at approximately 5.5 feet bgs, which had a photoionizable vapor concentration of 1.1 ppm.

4.0 SOIL CHEMICAL ANALYTICAL RESULTS

Soil samples were submitted to OnSite Environmental, Inc., in Redmond, Washington for chemical analysis. The soil analytical results are summarized in Table 1. Copies of the laboratory reports and the chain of custody are presented in Appendix B.

4.1. Petroleum Hydrocarbons

Gasoline-range and diesel-range petroleum hydrocarbons were not detected in the analyzed soil samples at levels at or greater than the reporting limit. One soil sample was also analyzed for BETX. BETX compounds were not detected in the analyzed soil sample.

Lube oil-range petroleum hydrocarbons were detected at concentrations less than the MTCA Method A cleanup level in analyzed soil samples from approximately 6.5 feet bgs in boring B-1 and from approximately 11.5 feet bgs in boring B-2. Borings B-1 and B-2 are located below the former sites of heating oil USTs. Lube oil-range petroleum hydrocarbons were not detected in the remaining analyzed soil samples.

5.0 CONCLUSIONS

Gasoline-range, diesel-range, and lube oil-range petroleum hydrocarbons were either not detected or were detected at concentrations less than the respective MTCA Method A Unrestricted Land Use (ULU) cleanup level in the analyzed soil samples collected from the eight borings on the subject property. Lube oil-range petroleum hydrocarbons were detected at concentrations less than the MTCA Method A cleanup levels in two soil samples (B-1 and B-2) collected at the depths of the base of the former UST excavations. Therefore, residual petroleum hydrocarbon contamination associated with the former heating oil USTs removed in April 2022, if any, is likely limited in extent and does not appear to present a threat to human health or the environment at this time.

6.0 LIMITATIONS

We have prepared this report for the exclusive use of the Nisqually Indian Tribe. Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted environmental science practices in this area at the time this report was prepared. The conclusions and opinions presented in this report are based on our professional knowledge, judgment and experience. No warranty or other conditions, express or implied, should be understood.

Any electronic form, facsimile or hard copy of the original document (email, text, table and/or figure), if provided, and any attachments should be considered a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

Please refer to Appendix C titled "Report Limitations and Guidelines for Use" for additional information pertaining to use of this report.

Table 1

Soil Chemical Analytical Results - Petroleum Hydrocarbons and BTEX[1]

Nisqually Horse Ranch Property - Phase II Environmental Site Assessment

10747 SE Todtkarle Road

Olympia, Washington

Boring ID	Sample ID[2]	Sample Depth (feet bgs)	Field Screening Results[3]		Petroleum Hydrocarbons (mg/kg)					
					HCID[4]			NWTPH-GX[5]	NWTPH-Dx[6]	
			Headspace Vapors (ppm)	Sheen	Gasoline-Range	Diesel-Range	Lube Oil-Range	Gasoline-Range	Diesel-Range	Lube Oil-Range
B-1	B-1-6-7	6	<1	NS	22 U	54 U	**DET**	--	27 U	**280**
B-2	B-2-11-12	11	<1	SS	21 U	52 U	**DET**	--	26 U	**80**
B-3	B-3-9-10	9	<1	SS	--	--	--	5.6 U	26 U	52 U
B-4	B-4-9-10	9	<1	MS	--	--	--	5.6 U	27 U	54 U
B-5	B-5-5-6	5	<1	SS	--	--	--	5.2 U	26 U	52 U
	B-5-11-12	11	<1	SS	--	--	--	5.4 U	27 U	54 U
B-6[7]	B-6-8-9	9	<1	SS	--	--	--	5.5 U	26 U	52 U
B-7	B-7-5.5-6.5	5.5	<1	SS	21 U	53 U	110 U	--	--	--
B-8	B-8-5.5-6.5	5.5	1.1	HS	--	--	--	5.8 U	27 U	54 U
	B-8-12-13	12	<1	SS	--	--	--	5.3 U	26 U	52 U
MTCA Method A ULU Cleanup Level					100/30[8]	2,000	2,000	100/30[8]	2,000	2,000

Notes:

[1] Chemical analysis performed by OnSite Environmental, Inc., of Redmond, Washington.

[2] Sample ID = boring number - starting depth of sample [feet bgs] - base depth of sample [feet bgs]. All samples collected on November 1, 2023.

[3] Field screening methods are described in Appendix A.

[4] Petroleum hydrocarbons identification by Washington State Department of Ecology (Ecology)-approved method NWTPH-HCID.

[5] Gasoline-range petroleum hydrocarbons by Ecology-approved method NWTPH-Gx.

[6] Diesel-range and lube oil-range petroleum hydrocarbons by Ecology-approved method NWTPH-Dx.

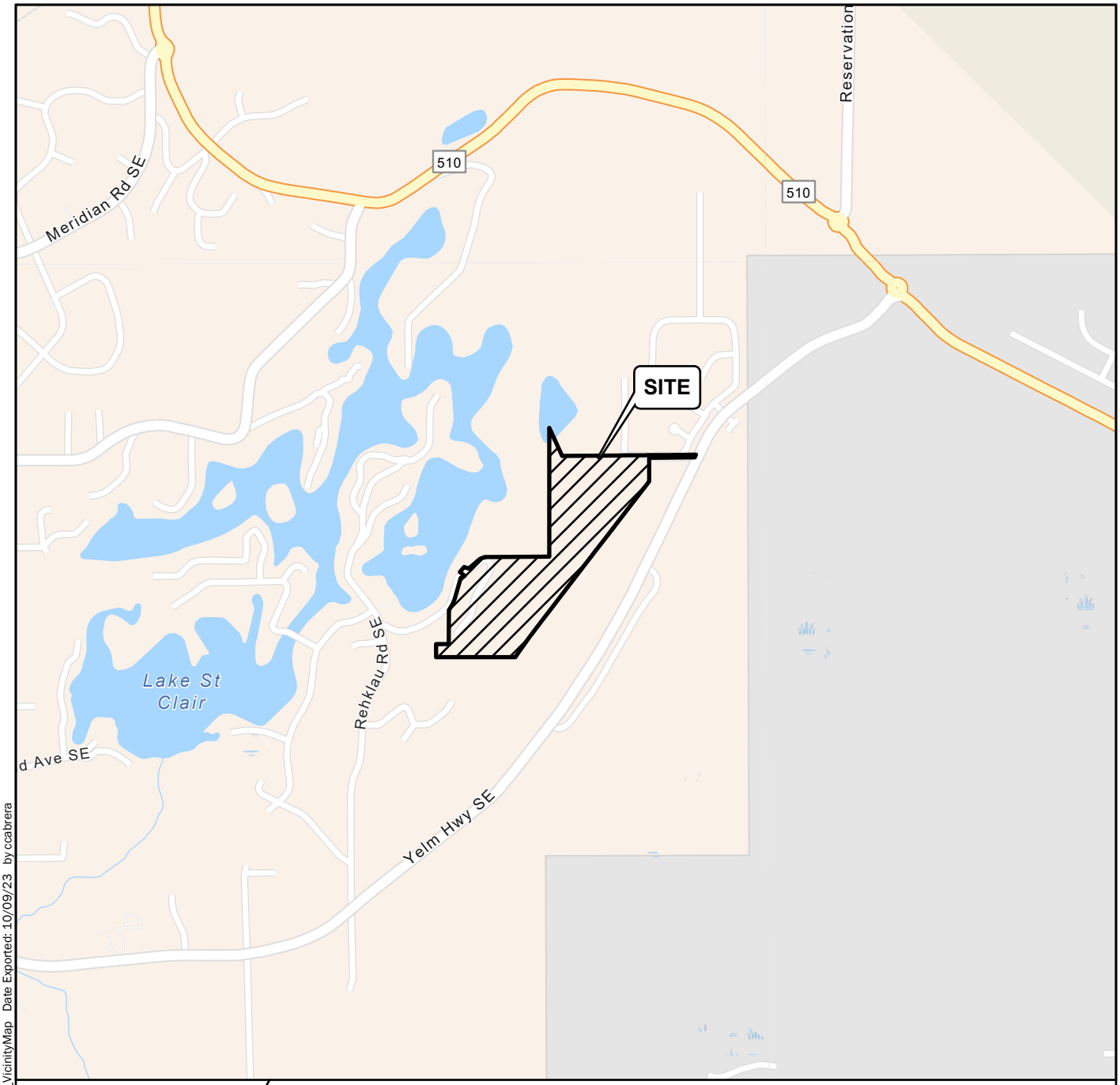
[7] Sample was also analyzed for benzene, ethylbenzene, toluene, and xylenes (BETX) analyzed by United States Environmental Protection Agency (EPA) method 8021B. Analytes were not detected.

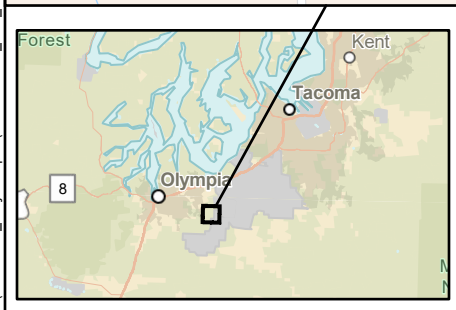
[8] Model Toxics Control Act (MTCA) Method A ULU cleanup level for gasoline is 30 mg/kg, or 100 mg/kg if no benzene is present or the sum of toluene, ethylbenzene and xylenes are less than 1% of the total gasoline detection.

BETX = benzene, ethylbenzene, toluene, and xylenes
bgs = below ground surface
Ecology = Washington State Department of Ecology
EPA = United States Environmental Protection Agency
MTCA = Model Toxics Control Act
MS = moderate sheen
SS = slight sheen
NS = no sheen
ppm = parts per million
mg/kg = milligram per kilogram
ULU = Unrestricted Land Use
-- = sample not analyzed
U = Analyte was not detected at or greater than the listed reporting limit

Bold font type indicates that the analyte was detected at a concentration greater than the respective laboratory reporting limit.

Bold font type and shaded indicates that the analyte was detected at a concentration greater than the respective Model Toxics Control Act Cleanup Level.





N

0 2,000

Feet

Source(s):
- ESRI

Coordinate System: NAD 1983 UTM Zone 10N

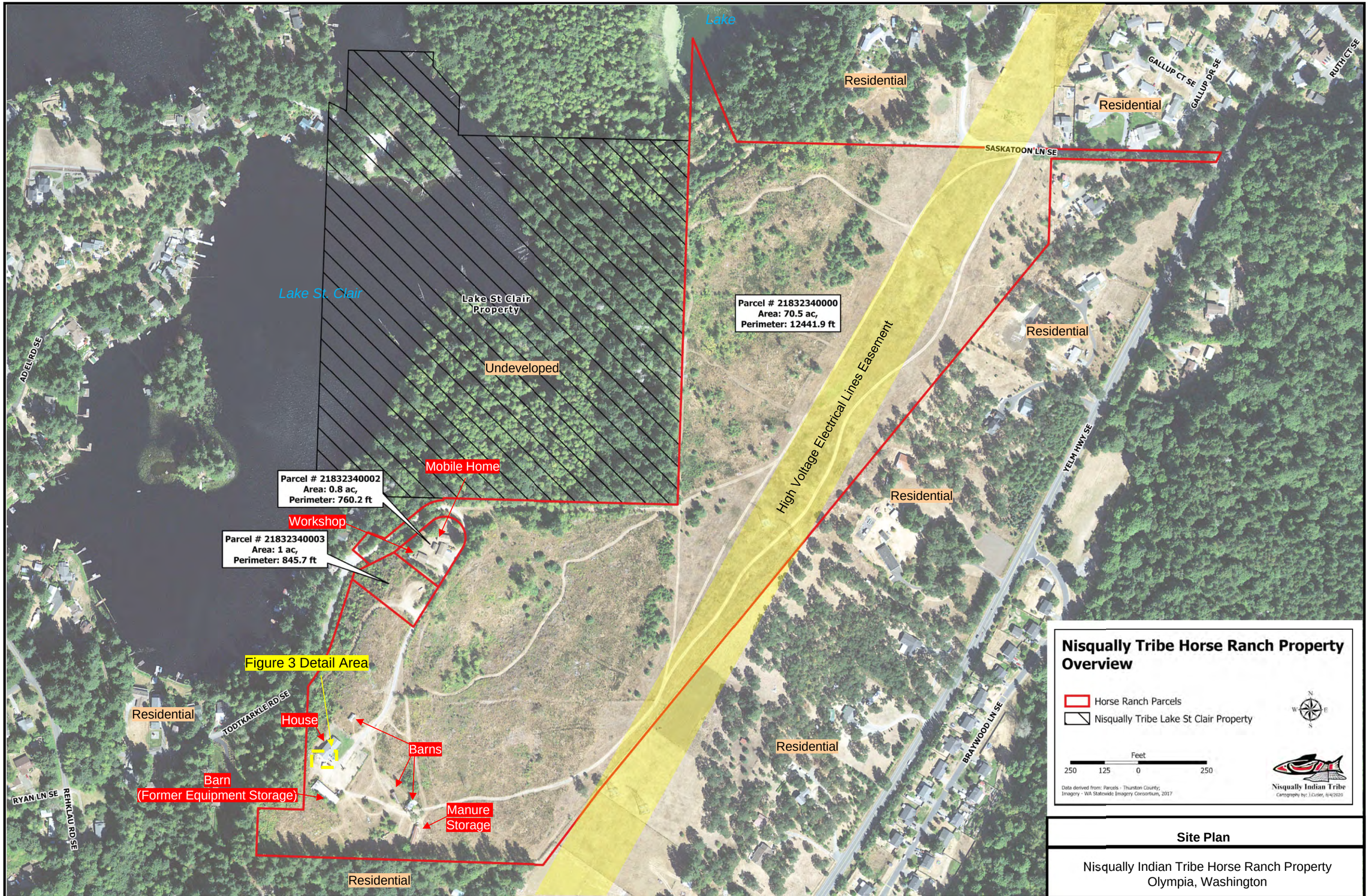
Vicinity Map

Nisqually Indian Tribe Horse Ranch Property
Olympia, Washington

GeoEngineers

Figure 1

P:\0\0277056\GIS\0277056_Project\0277056_Project.aprx\027705600_F01_VicinityMap Date Exported: 10/09/23 by ccabrera



