"Solutions to water quality, quantity, permitting & planning issues"

February 9th, 2024

William Haberman
Managing Member
Valiant Idaho II, LLC
151 Clubhouse Way
Sandpoint, ID 83864

SUBJECT: Hydrogeological Interpretation – Trestle Creek Drainage, Idaho
North Trestle Creek Man-made Island Removal Project

Dear Mr. Haberman:

This letter report documents Water & Natural Resource Group Inc. (WNR Group) preliminary interpretation of the hydrogeologic conditions in the lower Trestle Creek drainage to support Valiant Idaho II, LLC (Valiant), in consultation with the Idaho Club, proposed community dock project located north of the outfall of Trestle Creek into Lake Pend Oreille. As part of the community dock project, removal of the previous constructed "island" is proposed to restore the shoreline to its ancestral natural lakebed levels. Specifically, the regulatory agencies have requested an interpretation of the hydrogeologic setting at the site, and the hydraulic continuity to surface water by a licensed professional in order to understand the potential effects, if any, on the surface and groundwater if the proposed project is completed. This letter report includes a summary of readily available information reviewed for the interpretation of the groundwater aquifer at the site and its connection with the surface water.

QUALIFICATIONS OF PERSON CONDUCTING REVIEW

Gene St.Godard is a licensed Geologist in Idaho (PG #862) and a Professional Geologist/Hydrogeologist in Washington (L.Hg. #129). Mr. St.Godard with the WNR Group is also licensed geologist in Oregon (R.G. #1630) and California (R.G. #6247), certified hydrogeologist in California (C.Hg. #593), a Certified Water Right Examiner (CWRE) in Idaho (#134) and CWRE in Washington State (#004). He has a bachelor's degree in Geology from Mansfield University of Pennsylvania and a Master of Science degree in Geology from Eastern Washington University. Mr. St.Godard has over 35 years of professional experience in the northwestern United States conducting geologic, hydrogeologic and surface-groundwater continuity projects. The geologic and hydrogeologic conditions of the site are his professional interpretation and opinion on the groundwater conditions at the Site, at the time of this assessment, based on readily available data.

In May 2004, Mr. St.Godard formed the WNR Group to provide water resource services to clients throughout northern Idaho and eastern Washington and Oregon. The WNR Group has extensive experience in conducting hydrogeologic and hydrologic studies to demonstrate assured sustainable water supplies in accordance with state and federal guidelines. These include basin wide water hydrogeological evaluations and water balances, regional and localized aquifer characteristic studies, conducting hydraulic continuity analyses, and impairment analyses.

INTRODUCTION

The WNR Group was retained to perform a preliminary hydrogeologic review to support a proposed community dock project. The project site is located approximately three (3) miles northwest of the town of Hope, Idaho, near the mouth of Trestle Creek west of Highway 200 at the shoreline of Pend Oreille Lake (Figure 1). Specifically, the site is located within Gov't Lot 5 in the SE¼SE¼ Section 17 and the SW¼SW¼ Section 16, T57N, R01E (Figure 2).

The preliminary hydrogeologic review was conducted in order to provide a professional opinion as to the hydrogeologic setting of groundwater at the existing site of the proposed community dock. This interpretation was based on readily available information, primarily published government documents, driller well logs, geologic maps and data, and known hydrogeologic reports at and in the vicinity of the site. No intrusive field data collection was conducted, including the completion of drilling activities to determine geology and groundwater depth.

The WNR Group reviewed readily available hydrogeologic reports and data in the vicinity of the subject site in an attempt to develop an understanding of the hydrogeologic setting at the subject Site. The WNR Group attempted to identify uses of existing data at and in the immediate vicinity of the Site as recorded in readily available government documents. These sources and findings are summarized in the sections that follow.

Note: *It needs to be noted that of the difference in data elevations presented in this report. Government elevation data presented or reproduced in this document is reported as NGVD29 datum in their databases. Whereas, elevation data collected and presented under recent studies is in the NAVD88 datum. NGVD29 is the abbreviation for the National Geodetic Vertical Datum of 1929, the predecessor to NAVD88. Due to the advancement of technology and surveying methods, the increased amount of available data and the level of accuracy of that data led to the new datum. The original datum used 26 tide stations throughout the United States and Canada and recorded changes in tide levels to establish a starting line of 0 ft. elevation to measure and compare heights of buildings, floodplains, mountains, etc. NAVD88 is the abbreviation for the North American Vertical Datum of 1988. NAVD 88 is one of five current National Geodetic Datums, which are coordinate systems that act as standard reference lines to measure points on the earth's surface in the region that they apply. NAVD88 is more accurate while collecting field data in the current time. However, government databases which extend well before 1988, typically still present the data in NGVD29. Where used in this report, the difference at the site is noted and compared. For the area of the site, the USGS uses a correction factor of +3.87 feet (NGVD29 to NAVD88) at their lake level gaging station 12392500 near Hope, Idaho. When interpreting data in this report, the reader should be aware to which datum is being referenced for the measurement.*