Source: Nisqually Indian Tribe Horse Ranch Property Overview, 2023

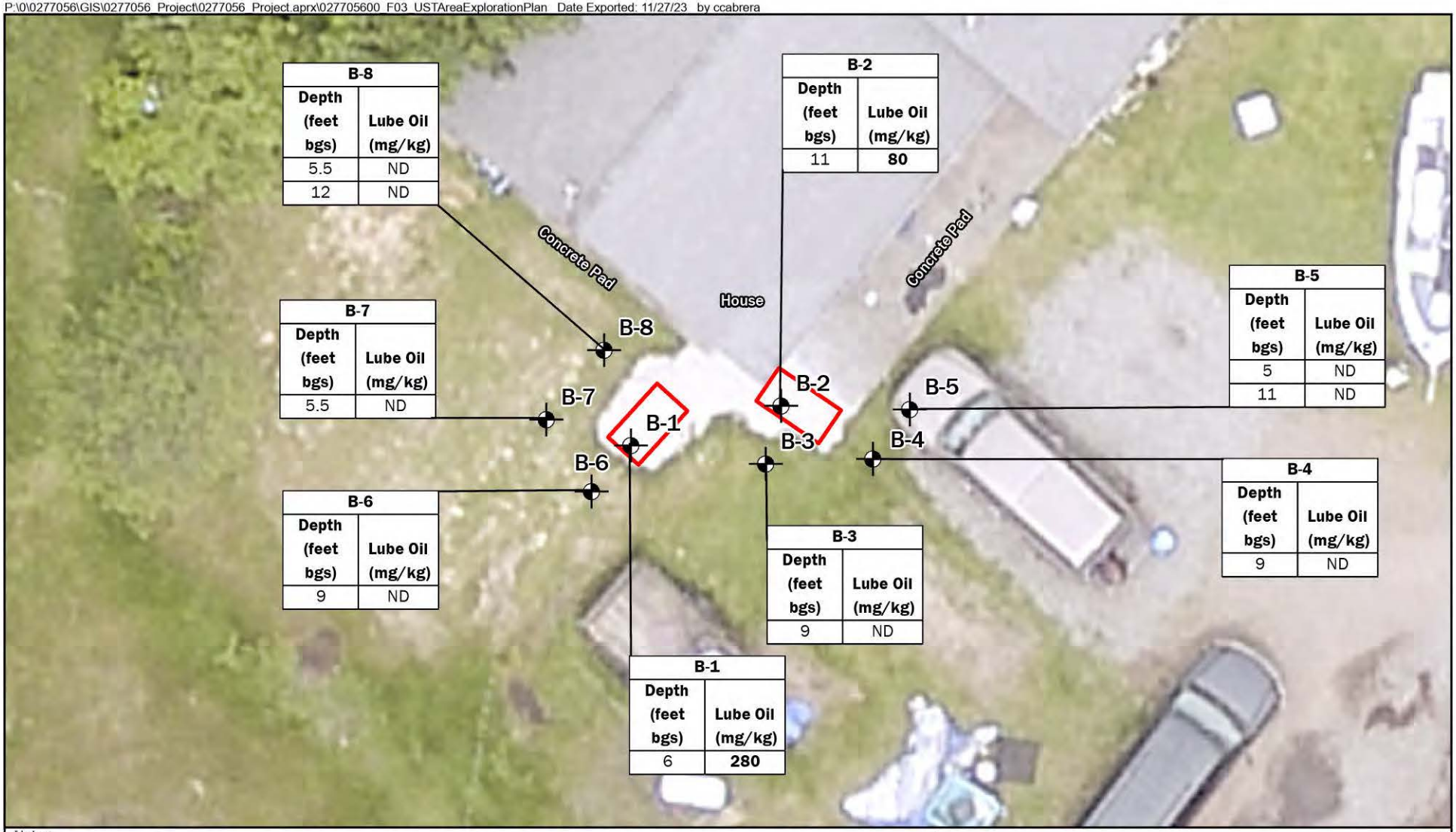
Site Plan

Nisqually Indian Tribe Horse Ranch Property
Olympia, Washington

GeoEngineers

Figure 2

P:\0\0277056\GIS\0277056_Project\0277056_Project.aprx\027705600_F03_USTAreaExplorationPlan Date Exported: 11/27/23 by ccabrera



Notes:
1. Lube Oil = Lube Oil-Range Hydrocarbons. MTCA Method A Cleanup Level 2000 mg/kg
2. ND = Not Detected, bgs = below ground surface, mg/kg = milligrams per kilogram
3. **Bold** font type indicates that the analyte was detected at a concentration greater than the respective laboratory reporting limit.

Source(s): Thurston County 2022 Aerial

Coordinate System: NAD 1983 StatePlane Washington South FIPS 4602 Feet

Legend

Boring Location

Approximate Location of Former Heating Oil USTs

N

0 10

Feet

UST Area Exploration Plan

Nisqually Indian Tribe Horse Ranch Property
Olympia, Washington

GeoEngineers

Figure 3

APPENDIX A
Field Procedures

APPENDIX A
FIELD PROCEDURES

General

Subsurface conditions were explored by completing eight borings at the site to evaluate the potential presence of petroleum hydrocarbons in the soil and groundwater.

A representative of GeoEngineers selected the locations for borings, observed and classified the soils encountered and prepared a detailed log of each boring. Soil in the explorations was visually classified in general accordance with ASTM D 2488-94. The soils were classified according to the system described in Figure A-1. The boring logs are presented in Figures A-2 through A-9.

Soil Sampling

Subsurface conditions were evaluated by completing direct-push soil borings using equipment owned and operated by Holocene Drilling, a Washington state-licensed drilling company.

The direct-push borings extended to a depth of approximately 15 feet bgs. Soil samples were collected in clean, plastic 1.5-inch diameter disposable liners. Soil samples were obtained from continuous cores for field screening and possible chemical analysis.

Soil samples obtained during the exploration activities were collected from the sampler with a stainless-steel knife or new gloves.

A portion of each sample was placed into laboratory-prepared jars for possible chemical analysis using the 5035 sampling method. The remaining portion of each sample was used for field screening. The sampling equipment was decontaminated prior to each use with an Alconox® wash and a clean water rinse. The sampling equipment was decontaminated before each sampling attempt with an Alconox® wash and a clean water rinse.

The soil samples were placed in a cooler with ice for transport to OnSite Environmental, Inc. located in Redmond, Washington. Standard chain-of-custody procedures were followed in transporting the soil samples to the laboratory.

Field Screening of Soil Samples

Soil samples obtained from the borings were screened in the field for evidence of contamination using 1) visual examination; 2) sheen screening; and/or 3) or photo-ionization detector (PID). The results of headspace and sheen screening are included in the boring logs and in Table 1 for soil samples tested by chemical analysis.

Visual screening consists of inspecting the soil for stains indicative of petroleum-related contamination. Visual screening is generally more effective when contamination is related to heavy petroleum hydrocarbons, such as motor oil or hydraulic oil, or when hydrocarbon concentrations are high. Sheen screening and headspace vapor screening are more sensitive methods that have been effective in detecting contamination at concentrations less than regulatory cleanup guidelines. Sheen screening involves placing soil in a pan of water and observing the water surface for signs of sheen. Sheen classifications are as follows:

No Sheen (NS)	No visible sheen on water surface.
Slight Sheen (SS)	Light, colorless, dull sheen; spread is irregular, not rapid; sheen dissipates rapidly.
Moderate Sheen (MS)	Light to heavy sheen, may have some color/iridescence; spread is irregular to flowing; few remaining areas of no sheen on water surface.
Heavy Sheen (HS)	Heavy sheen with color/iridescence; spread is rapid; entire water surface may be covered with sheen.

Headspace vapor screening involves placing a soil sample in a plastic sample bag. Air is captured in the bag and the bag is shaken to expose the soil to the air trapped in the bag. The probe of a PID is inserted in the bag and the instrument measures the concentration of combustible vapor in the air removed from the sample headspace. The PID measures concentrations in ppm (parts per million) and is calibrated to isobutylene. The PID is designed to quantify combustible gas and organic vapor concentrations up to 2,500 ppm with a lower threshold of significance of 1 ppm in this application. Field screening results are site-specific and vary with soil type, soil moisture content, temperature and type of contaminant.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% RETAINED ON NO. 200 SIEVE	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS
				SP	POORLY-GRADED SANDS, GRAVELLY SAND
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
	AC	Asphalt Concrete
	CC	Cement Concrete
	CR	Crushed Rock/ Quarry Spalls
	SOD	Sod/Forest Duff
	TS	Topsoil

Groundwater Contact

Measured groundwater level in exploration, well, or piezometer

Measured free product in well or piezometer

Graphic Log Contact

Distinct contact between soil strata

Approximate contact between soil strata

Material Description Contact

Contact between geologic units

Contact between soil of the same geologic unit

Sampler Symbol Descriptions

2.4-inch I.D. split barrel / Dames & Moore (D&M)

Standard Penetration Test (SPT)

Shelby tube

Piston

Direct-Push

Bulk or grab

Continuous Coring

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

"P" indicates sampler pushed using the weight of the drill rig.

"WOH" indicates sampler pushed using the weight of the hammer.

Laboratory / Field Tests

%F	Percent fines
%G	Percent gravel
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DD	Dry density
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
Mohs	Mohs hardness scale
OC	Organic content
PM	Permeability or hydraulic conductivity
PI	Plasticity index
PL	Point load test
PP	Pocket penetrometer
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
UU	Unconsolidated undrained triaxial compression
VS	Vane shear

Sheen Classification

NS	No Visible Sheen
SS	Slight Sheen
MS	Moderate Sheen
HS	Heavy Sheen

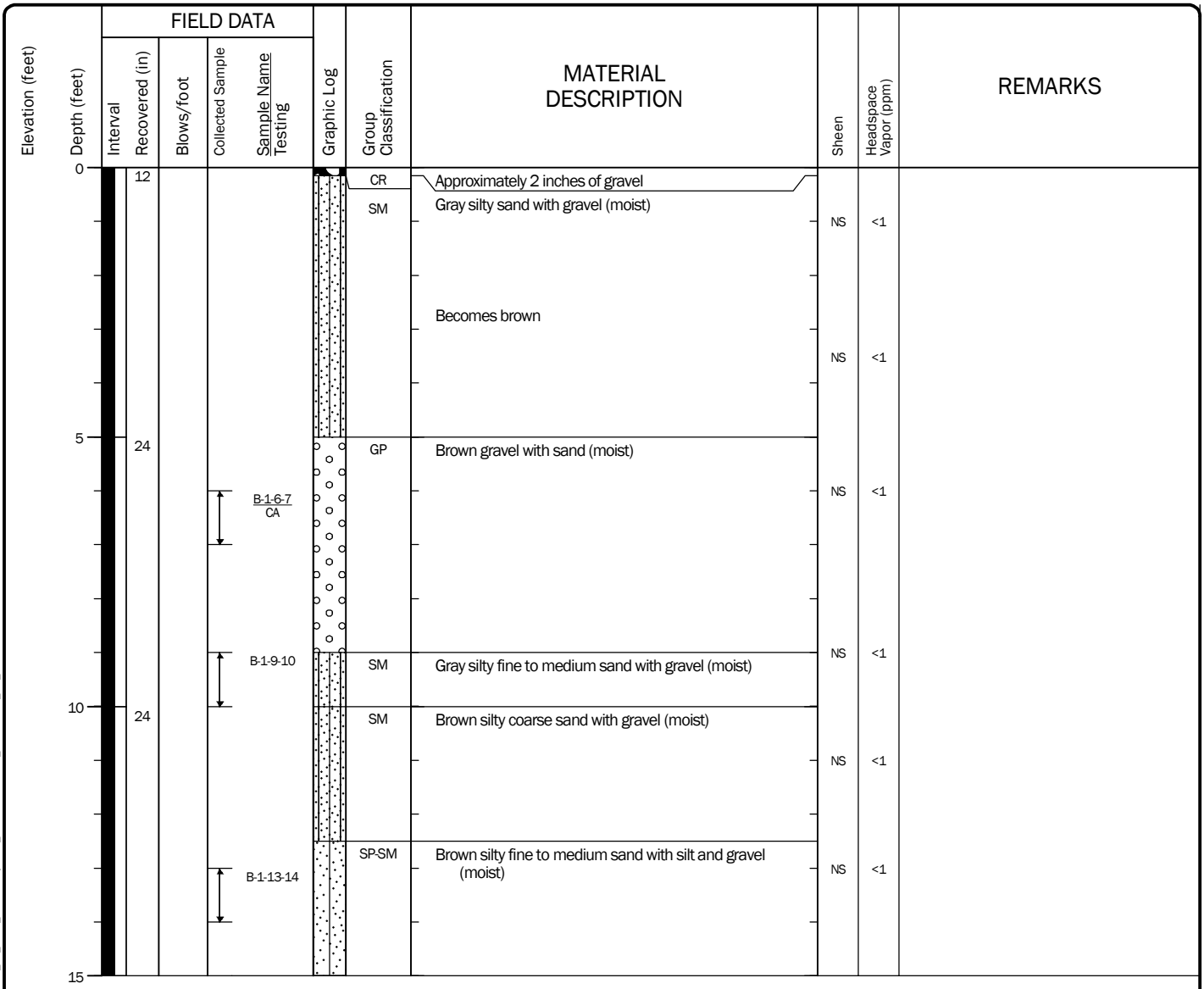
NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

Key to Exploration Logs

GeoEngineers

Figure A-1

Drilled Start 11/1/2023 End 11/1/2023	Total Depth (ft) 15	Logged By MB Checked By	Driller Holocene Drilling	Drilling Method Direct-Push	
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Pneumatic		Drilling Equipment Geoprobe 7800	
Latitude Longitude		System Datum		Groundwater not observed at time of exploration	
Notes:					



Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

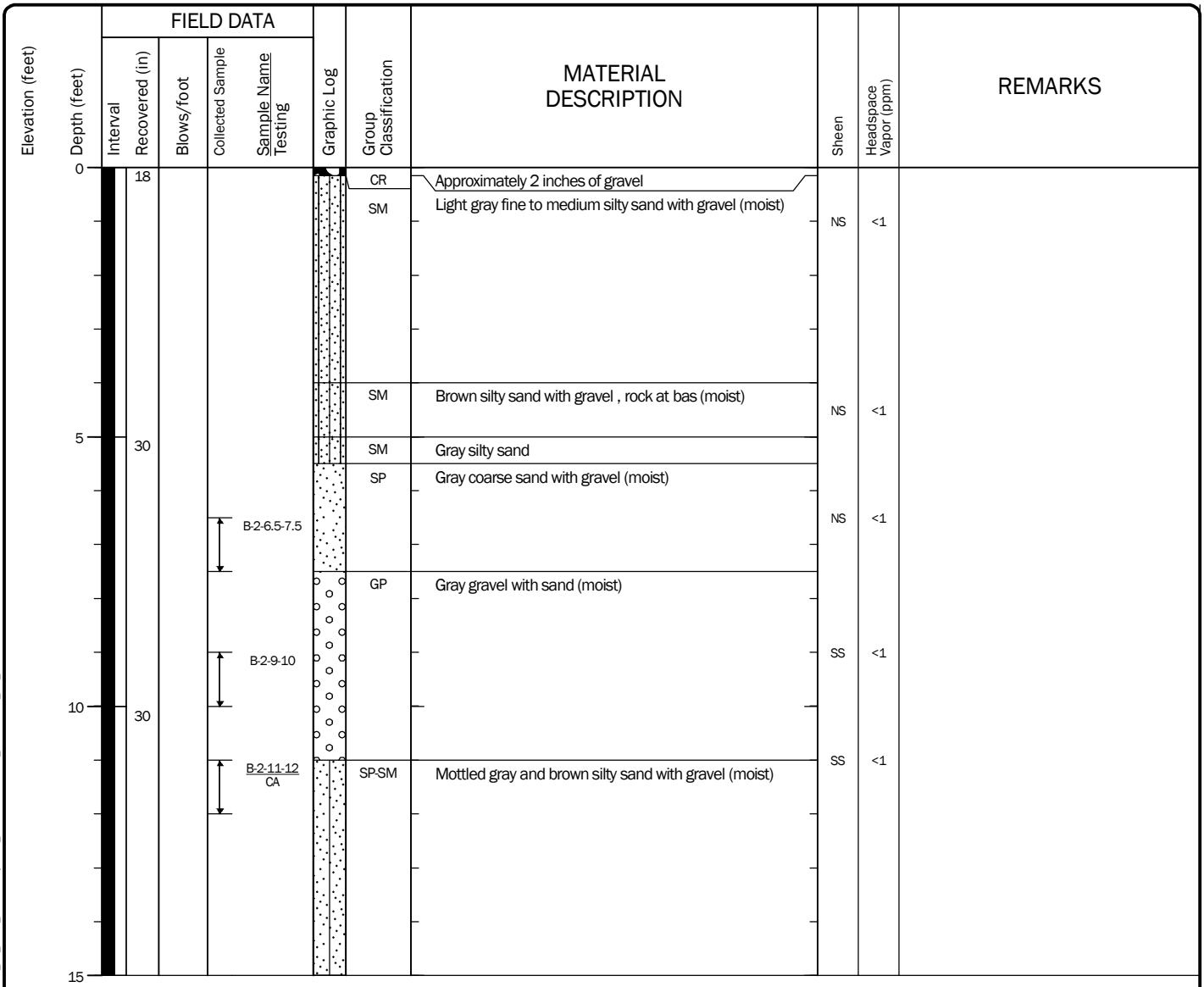
Log of Boring B-1

GeoEngineers

Project: Medicine River Ranch Property
Project Location: Olympia, Washington
Project Number: 0277-056-00

Figure A-2
Sheet 1 of 1

Drilled	Start 11/1/2023	End 11/1/2023	Total Depth (ft)	15	Logged By MB Checked By	Driller Holocene Drilling	Drilling Method	Direct-Push
Surface Elevation (ft) Vertical Datum	Undetermined		Hammer Data	Pneumatic		Drilling Equipment	Geoprobe 7800	
Latitude Longitude			System Datum			Groundwater not observed at time of exploration		
Notes:								



Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

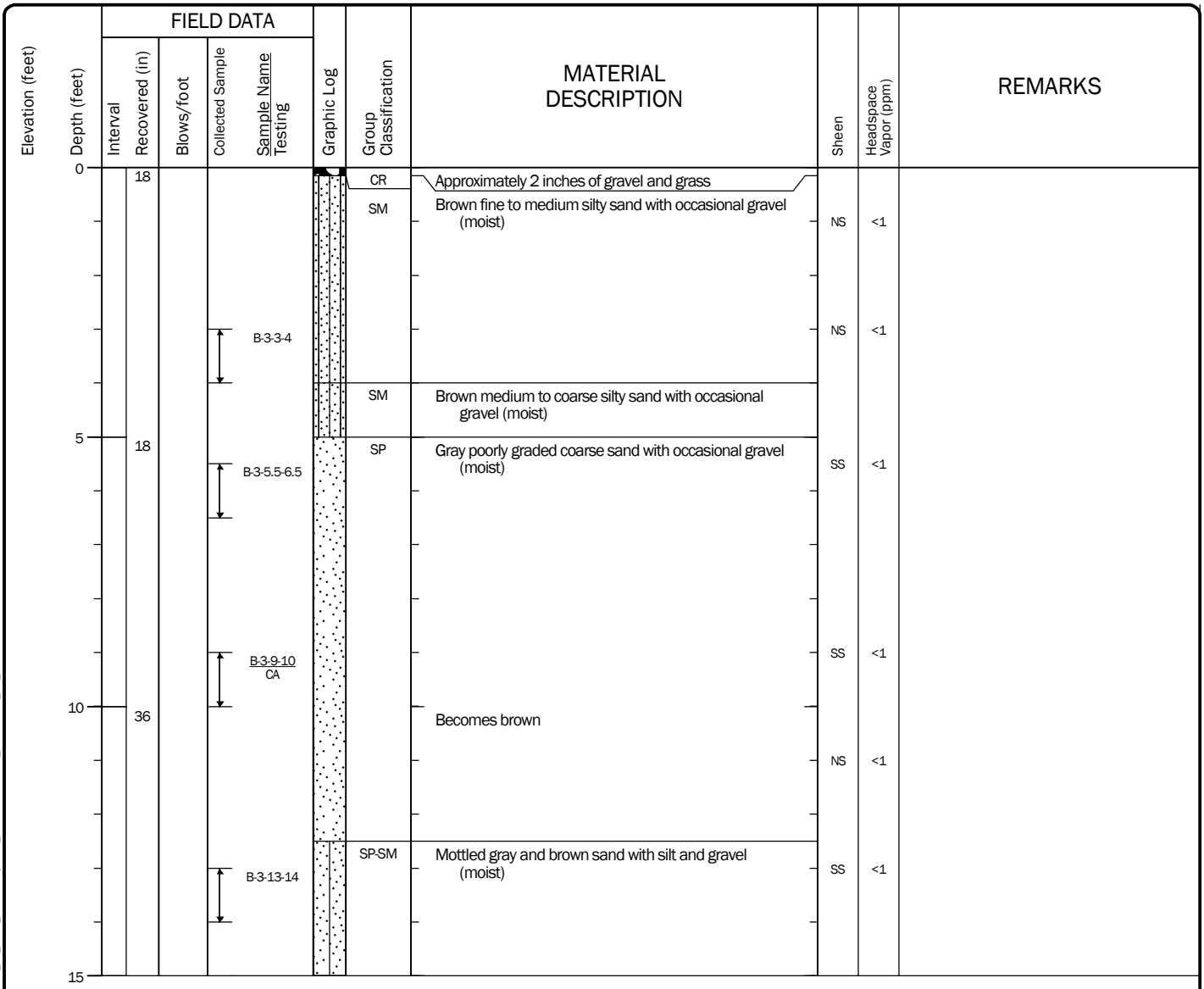
Log of Boring B-2

GeoEngineers

Project: Medicine River Ranch Property
Project Location: Olympia, Washington
Project Number: 0277-056-00

Figure A-3
Sheet 1 of 1

Drilled Start 11/1/2023 End 11/1/2023	Total Depth (ft) 15	Logged By MB Checked By	Driller Holocene Drilling	Drilling Method Direct-Push	
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Pneumatic		Drilling Equipment Geoprobe 7800	
Latitude Longitude		System Datum		Groundwater not observed at time of exploration	
Notes:					



Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Boring B-3

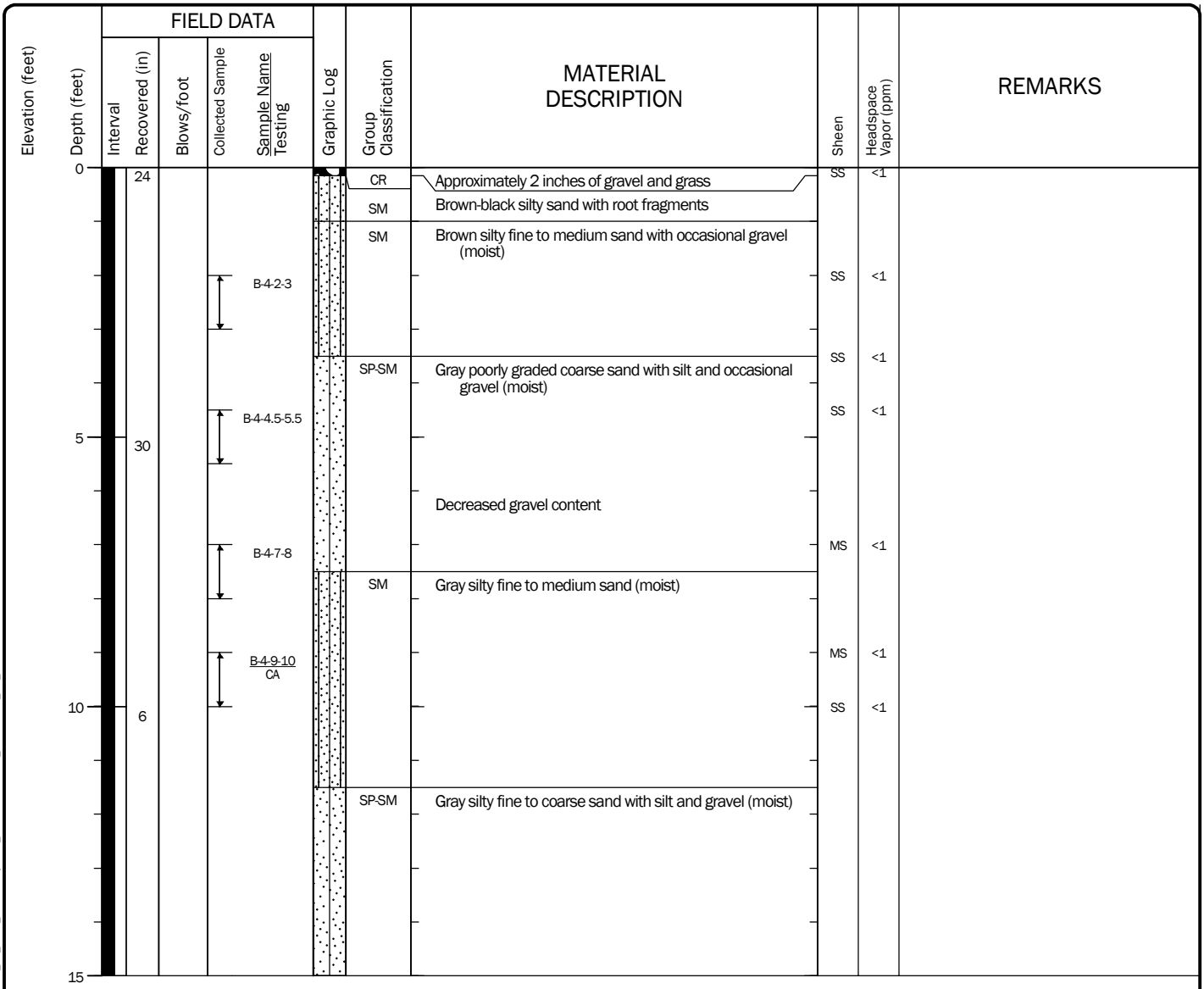
GeoEngineers

Project: Medicine River Ranch Property
Project Location: Olympia, Washington
Project Number: 0277-056-00

Figure A-4
Sheet 1 of 1

Drilled	Start 11/1/2023	End 11/1/2023	Total Depth (ft)	15	Logged By / Checked By	MB	Driller	Holocene Drilling	Drilling Method	Direct-Push
Surface Elevation (ft) / Vertical Datum	Undetermined		Hammer Data	Pneumatic	Drilling Equipment	Geoprobe 7800				
Latitude / Longitude			System Datum		Groundwater not observed at time of exploration					

Notes:



Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

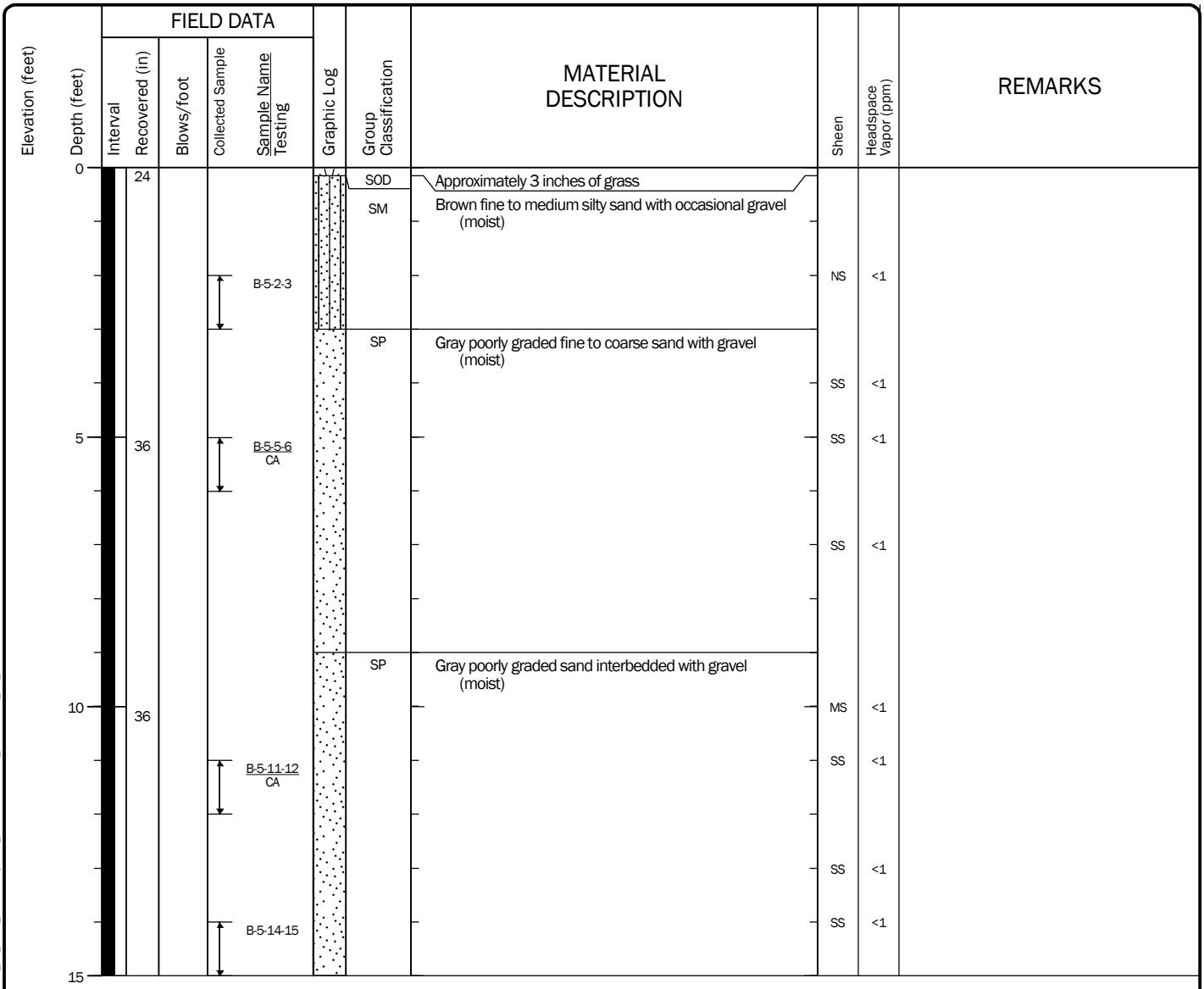
Log of Boring B-4

GeoEngineers

Project: Medicine River Ranch Property
Project Location: Olympia, Washington
Project Number: 0277-056-00

Figure A-5
Sheet 1 of 1

Drilled Start 11/1/2023 End 11/1/2023	Total Depth (ft) 15	Logged By MB Checked By	Driller Holocene Drilling	Drilling Method Direct-Push	
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Pneumatic		Drilling Equipment Geoprobe 7800	
Latitude Longitude		System Datum		Groundwater not observed at time of exploration	
Notes:					



Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

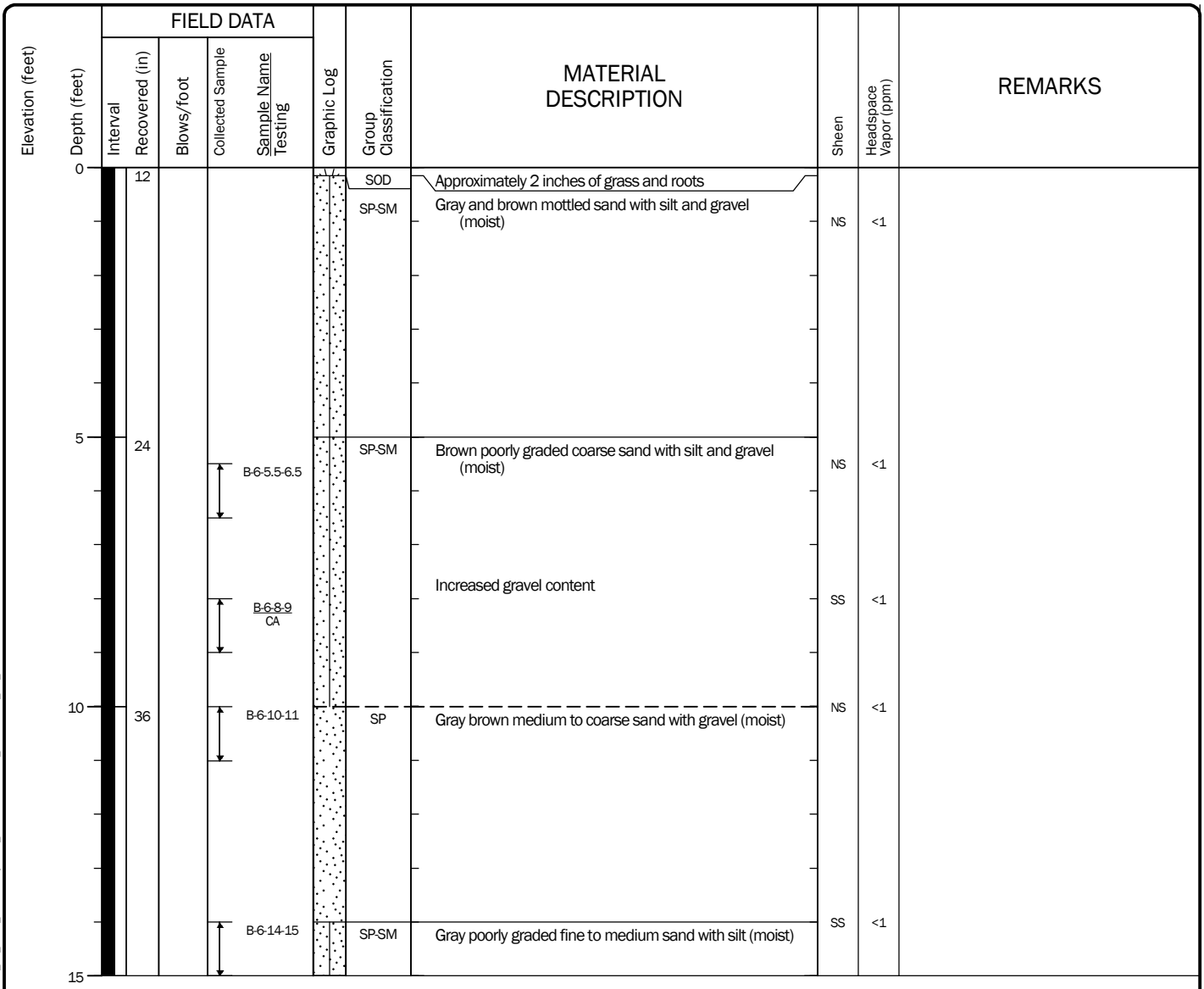
Log of Boring B-5

GeoEngineers

Project: Medicine River Ranch Property
Project Location: Olympia, Washington
Project Number: 0277-056-00

Figure A-6
Sheet 1 of 1

Drilled Start 11/1/2023 End 11/1/2023	Total Depth (ft) 15	Logged By MB Checked By	Driller Holocene Drilling	Drilling Method Direct-Push	
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Pneumatic		Drilling Equipment Geoprobe 7800	
Latitude Longitude		System Datum		Groundwater not observed at time of exploration	
Notes:					



Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

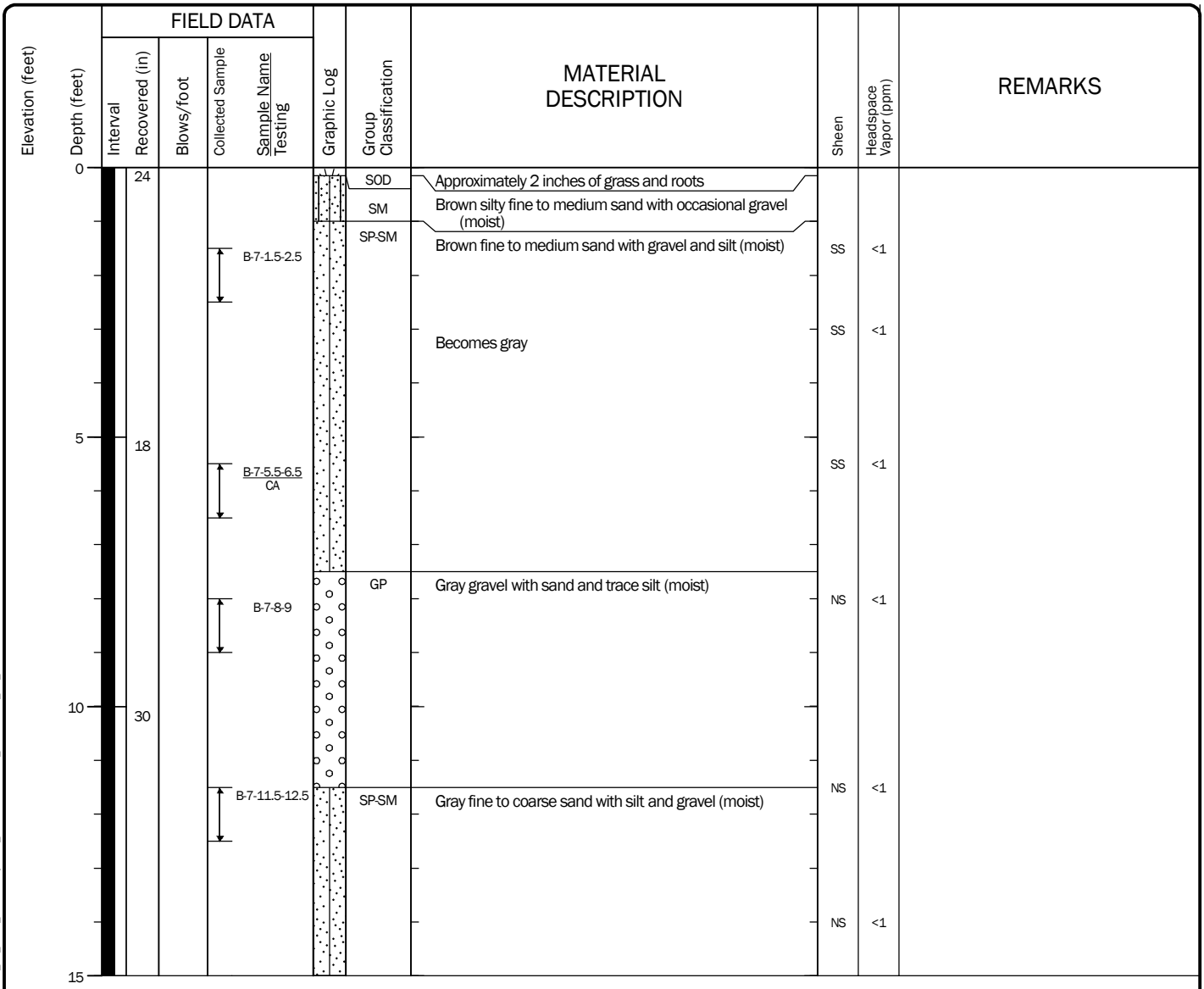
Log of Boring B-6

GeoEngineers

Project: Medicine River Ranch Property
Project Location: Olympia, Washington
Project Number: 0277-056-00

Figure A-7
Sheet 1 of 1

Drilled Start 11/1/2023 End 11/1/2023	Total Depth (ft) 15	Logged By MB Checked By	Driller Holocene Drilling	Drilling Method Direct-Push	
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Pneumatic		Drilling Equipment Geoprobe 7800	
Latitude Longitude		System Datum		Groundwater not observed at time of exploration	
Notes:					



Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

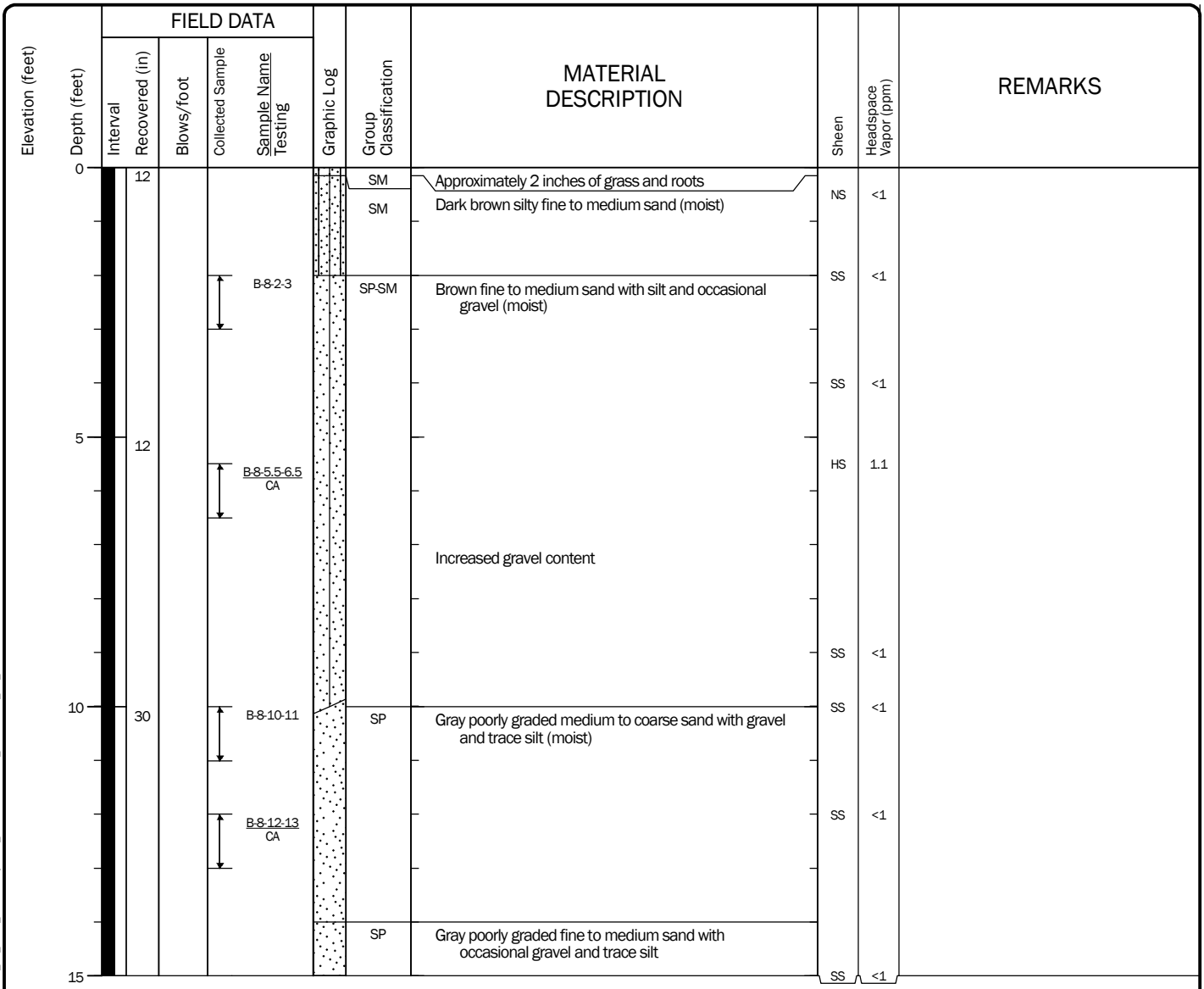
Log of Boring B-7

GeoEngineers

Project: Medicine River Ranch Property
Project Location: Olympia, Washington
Project Number: 0277-056-00

Figure A-8
Sheet 1 of 1

Drilled Start 11/1/2023 End 11/1/2023	Total Depth (ft) 15	Logged By MB Checked By	Driller Holocene Drilling	Drilling Method Direct-Push	
Surface Elevation (ft) Vertical Datum Undetermined		Hammer Data Pneumatic		Drilling Equipment Geoprobe 7800	
Latitude Longitude		System Datum		Groundwater not observed at time of exploration	
Notes:					



Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Boring B-8

GeoEngineers

Project: Medicine River Ranch Property
Project Location: Olympia, Washington
Project Number: 0277-056-00

Figure A-9
Sheet 1 of 1

APPENDIX B
Laboratory Analytical Report

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 8, 2023

Jessica Robertson
GeoEngineers, Inc.
1550 Woodridge Drive SE
Port Orchard, WA 98366

Re: Analytical Data for Project 0277-056-00 T200
Laboratory Reference No. 2311-030

Dear Jessica:

Enclosed are the analytical results and associated quality control data for samples submitted on November 2, 2023.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

Case Narrative

Samples were collected on November 1, 2023 and received by the laboratory on November 2, 2023. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
B-1-6-7	11-030-01	Soil	11-1-23	11-2-23	
B-2-11-12	11-030-06	Soil	11-1-23	11-2-23	
B-3-9-10	11-030-09	Soil	11-1-23	11-2-23	
B-4-9-10	11-030-14	Soil	11-1-23	11-2-23	
B-5-5-6	11-030-16	Soil	11-1-23	11-2-23	
B-5-11-12	11-030-17	Soil	11-1-23	11-2-23	
B-6-8-9	11-030-20	Soil	11-1-23	11-2-23	
B-7-5.5-6.5	11-030-24	Soil	11-1-23	11-2-23	
B-8-5.5-6.5	11-030-28	Soil	11-1-23	11-2-23	
B-8-12-13	11-030-30	Soil	11-1-23	11-2-23	

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

HYDROCARBON IDENTIFICATION
NWTPH-HCID

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B-1-6-7**					
Laboratory ID:	11-030-01					
Gasoline Range Organics	**ND**	22	NWTPH-HCID	11-3-23	11-3-23	
Diesel Range Organics	**ND**	54	NWTPH-HCID	11-3-23	11-3-23	
Lube Oil	**Detected**	110	NWTPH-HCID	11-3-23	11-3-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*91*	*50-150*				
Client ID:	**B-2-11-12**					
Laboratory ID:	11-030-06					
Gasoline Range Organics	**ND**	21	NWTPH-HCID	11-3-23	11-3-23	
Diesel Range Organics	**ND**	52	NWTPH-HCID	11-3-23	11-3-23	
Lube Oil	**Detected**	110	NWTPH-HCID	11-3-23	11-3-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*99*	*50-150*				
Client ID:	**B-7-5.5-6.5**					
Laboratory ID:	11-030-24					
Gasoline Range Organics	**ND**	21	NWTPH-HCID	11-3-23	11-3-23	
Diesel Range Organics	**ND**	53	NWTPH-HCID	11-3-23	11-3-23	
Lube Oil Range Organics	**ND**	110	NWTPH-HCID	11-3-23	11-3-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*94*	*50-150*				

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B-3-9-10**					
Laboratory ID:	11-030-09					
Gasoline	**ND**	5.6	NWTPH-Gx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*84*	*65-126*				
Client ID:	**B-4-9-10**					
Laboratory ID:	11-030-14					
Gasoline	**ND**	5.6	NWTPH-Gx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*77*	*65-126*				
Client ID:	**B-5-5-6**					
Laboratory ID:	11-030-16					
Gasoline	**ND**	5.2	NWTPH-Gx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*79*	*65-126*				
Client ID:	**B-5-11-12**					
Laboratory ID:	11-030-17					
Gasoline	**ND**	5.4	NWTPH-Gx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*90*	*65-126*				
Client ID:	**B-6-8-9**					
Laboratory ID:	11-030-20					
Benzene	**ND**	0.020	EPA 8021B	11-7-23	11-7-23	
Toluene	**ND**	0.055	EPA 8021B	11-7-23	11-7-23	
Ethylbenzene	**ND**	0.055	EPA 8021B	11-7-23	11-7-23	
m,p-Xylene	**ND**	0.055	EPA 8021B	11-7-23	11-7-23	
o-Xylene	**ND**	0.055	EPA 8021B	11-7-23	11-7-23	
Gasoline	**ND**	5.5	NWTPH-Gx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*76*	*65-126*				
Client ID:	**B-8-5.5-6.5**					
Laboratory ID:	11-030-28					
Gasoline	**ND**	5.8	NWTPH-Gx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*88*	*65-126*				

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B-8-12-13**					
Laboratory ID:	11-030-30					
Gasoline	**ND**	5.3	NWTPH-Gx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*88*	*65-126*				

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B-3-9-10**					
Laboratory ID:	11-030-09					
Diesel Range Organics	**ND**	26	NWTPH-Dx	11-7-23	11-7-23	
Lube Oil Range Organics	**ND**	52	NWTPH-Dx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*79*	*50-150*				
Client ID:	**B-4-9-10**					
Laboratory ID:	11-030-14					
Diesel Range Organics	**ND**	27	NWTPH-Dx	11-7-23	11-7-23	
Lube Oil Range Organics	**ND**	54	NWTPH-Dx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*81*	*50-150*				
Client ID:	**B-5-5-6**					
Laboratory ID:	11-030-16					
Diesel Range Organics	**ND**	26	NWTPH-Dx	11-7-23	11-7-23	
Lube Oil Range Organics	**ND**	52	NWTPH-Dx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*85*	*50-150*				
Client ID:	**B-5-11-12**					
Laboratory ID:	11-030-17					
Diesel Range Organics	**ND**	27	NWTPH-Dx	11-7-23	11-7-23	
Lube Oil Range Organics	**ND**	54	NWTPH-Dx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*92*	*50-150*				
Client ID:	**B-8-5.5-6.5**					
Laboratory ID:	11-030-28					
Diesel Range Organics	**ND**	27	NWTPH-Dx	11-7-23	11-7-23	
Lube Oil Range Organics	**ND**	54	NWTPH-Dx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*96*	*50-150*				
Client ID:	**B-8-12-13**					
Laboratory ID:	11-030-30					
Diesel Range Organics	**ND**	26	NWTPH-Dx	11-7-23	11-7-23	
Lube Oil Range Organics	**ND**	52	NWTPH-Dx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*87*	*50-150*				

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B-1-6-7**					
Laboratory ID:	11-030-01					
Diesel Range Organics	**ND**	27	NWTPH-Dx	11-7-23	11-7-23	
Lube Oil	**280**	54	NWTPH-Dx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*81*	*50-150*				
Client ID:	**B-2-11-12**					
Laboratory ID:	11-030-06					
Diesel Range Organics	**ND**	26	NWTPH-Dx	11-7-23	11-7-23	
Lube Oil	**80**	52	NWTPH-Dx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*75*	*50-150*				

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

HYDROCARBON IDENTIFICATION
NWTPH-HCID
QUALITY CONTROL

Matrix: Solid
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1103S1					
Gasoline Range Organics	**ND**	20	NWTPH-HCID	11-3-23	11-3-23	
Diesel Range Organics	**ND**	50	NWTPH-HCID	11-3-23	11-3-23	
Lube Oil Range Organics	**ND**	100	NWTPH-HCID	11-3-23	11-3-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*88*	*50-150*				

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

GASOLINE RANGE ORGANICS/BTEX
NWTPH-Gx/EPA 8021B
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1107S1					
Benzene	**ND**	0.020	EPA 8021B	11-7-23	11-7-23	
Toluene	**ND**	0.050	EPA 8021B	11-7-23	11-7-23	
Ethylbenzene	**ND**	0.050	EPA 8021B	11-7-23	11-7-23	
m,p-Xylene	**ND**	0.050	EPA 8021B	11-7-23	11-7-23	
o-Xylene	**ND**	0.050	EPA 8021B	11-7-23	11-7-23	
Gasoline	**ND**	5.0	NWTPH-Gx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*80*	*65-126*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	11-030-20										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethylbenzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*76*	*80*	*65-126*			
SPIKE BLANKS											
Laboratory ID:	SB1107S1										
	SB	SBD	SB	SBD		SB	SBD				
Benzene	**0.796**	**0.792**	1.00	1.00		**80**	**79**	77-113	1	10	
Toluene	**0.819**	**0.820**	1.00	1.00		**82**	**82**	81-115	0	10	
Ethylbenzene	**0.816**	**0.834**	1.00	1.00		**82**	**83**	80-115	2	10	
m,p-Xylene	**0.815**	**0.835**	1.00	1.00		**82**	**84**	81-115	2	11	
o-Xylene	**0.812**	**0.839**	1.00	1.00		**81**	**84**	82-115	3	11	
Surrogate:											
Fluorobenzene						*79*	*81*	*65-126*			

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1107S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	11-7-23	11-7-23	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*87*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-312-02										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	40	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	40	
Surrogate:											
o-Terphenyl						*80*	*79*	*50-150*			

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1107S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	11-7-23	11-7-23	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	11-7-23	11-7-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*87*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-346-18										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	40	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	40	
Surrogate:											
o-Terphenyl						*76*	*78*	*50-150*			

Date of Report: November 8, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030
Project: 0277-056-00 T200

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
B-1-6-7	11-030-01	**8**	11-3-23
B-2-11-12	11-030-06	**5**	11-3-23
B-3-9-10	11-030-09	**5**	11-3-23
B-4-9-10	11-030-14	**7**	11-3-23
B-5-5-6	11-030-16	**4**	11-3-23
B-5-11-12	11-030-17	**7**	11-3-23
B-6-8-9	11-030-20	**3**	11-3-23
B-7-5.5-6.5	11-030-24	**5**	11-3-23
B-8-5.5-6.5	11-030-28	**7**	11-3-23
B-8-12-13	11-030-30	**3**	11-3-23

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 3

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEI
Project Number: 0277-056-00 Task 200
Project Name: Nisqually Medicine River Horse Farm
Project Manager: Jessica Robertson
Sampled by: Meredith Bush

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-030

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	HOLD			% Moisture
1	B-1-6-7	11/1	1019	S	2	X			(X)														X			X
2	B-1-9-10		1024																							
3	B-1-13-14		1028																							
4	B-2-6.5-7.5		0944																							
5	B-2-9-10		0947																							
6	B-2-11-R		0951			X			(X)																	X
7	B-3-3-4		1058																							
8	B-3-5.5-6.5		1102																							
9	B-3-9-10		1104					X	X																	X
10	B-3-13-14		1107																							

	Signature	Company	Date	Time
Relinquished		GEI	11/2/23	1100
Received	Van	Sally	11/2/23	1100
Relinquished	Van	Sally	11/2/23	1205
Received		OSG	11/2/23	1205
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
(X) Added 11/6/23. DB (STA)

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street · Redmond, WA 98052
Phone: (425) 883-3881 · www.onsite-env.com

Company: GEI
Project Number: 0277-056-00 Task 200
Project Name: Nisqually Horse Ranch
Project Manager: Jessica Robertson
Sampled by: Meredith Rusy

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-030

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (802X 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	HOLD				% Moisture
11	B-4-2-3	11/01	1134	S	2																		HOLD				
12	B-4 4.5-5.5		1136																								
13	B-4-7-8		1140																								
14	B-4-9-10		1143					X	X																		X
15	B-5-2-3		1222																								
16	B-5-5-6		1225					X	X																		X
17	B-5-11-12		1227					X	X																		↓
18	B-5-14-15		1230																								
19	B-6-5.5-6.5		1330																								
20	B-6-8-9	↓	1332	↓	↓		X																				X

	Signature	Company	Date	Time
Relinquished		GEI	11/2/23	1100
Received		SPSL	11/2/23	1100
Relinquished		SPSL	11/2/23	1205
Received		ORE	11/2/23	1205
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

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Company: GEI
Project Number: 0277-056-00 Task 200
Project Name: Nisqually Horse Ranch
Project Manager: Jessica Robertson
Sampled by: Meredith Bush

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-030

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	HOLD				% Moisture
21	B-6-10-11	11/01	1335	S	2																		X				
22	B-6-14-15		1337																								
23	B-7-1.5-2.5		1446																								
24	B-7-5.5-6.5		1449			X																					X
25	B-7-8-9		1452																								
26	B-7-11.5-12.5		1455																								
27	B-8-2-3		1409																								
28	B-8-5.5-6.5		1412					X	X																		X
29	B-8-10-11		1414																								
30	B-8-12-13	↓	1416	↓	↓			X	X														↓				X

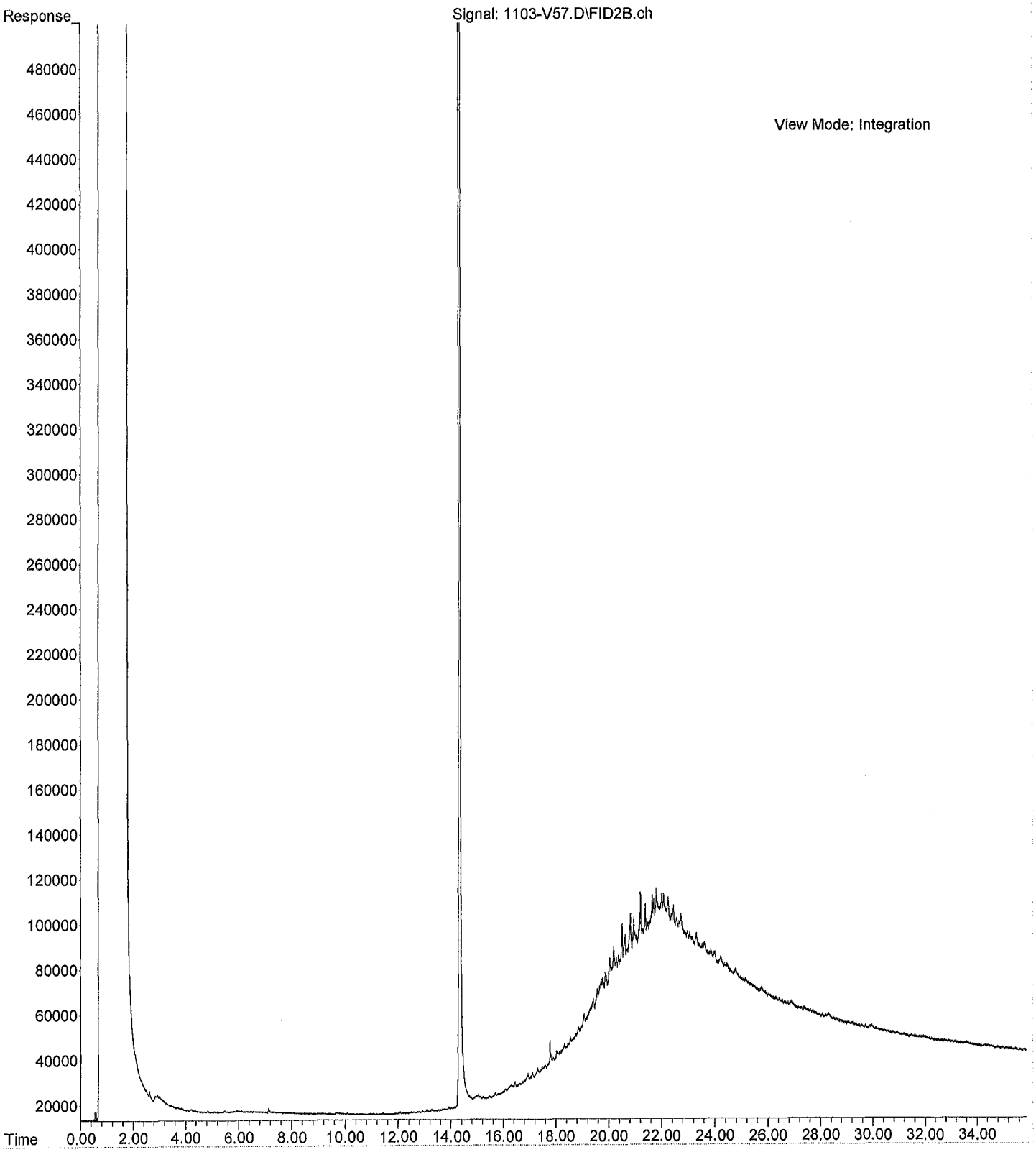
	Signature	Company	Date	Time
Relinquished		GEI	11/2/23	1100
Received	Van		11/2/23	1100
Relinquished	Van		11/2/23	1205
Received			11/2/23	1205
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

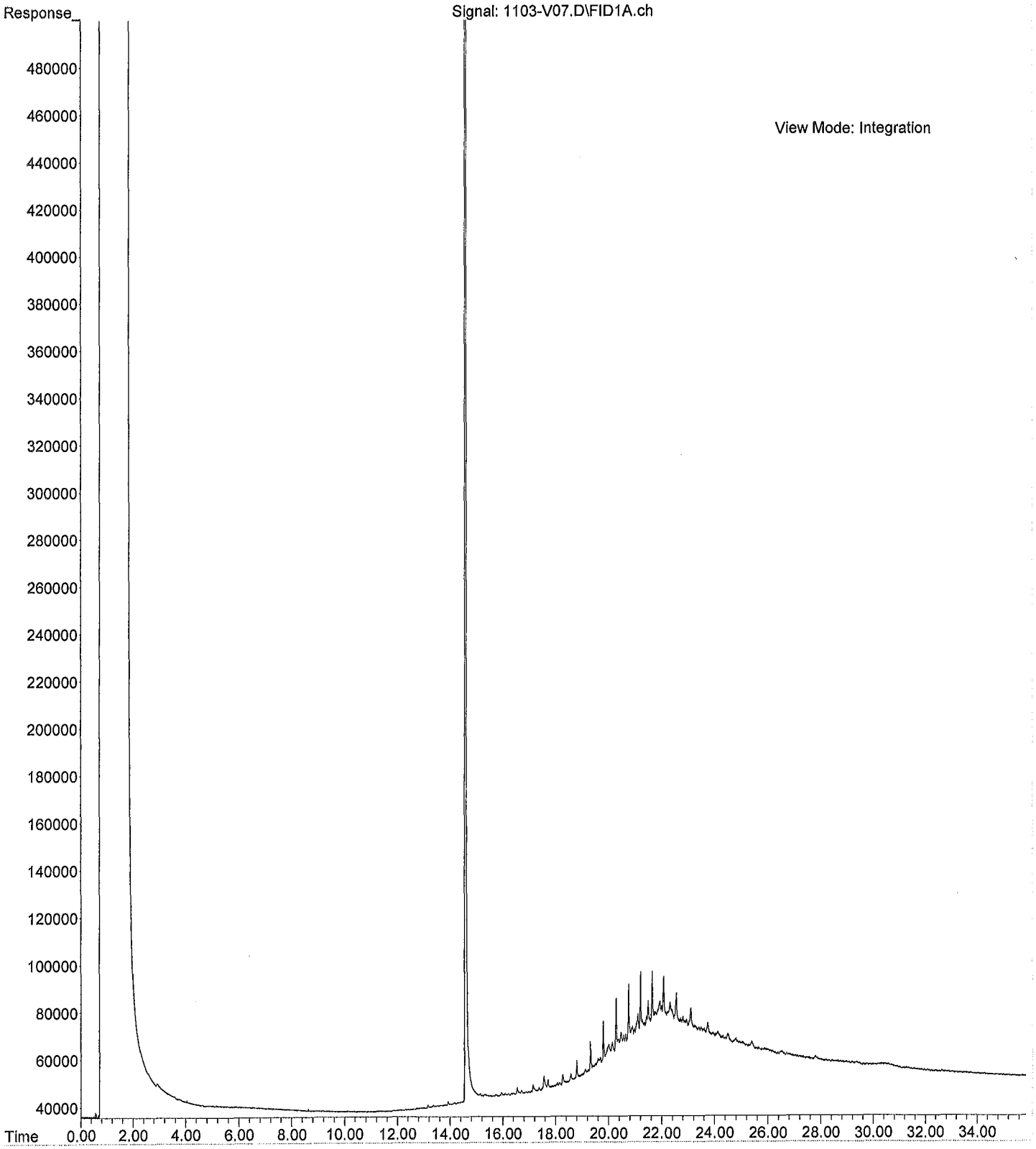
Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

File :C:\msdchem\2\data\V231103.SEC\1103-V57.D
Operator : LW
Acquired : 3 Nov 2023 13:00 using AcqMethod V230830F.M
Instrument : Vigo
Sample Name: 11-030-01
Misc Info : RearSamp
Vial Number: 57



File :C:\msdchem\2\data\V231103\1103-V07.D
Operator : LW
Acquired : 3 Nov 2023 13:00 using AcqMethod V230830F.M
Instrument : Vigo
Sample Name: 11-030-06
Misc Info : Sample
Vial Number: 7



OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 10, 2023

Jessica Robertson
GeoEngineers, Inc.
1550 Woodridge Drive SE
Port Orchard, WA 98366

Re: Analytical Data for Project 0277-056-00 T200
Laboratory Reference No. 2311-030B

Dear Jessica:

Enclosed are the analytical results and associated quality control data for samples submitted on November 2, 2023.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: November 10, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030B
Project: 0277-056-00 T200

Case Narrative

Samples were collected on November 1, 2023 and received by the laboratory on November 2, 2023. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: November 10, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030B
Project: 0277-056-00 T200

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
B-6-8-9	11-030-20	Soil	11-1-23	11-2-23	

Date of Report: November 10, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030B
Project: 0277-056-00 T200

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B-6-8-9**					
Laboratory ID:	11-030-20					
Diesel Range Organics	**ND**	26	NWTPH-Dx	11-9-23	11-9-23	
Lube Oil Range Organics	**ND**	52	NWTPH-Dx	11-9-23	11-9-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*84*	*50-150*				

Date of Report: November 10, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030B
Project: 0277-056-00 T200

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1109S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	11-9-23	11-9-23	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	11-9-23	11-9-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*80*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-284-07										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	40	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	40	
Surrogate:											
o-Terphenyl						*75*	*66*	*50-150*			

Date of Report: November 10, 2023
Samples Submitted: November 2, 2023
Laboratory Reference: 2311-030B
Project: 0277-056-00 T200

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
B-6-8-9	11-030-20	**3**	11-3-23

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 3

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEI
Project Number: 0277-056-00 Task 200
Project Name: Nisqually Medicine River Horse Farm
Project Manager: Jessica Robertson
Sampled by: Meredith Bush

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-030

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up ☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	HOLD				% Moisture
1	B-1-6-7	11/1	1019	S	2	X			(X)														X				X
2	B-1-9-10		1024																								
3	B-1-13-14		1028																								
4	B-2-6.5-7.5		0944																								
5	B-2-9-10		0947																								
6	B-2-11-R		0951			X			(X)																		X
7	B-3-3-4		1058																								
8	B-3-5.5-6.5		1102																								
9	B-3-9-10		1104					X	X																		X
10	B-3-13-14		1107																								

	Signature	Company	Date	Time
Relinquished		GEI	11/2/23	1100
Received			11/2/23	1100
Relinquished			11/2/23	1205
Received			11/2/23	1205
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
(X) Added 11/6/23. DB (STA)
● Added 11/8/23. DB (3 day TAT)

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
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Phone: (425) 883-3881 • www.onsite-env.com

Company: GEI
Project Number: 0277-056-00 Task 200
Project Name: Nisqually Horse Ranch
Project Manager: Jessica Robertson
Sampled by: Meredith Bush

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-030

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021 ☒ 8260 ☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up ☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	HOLD				% Moisture
11	B-4-2-3	11/01	1134	S	2																						
12	B-4 4.5-5.5		1136																								
13	B-4-7-8		1140																								
14	B-4-9-10		1143					X	X																		X
15	B-5-2-3		1222																								
16	B-5-5-6		1225					X	X																		X
17	B-5-11-12		1227					X	X																		↓
18	B-5-14-15		1230																								
19	B-6-5.5-6.5		1330																								
20	B-6-8-9		1332				X																				X

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		GEI	11/2/23	1100	
Received		spdx	11/2/23	1100	
Relinquished		spdx	11/2/23	1205	
Received		ORE	11/2/23	1205	
Relinquished					
Received					Data Package: Standard ☐ Level III ☐ Level IV ☐
Reviewed/Date		Reviewed/Date			Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

Page 3 of 3

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Company: GEI
Project Number: 0277-056-00 Task 200
Project Name: Nisqually Horse Ranch
Project Manager: Jessica Robertson
Sampled by: Meredith Bush

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-030

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up ☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	HOLD				% Moisture
21	B-6-10-11	11/01	1335	S	2																		X				
22	B-6-14-15		1337																								
23	B-7-1.5-2.5		1446																								
24	B-7-5.5-6.5		1449			X																					X
25	B-7-8-9		1452																								
26	B-7-11.5-12.5		1455																								
27	B-8-2-3		1409																								
28	B-8-5.5-6.5		1412					X	X																		X
29	B-8-10-11		1414																								
30	B-8-12-13	↓	1416	↓	↓			X	X														↓				X

	Signature	Company	Date	Time
Relinquished		GEI	11/2/23	1100
Received	Van		11/2/23	1100
Relinquished	Van		11/2/23	1205
Received			11/2/23	1205
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

APPENDIX C
Report Limitations and Guidelines for Use

APPENDIX C
REPORT LIMITATIONS AND GUIDELINES FOR USE[2]

This appendix provides information to help you manage your risks with respect to the use of this report.

Environmental Services Are Performed for Specific Purposes, Persons and Projects

GeoEngineers has performed this Phase II ESA on the property located at 10735 and 10747 Todtkarle Road SE (Thurston County Parcel No. 1832340000, 21832340002, and 21832340003) in Olympia, Washington in general accordance with the scope and limitations of our proposal, dated October 9, 2023. This report has been prepared for the exclusive use of Nisqually Indian Tribe, their authorized agents, and regulatory agencies. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

GeoEngineers structures our services to meet the specific needs of our clients. For example, an ESA study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and property. No one except Nisqually Indian Tribe should rely on this environmental report without first conferring with GeoEngineers. Use of this report is not recommended for any purpose or project except the one originally contemplated.

This Environmental Report is Based on a Unique Set of Project-Specific Factors

This report has been prepared for the Nisqually Indian Tribe on the property located at 10735 and 10747 Todtkarle Road SE in Olympia, Washington. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, it is important not to rely on this report if it was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

If important changes are made to the project or property after the date of this report, we recommend that GeoEngineers be given the opportunity to review our interpretations and recommendations. Based on that review, we can provide written modifications or confirmation, as appropriate.

Reliance Conditions for Third Parties

Our report was prepared for the exclusive use of the Nisqually Indian Tribe. No other party may rely on the product of our services unless we agree to such reliance in advance and in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would

[2] Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; www.asfe.org.

otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and generally accepted environmental practices in this area at the time this report was prepared.

Environmental Regulations Are Always Evolving

Some substances may be present in the vicinity of the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substances, change or if more stringent environmental standards are developed in the future.

Uncertainty May Remain Even After This Phase II ESA is Completed

Performance of a Phase II ESA is intended to reduce uncertainty regarding the potential for contamination in connection with a property, but no ESA can wholly eliminate that uncertainty. Our interpretation of subsurface conditions in this study is based on field observations and chemical analytical data from widely spaced sampling locations. It is always possible that contamination exists in areas that were not explored, sampled or analyzed.

Subsurface Conditions Can Change

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by man-made events such as construction on or adjacent to the subject property, by new releases of hazardous substances, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Please contact GeoEngineers before applying this report for its intended purpose so that GeoEngineers may evaluate whether changed conditions affect the continued applicability of the report.

Soil and Groundwater End Use

The cleanup levels referenced in this report are site- and situation-specific. The cleanup levels may not be applicable for other properties or for other on-site uses of the affected soil and/or groundwater. Note that hazardous substances may be present in some of the on-site soil and/or groundwater at detectable concentrations that are less than the referenced cleanup levels. GeoEngineers should be contacted prior to the export of soil or groundwater from the subject property or reuse of the affected soil or groundwater on-site to evaluate the potential for associated environmental liabilities. We are unable to assume responsibility for potential environmental liability arising out of the transfer of soil and/or groundwater from the subject property to another location or its reuse on-site in instances that we did not know or could not control.

Most Environmental Findings Are Professional Opinions

Our interpretations of subsurface conditions are based on field observations and chemical analytical data from widely spaced sampling locations at the subject property. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an informed opinion about subsurface conditions throughout the property. Actual subsurface conditions may differ,

sometimes significantly, from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

Do Not Redraw the Exploration Logs

Environmental scientists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in an environmental report should never be redrawn for inclusion in other design drawings. Only photographic or electronic reproduction is acceptable, but separating logs from the report can create a risk of misinterpretation.

Read These Provisions Closely

It is important to recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are less exact than other engineering and natural science disciplines. Without this understanding, there may be expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory "limitations" provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you need to know more about how these "Report Limitations and Guidelines for Use" apply to your project or property.

Biological Pollutants

GeoEngineers' Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations, recommendations, findings or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants, and no conclusions or inferences should be drawn regarding Biological Pollutants as they may relate to this project. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria and viruses, and/or any of their byproducts.

A Client that desires these specialized services is advised to obtain them from a consultant who offers services in this specialized field.

Appendix D

FFRMS Freeboard Value Approach Report

FFRMS Freeboard Value Approach Report

Report generated by the Federal Flood Standard Support Tool on Thu Jan 30 2025. For more information on FFRMS and the data, visit https://floodstandard.climate.gov.

Summary

Based on the user-defined location and non-critical designation, the proposed action is not in the coastal or riverine FFRMS floodplain. However, there are additional resilience measures you might consider. Check on the resources below to learn more.

Projects located in the FFRMS floodplain should be designed consistent with the applicable policies and directives of the agency taking or approving the action.

Proposed Action Details

Location centroid (Latitude, Longitude): Y: 46.999119 X: -122.705984

Service criticality: Non-critical Service Life: Through 2100

Consult with the applicable agency to identify any agency-specific policies, guidance, protocols, or direction on the critical action determination. The services of a professional engineer, architect, or other licensed design professional are recommended for designing critical actions or assets with long intended service life, and for other situations where risk tolerance is low because of unique characteristics of the action.

Considerations of Freeboard approach at this location

No additional considerations at this location.

Next Steps

This is the Step 1 of the 8-step decision-making process required in section 2(a) of Executive Order 11988, Floodplain Management (Determine if the proposed action within the FFRMS floodplain). Follow the remainder of the 8-step process outlined in the Implementation Guidelines (2015), page 4, including Step 5 which include minimizing harm and restoring and preserving natural and beneficial values. (Please refer to the Nature Based Solutions section). A licensed design professional should be contacted for the design or engineering of the action. If an action is in the FFRMS floodplain and its location is the only practicable alternative, then you may need the services of a professional engineer, architect, or other licensed design professional to determine how to minimize the impacts of flood and make the action resilient (e.g., elevation, flood-proofing and/or nature-based solutions), especially when dealing with critical actions.

Assistance

To contact the FEMA Regional Floodplain Management & Insurance FFRMS Point of Contact for assistance, e-mail FEMA at FEMA-FFRMS-SUPPORT-REQUEST@fema.dhs.gov.

Project Location

1:144,448

FFRMS Floodplain

Project Location

Appendix E

Air Quality Emissions Estimates

Table 1a
Alternative A - Vehicle Miles Traveled per Year

Market Areas	Trip Generation (average daily trips)[2]	Trip Distribution	Average Distance (miles)[1]	Alternative A	
				Trips/Year	VMT/Year (miles)
Thurston County	27	100%	10	9,855	98,550

[1] Trip lengths based on estimated distance to population centers.
[2] Expecting 4,000 to 5,000 guests per year by 2024. Doubled to account for one-way trips.

Table 2a
2027 Mobile Operations Criteria Pollutant and GHG Emissions

	Alternative A
vmt/yr	98,550
Criteria Pollutant Emissions (tpy)	
NOx	0.05
VOC	0.01
SO_2	0.00
CO	0.37
$PM_{2.5}$	0.00
PM_{10}	0.00
Greenhouse Gas[1]	
CO_2	46.6
CH_4	0.0
N_2O	0.0
CO_2e	47.6

[1] GHG emissions shown in metric tonnes.
Source: MOVES4

Table 3a
2027 Operational Mobile Annual Average Emission Factors

Criteria Pollutant	grams per mile
NOx	0.41
VOC	0.08
SO_2	0.002
CO	2.93
$PM_{2.5}$	0.01
PM_{10}	0.04
Greenhouse Gases	
CO_2	464.32
CH_4	0.03
N_2O	0.03
CO_2e	473.17
Source: MOVES4	

Table 3b
2027 Operational Start Annual Average Emission Factors

Criteria Pollutant	grams per start
NOx	0.37
VOC	0.38
SO_2	0.000
CO	4.35
$PM_{2.5}$	0.01
PM_{10}	0.01
Greenhouse Gases	
CO_2	84.07
CH_4	0.06
N_2O	0.03
CO_2e	95.02
Source: MOVES4	

Table 4
Fugitive Dust Emissions from Construction

	Alternative A
Construction Area (acres)	7.00
Duration of Construction (months)	6
On-site cut/fill (1,000 cubic yards) [1]	40
PM_{10} Emisson Factor (tons PM_{10}/acre-month)	0.011
On-site cut/fill PM10 Emission Factor (tons PM10/1,000 cubic yards)	0.059
Total PM10 Emissions (tons)	**2.82**
Total $PM_{2.5}$ Emissions (tons)	**1.41**

Source: Emission factors from WRAP's Fugitive Dust Handbook (Level 2).

PM2.5 conservatively estimated to be half of PM10 emissions.

[1] Light grading assumed up 2 feet cut/fill * sq-ft of arena

Table 5

Alternative A - Construction Emissions

Construction Equipment[1]	Horsepower	Load Factor	Hours in Use[2] (hours/day)	Emission Factors (g/bhp/hr)[6]						Emission (tons/year)					
				CO	VOC	NOx	SO_2	PM_{10}	$PM_{2.5}$	CO	VOC	NOx	SO_2	PM_{10}	$PM_{2.5}$
Site Preparation															
3 Rubber Tired Dozers	367	0.4	8	2.73	0.353	3.22	0.005	0.142	0.131	0.11	0.01	0.12	0.00	0.01	0.01
4 Tractors/Loaders/Backhoes	84	0.37	8	3.48	0.184	1.88	0.005	0.063	0.058	0.04	0.00	0.02	0.00	0.00	0.00
Employee Trips (miles)[3]		1,800		2.85	0.07	0.18	0.00	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Site Grading															
1 Grader	148	0.41	8	3.40	0.31	2.53	0.005	0.14	0.13	0.03	0.00	0.02	0.00	0.00	0.00
1 Excavator	36	0.38	8	4.22	0.39	3.41	0.005	0.10	0.09	0.01	0.00	0.01	0.00	0.00	0.00
3 Tractor/Loaders/Backhoes	84	0.37	8	3.48	0.18	1.88	0.005	0.06	0.06	0.04	0.00	0.02	0.00	0.00	0.00
1 Rubber Tired Dozer	367	0.4	8	2.73	0.35	3.22	0.005	0.14	0.13	0.05	0.01	0.06	0.00	0.00	0.00
Employee Trips (miles)[3]		2,250		2.85	0.07	0.18	0.00	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Fugitive Dust														2.82	1.41
Construction															
3 Forklifts	82	0.20	8	3.58	0.25	2.34	0.005	0.11	0.10	0.13	0.01	0.09	0.00	0.00	0.00
1 Generator Set	14	0.74	8	2.86	0.54	4.32	0.008	0.17	0.16	0.02	0.00	0.03	0.00	0.00	0.00
1 Crane	367	0.29	7	1.64	0.20	1.84	0.005	0.08	0.07	0.11	0.01	0.13	0.00	0.01	0.00
1 Welder	46	0.45	8	4.49	0.47	3.57	0.007	0.10	0.09	0.07	0.01	0.06	0.00	0.00	0.00
3 Tractor/Loaders/Backhoes	84	0.37	7	3.48	0.18	1.88	0.005	0.06	0.06	0.21	0.01	0.11	0.00	0.00	0.00
Employee Trips (miles)[3]		6,800		2.85	0.07	0.18	0.00	0.03	0.01	0.02	0.00	0.00	0.00	0.00	0.00
Vendor Trips (miles)[5]		2,550		2.86	0.16	0.92	0.00	0.07	0.03	0.01	0.00	0.00	0.00	0.00	0.00
Paving															
2 Pavers	81	0.42	8	3.43	0.24	2.53	0.005	0.13	0.12	0.02	0.00	0.02	0.00	0.00	0.00
2 Paving Equipment	89	0.36	8	3.40	0.19	2.07	0.005	0.08	0.07	0.02	0.00	0.01	0.00	0.00	0.00
2 Rollers	36	0.38	8	4.09	0.54	3.61	0.005	0.15	0.14	0.01	0.00	0.02	0.00	0.00	0.00
Employee Trips (miles)[3]		1,500		2.85	0.07	0.18	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating															
1 Air Compressor	37	0.48	6	4.82	0.512	3.65	0.007	0.099	0.091	0.01	0.00	0.00	0.00	0.00	0.00
Employee Trips (miles)[3]		200		2.85	0.07	0.18	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Coating[7]		0.0116									0.24				
Total Project Construction Emissions										**0.93**	**0.32**	**0.73**	**0.00**	**2.85**	**1.44**

Sources:

[1] Construction equipment list, quantity, HP, load factor from CalEEMod.

[2] Hours per normal work day from CalEEMod.

[3] Based on 10 mile trip length. Worker trip numbers from CalEEMod. On-Road Emission Factors from MOVES4 for Passenger Truck (31). Emission factors in grams/mile. (ex. # worker trips *construction phase length * 10 miles)

[5] Based on 10 mile trip length. Vendor trip numbers from CalEEMod. On Road Emission Factors from MOVES4 for Single-Unit Short Haul Truck (52). Emission factors in grams/mile.

[6] Off-Road Emission factors provided from California Air Resources Board OFFROAD2011 emission factors, as sourced from CalEEMod Default Data Tables; On-Road Emission Factors from MOVES4

[7] Paved area from CalEEMod.

Table 6a

Alternative A - Construction GHG Emissions

Construction Equipment[1]	Horsepower	Load Factor	Hours in Use[2] (hours/day)	Emission Factors (g/bhp/hr)[6]		Emission Factors (g/mile)	Emission (metric tons)
				CO2	CH4	CO2e	CO2e
Site Preparation							
3 Rubber Tired Dozers	367	0.4	8	533.00	0.02		18.80
4 Tractors/Loaders/Backhoes	84	0.37	8	530.00	0.02		5.28
Employee Trips (total miles) [3]	1,800			389.25	0.02	363.14	1
Site Grading							
1 Grader	148	0.41	8	531.00	0.02		3.87
1 Excavator	36	0.38	8	587.00	0.02		0.96
3 Tractor/Loaders/Backhoes	84	0.37	8	530.00	0.02		5.94
1 Rubber Tired Dozer	367	0.4	8	533.00	0.02		9.40
Employee Trips (total miles)[3]	2,250			389.25	0.02	363.14	1
Construction							
3 Forklifts	82	0.2	8	527.00	0.02		17.65
1 Generator Set	14	0.74	8	568.00	0.02		4.01
1 Crane	367	0.29	7	527.00	0.02		33.41
1 Welder	46	0.45	8	568.00	0.02		8.00
3 Tractor/Loaders/Backhoes	84	0.37	7	530.00	0.02		29.43
Employee Trips (total miles) [3]	6,800			389.25	0.02	363.14	2
Vendor Trips (total miles) [5]	2,550			429.87	0.02	893.86	2
Paving							
2 Pavers	81	0.42	8	526.00	0.02		2.87
2 Paving Equipment	89	0.36	8	528.00	0.02		2.71
2 Rollers	36	0.38	8	587.00	0.02		1.29
Employee Trips (total miles)[4]	1,500			389.25	0.02	363.14	1
Architectural Coating							
1 Air Compressor	37	0.48	6	567.00	0.02		0.60
Employee Trips (total miles) [3]	200			389.25	0.02	363.14	0
Construction GHG Emissions							**151**

Sources:

[1] Construction equipment list, quantity, HP, load factor from CalEEMod.

[2] Hours per normal work day.

[3] Based on 10 mile trip length. Worker trip numbers from CalEEMod. On-Road Emission Factors from MOVES4 for Passenger Truck (31). Emission factors in grams/mile. (ex. # worker trips * construction phase l

[5] Based on 10 mile trip length. Vendor trip numbers from CalEEMod. On Road Emission Factors from MOVES4 for Single-Unit Short Haul Truck (52). Emission factors in grams/mile.

[6] Off-Road Emission factors provided from California Air Resources Board OFFROAD2011 emission factors, as sourced from CalEEMod Default Data Tables; On-Road Emission Factors from MOVES4

Table 7a
Alternative A

Pollutant/GHG	MMscf/year	Emission Factors (lb/MMscf)	Conversion factor (lb/tons)	Emissions (tons)
VOC	0.80	5.5	0.0005	0.00
NOx	0.80	0.64	0.0005	0.00
CO	0.80	84	0.0005	0.03
SO_2	0.80	0.6	0.0005	0.00
PM_{10}	0.80	7.6	0.0005	0.00
$PM_{2.5}$	0.80	7.6	0.0005	0.00
Greenhouse Gas			**lb/MT**	**MT**
CO_2	0.80	120,000	0.00045	43

Stationary Sources include boilers, stoves, heating units, and other equipment.

Source: AP 42, Tables 1.4-1 and 1.4-2 (EPA, 1998), USEIA, 2022.

Table 8a Indirect GHG Emissions

Alternative A

Sources	Emission Factors			Use	Emissions
	CO_2	CH_4	N_2O		(MT of CO_2e)
	lbs of/MWh			MWh	
Electricity	995.8	0.107	0.015	242	110.04
	MT of CO_{2e}/MT of Solid Waste			MT of Solid Waste	
Solid Waste [1]	0.503			0.60	0.30
Water/Wastewater [1]	MT of CO2e/Million Gallons			Million Gallons	
	6.428			8.62	55.38
Total					**166**

Sources: Electricity based on U.S. Energy Information Administration, 2018 Commercial Buildings Energy
Solid Waste and Water/Wastewater from CalEEMod for Arena land use.

Social Cost of GHG Calculations

GHG/Cost per metric ton		Alternative A	
		Tons	Cost
Lifetime (3% Discount)			
Construction (2025)			
CO_2	$56	151	$8,456
Operation (2026)			
CO_2	$57	257	$14,626

Lifetime (2.5% Discount)			
Construction (2025)	$83	151	$12,533
Operation (2026)	$84	257	$21,554

Lifetime (5% Discount)			
Construction (2025)	$17	151	$2,567
Operation (2026)	$17	257	$4,362

Lifetime (95th Percentile, 3% Discount)			
Construction (2025)	$169	151	$25,519
Operation (2026)	$173	257	$44,392

Costs from IWG, 2021

Appendix F

Fire Services Agreement and Amendment

AGREEMENT BETWEEN
THE NISQUALLY INDIAN TRIBE OF THE NISQUALLY RESERVATION
AND
LACEY FIRE DISTRICT #3
FOR FIRE PROTECTION AND RELATED EMERGENCY SERVICES

THIS AGREEMENT is made and entered into this 19th day of January, 2017, by and between the Nisqually Indian Tribe of the Nisqually Reservation, a sovereign nation hereinafter referred to as "TRIBE," and Lacey Fire DISTRICT #3, hereinafter referred to as "DISTRICT."

WHEREAS, the TRIBE has land located within the DISTRICT's service area; and

WHEREAS, the DISTRICT has the resources to provide fire and emergency medical protection to residents, guests, visitors, employees, and inmates and the buildings within the TRIBE's lands located within the DISTRICT service area; and

WHEREAS, the TRIBE and the DISTRICT believe that it is in the best interests of the public to enter into an agreement for their mutual benefit; and

WHEREAS, it is the purpose of this Agreement to establish fire protection and emergency medical services wherein the DISTRICT will provide fire protection, rescue, and emergency medical services (hereinafter referred to as "Services") to the TRIBE; and

WHEREAS, the DISTRICT is a fire protection district organized and operating pursuant to Title 52 RCW with the responsibility to provide fire protection and emergency medical services within its geographical boundaries; and

WHEREAS, the DISTRICT funds its operations primarily through property tax levies. The TRIBE is a federally-recognized tribal nation that owns tax-exempt properties located in or adjacent to the DISTRICT; and

WHEREAS, the TRIBE does not pay property taxes to the DISTRICT and the purpose of this Agreement is to provide for the costs and reimbursement of services by the DISTRICT.

NOW THEREFORE, for and in consideration of the mutual promises contained herein, the parties hereto hereby agree:

I. SERVICES

This agreement covers those portions of the TRIBE'S reservation and trust lands within the DISTRICT'S service area that includes the Nisqually Corrections Center and facilities, the Nisqually Youth Center, the private residences and adjoining tribal property with the exception of the Red Wind Casino and facilities. A separate agreement of the parties or further amendment to

this agreement may be established to provide DISTRICT services to the Red Wind Casino and facilities.
The DISTRICT will provide fire and emergency medical services to the businesses, buildings, guests, visitors, employees, inmates and the residents of the Nisqually Reservation and all trust lands located within the DISTRICT service area.

II. PERIOD OF PERFORMANCE

Subject to its other provisions, the period of performance of this Agreement shall commence on January 1st, 2017 and shall remain in full force and effect unless and until one of the following shall occur:

a) the parties mutually agree in writing to terminate this Agreement on a date certain; or
b) either party gives written notice of termination to the other party at least six (6) months prior to the effective date of termination.

III. PAYMENT

Compensation for the services provided according to this Agreement have been established and agreed to be based on a fee structure that will be assessed in the amount of one thousand twenty five dollars and no cents ($1,025.00) per incident and call. The fee may be reviewed by both parties and may be adjusted every two years by mutual agreement from the effective date of this Agreement. The TRIBE will be invoiced by the DISTRICT on a quarterly basis.

The TRIBE shall make payments upon receipt of an invoice submitted to the TRIBE and the TRIBE'S current CFO, David Montgomery, on a quarterly basis. Payment shall be considered timely if made by the TRIBE within thirty (30) days after receipt of properly completed invoices. Payments shall be sent to the address designated by the DISTRICT.

TRIBE requested standby or special event services by the DISTRICT will be undertaken by separate agreement and fee.

IV. REVIEW OF AGREEMENT

The TRIBE and DISTRICT may meet annually to review terms and conditions of carrying forward subsequent agreements related to fire and emergency medical protection to residents, guests, visitors, employees, inmates and the buildings within the TRIBE's lands located within the DISTRICT service area.

V. DISPUTES

In the event that a dispute arises under this Agreement, it shall be determined by a Dispute Board in the following manner: Each party to this Agreement shall appoint one member to the Dispute Board. The members so appointed shall jointly appoint an additional member to the Dispute Board. The Dispute Board shall review the facts, agreement terms and applicable statutes and rules and

make a determination of the dispute. The determination of the Dispute Board shall be final and binding on the parties thereto.

VI. ASSIGNMENT

The work to be provided under this Agreement, and any claim arising thereunder, is not assignable or delegable by either party in whole or in part, without the express prior written consent of the other party, which consent shall not be unreasonably withheld.

VII. WAIVER

A failure by either party to exercise its rights under this Agreement shall not preclude that party from subsequent exercise of such rights and shall not constitute a waiver of any other rights under this Agreement unless stated to be such in a writing signed by an authorized representative of the party and attached to the original Agreement.

VIII. SEVERABILITY

If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, if such remainder conforms to the requirements of applicable law and the fundamental purpose of this Agreement, and to this end the provisions of this Agreement are declared to be severable.

IX. AGREEMENT MANAGEMENT

The manager for each of the parties shall be responsible for and shall be the contact person for all communications and billings regarding the performance of this Agreement.

The contact for the TRIBE will be:

David Montgomery
Chief Financial Officer
Nisqually Tribe
4820 She-Nah-Num Drive S.E.
Olympia, WA 98513
(360) 456-5221

The Contact for the DISTRICT is:

Steve Brooks
Fire Chief
Lacey Fire District #3
1231 Franz Street SE
Lacey, WA 98503
(360) 491-2410

X. NON-EXCLUSIVE AGREEMENT

The parties to this Agreement shall not be precluded from entering into similar agreement with other municipal corporations.

XI. ALL WRITINGS CONTAINED HEREIN

This Agreement contains all the terms and conditions agreed upon by the parties. No other understandings, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind any of the parties hereto.

XII. SOVEREIGN IMMUNITY

Nothing in this agreement shall be construed as a waiver of the TRIBE's sovereign immunity.

IN WITNESS WHEREOF, the parties have executed this Agreement.

NISQUALLY INDIAN TRIBE OF THE NISQUALLY RESERVATION

Farron McCloud
Chairman

LACEY FIRE DISTRICT #3

Eugene W. Dobry, Jr.
Commissioner

Frank Kirkbride
Commissioner

Tom Nelson
Commissioner

Sylvia Roberts
Commissioner

Judy Wilson
Commissioner

Nisqually Indian Tribe

Tribal Council Resolution No 57 -2019

A RESOLUTION TO AMEND THE MEMORANDUM OF AGREEMENT

WITH LACEY FIRE DISTRICT #3

WHEREAS, the Nisqually Indian Tribe is the successor descendent entity of the Nisqually Nation signatory to the Treaty of Medicine Creek of 1854 (10 Stat. 1132), and unto this day has retained and maintained its Tribal identity, its governing body, and its sovereign powers;

WHEREAS, the Nisqually Indian Tribe is a federally recognized American Indian Tribe organized under its governing Constitution and Bylaws approved by the U.S. Secretary of the Interior on September 9, 1946 and amended on October 28, 1994, pursuant to Section 16 of the Indian Reorganization Act, 25 U .S.C. 476;

WHEREAS, the Nisqually Tribal General Council is the duly constituted governing body of the Nisqually Tribe, and the Tribal Council is the duly elected representative body of tbe General Council by the authority of the Tribe's Constitution and Bylaws, as amended; and

WHEREAS, the Nisqually Tribe and the Lacey Fire District #3 entered into a Memorandum of Agreement, dated as of January 19th, 2017, in connection with the provision of fire and emergency medical protection to residents, guests, visitors, employees, and inmates and the buildings within the TRIBE'S lands located within the DISTRICT service area; and

WHEREAS, the Nisqually Tribal Council desires to extend the agreement to cover the Red Wind Casino and facilities.

NOW, THEREFORE BE IT RESOLVED, that the Nisqually Tribal Council approves and authorizes the attached first amendment to the memorandum of agreement; and

BE IT FURTHER RESOLVED that the Chairman is authorized to sign the First Amendment to Memorandum of Agreement adding the Red Wind Casino to the Memorandum of Agreement with the Lacey Fire District #3.

Certification

I certify that the above Resolution was adopted at a regular meeting of the Nisqually Tribal Council held on the 24 day of July, 2019 at the Nisqually Tribal Center, at which time a quorum was present and voting 3 FOR 0 AGAINST 0 ABSTENTIONS.
ATTEST:

E. K. Choke
E. K. Choke, Chairman
Nisqually Indian Tribe

Jackie Whittington
Jackie Whittington, Secretary
Nisqually Indian Tribe

FIRST AMENDMENT TO MEMORANDUM OF AGREEMENT

This FIRST AMENDMENT TO MEMORANDUM OF AGREEMENT (the "Amendment") is entered into as of July 23, 2019 (the "Effective Date"), by and among the Nisqually Indian Tribe of the Nisqually Reservation, a sovereign nation hereinafter referred to as "TRIBE," and Lacey Fire DISTRICT #3, hereinafter referred to as "DISTRICT."

WHEREAS, TRIBE and DISTRICT entered into that certain Memorandum of Agreement, dated as of January 19th, 2017 (as hereby amended, and as may be further amended, restated, supplemented or otherwise modified from time to time, the "Agreement"), in connection with provide fire and emergency medical protection to residents, guests, visitors, employees, and inmates and the buildings within the TRIBE'S lands located within the DISTRICT service area; and

WHEREAS, the parties desire to extend the agreement to cover the Red Wind Casino and facilities.

NOW THEREFORE, in consideration of the representations, warranties, and mutual agreements set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, TRIBE and DISTRICT hereby agree as follows:

AGREEMENT

1. Definitions. Capitalized terms used and not defined herein shall have the meanings given to them in the Agreement.

2. Amendment to Agreement. The Agreement is hereby amended as follows:

   a. Article I. Services is hereby amended by (i) deleting "with the exception of the Red Wind Casino and facilities. A separate agreement of the parties or further amendment to this agreement may be established to provide DISTRICT services to the Red Wind Casino and facilities." And replacing it with the following: "including the Red Wind Casino and facilities, but excluding Washington State right of ways, including but not limited to State Route 510."

   b. Article III and IX is hereby amended to replace the David Montgomery, Chief Financial Officer for Nisqually Tribe with Alvin E. Aganon, Controller/Acting CFO, Nisqually Tribe.

3. Effectiveness. This Amendment shall be effective as of the date first written above.

IN WITNESS WHEREOF, the parties have executed this Agreement, NISQUALLY INDIAN TRIBE OF THE NISQUALLY RESERVATION

Ken Choke
Chairman

LACEY FIRE DISTRICT #3

Commissioner

Commissioner

Commissioner

Commissioner

Commissioner

LACEY FIRE DISTRICT #3

Commissioner

Commissioner

Secretary