The proposed action at the site is to construct a new community dock facility. In order to accomplish the project, the proponent needs to excavate soil materials that were placed as an "island" during the initial construction of the boat docks currently at the site. During the initial development phase, the current inlet and embayment was excavated out in order to create more shoreline to place boat docks which paralleled the newly created shoreline. Material excavated out at this time was placed at the site as fill, creating the current configuration of the "island." The proposed project will be to remove this previously placed fill material that created the island and now backfill in the previously excavated sloughs, to allow docks to be placed within the bay. Figure 3 presents the engineering drawings of the current configuration of the sloughs, Figure 4 depicts the proposed actions needed for completion of the project, and Figure 5 an engineering drawing of the proposed completed project. Additional information on the proposed actions can be found within the J.A. Sewell and Associates engineering drawing exhibits submitted for support the US Army Corps of Engineers Joint Permit (December 2023). The proposed action would also realign the North Fork Trestle Creek (NFTC) to return its flow back to Trestle Creek. This action is discussed later in the report.

PHYSIOGRAPHIC SETTING

The project site is in the Lake Pend Oreille subbasin, which is bordered to the west by the Selkirk Mountains, to the north by the Cabinet Mountains, and by the Bitterroot Mountains to the east. The basin was substantially modified by Pleistocene glaciation, and was the site of the ice dam that created the largest catastrophic floods documented in the earth's history (Rain Shadow Research, Inc., 2008). Glacial advances resulted in highly dissected watersheds, depositing glacial sediments (till and outwash) throughout the Lake Pend Oreille tributaries.

Several times during the Pleistocene "Ice Age," vast glaciers originating in Canada advanced into the northern part of the Columbia Plateau, northern Idaho, and Montana. Glacial meltwater streams from northern Washington, along with gigantic floods caused by sudden breakage of ice-dammed lakes in the Selkirk and Rocky Mountains to the northeast of the Columbia Plateau (Glacial Lake Missoula) cut deep channels (coulees) across the Columbia Plateau. Lake Pend Oreille was formed by the Pleistocene glaciation. Lake Pend Oreille is approximately 43 miles long, 1,152 feet deep, and has over 111 miles of shoreline. The lake covers approximately 85,960 acres and is dammed on the Pend Oreille River outlet by Albeni Falls dam just east of Oldtown, Idaho. The site lies along the northeastern shore of Lake Pend Oreille, approximately 3 miles west of Hope, Idaho at the mouth of Trestle Creek.

HYDROGEOLOGIC FRAMEWORK

This section of the report summarizes the geologic and hydrogeologic framework at and in the immediate vicinity of the site. The WNR Group reviewed available data to develop an understanding and interpretation of the lithologic, hydrologic, and hydrogeologic characteristics which compose the groundwater system at the site, and the hydraulic connection to surface water of NFTC and Lake Pend Oreille. Understanding these characteristics is important in developing a conceptual model of hydrogeologic setting at the present time, and inferring conditions after the project is completed.

Surface Topography – WNR Group reviewed available United States Geological Survey (USGS) topographic quadrangle maps for the Site and vicinity to determine the physical setting of the Site. The Site is located within the southwestern area of the Trout Peak, Idaho 7-1/2-minute quadrangle map dated 1996. The Site is located at the mouth of Trestle Creek (Figure 6). The general slope of the Trestle Creek area is to the west-southwest. Trestle Creek sits within a deeply incised tributary valley that has steep bedrock slopes (Figure 6). The valley floor is filled in with glacial and alluvial sediments, with the lower mile of the drainage having a slope of approximately 0.026 ft/ft (approximately 140 ft drop per mile). Trestle Creek drainage is approximately 8-miles long with the headwaters to the northeast on the southeastern slope of Trestle Ridge (USGS(a)).

Geologic Setting - Maps and Reports

The WNR Group reviewed the Idaho Geological Survey geologic map for Idaho interactive map site (2023), the USGS (Miller & others, 1999) Digital Geologic Map of the Sandpoint 1- x 2-Degree Quadrangle, and the Geologic Map of the Trout Peak Quadrangle (Reed and others, 2006). The geologic maps revealed that the Trestle Creek drainage is primarily filled with Quaternary Age glacial till deposits (Qgt) as shown on the regional geologic map (Figure 7). The lower half mile of the drainage and at the subject site is underlain by Quaternary Age unconsolidated alluvial fan deposits (Qaf) as shown on the Trout Peak geologic map (Figure 8). Groundwater is inferred to flow to the west-southwest in the area of the site, mimicking the valley floor.

Regional Geology – This section provides a generalized conceptual review of the geology in the area of the Valiant Idaho II, LLC area. The generalized regional geology of the area is best summarized by Reed and others (2006) as:

"The oldest and most abundant rocks in the Trout Peak quadrangle are low metamorphic grade metasedimentary rocks of the Prichard Formation of the Proterozoic Belt-Purcell Supergroup. These rocks host penecontemporaneous mafic sills. A pluton of Cretaceous age is also present within the Belt Supergroup. Tertiary intrusions occur in both as dikes. The quadrangle was glaciated by the Purcell Trench Lobe of the Cordilleran ice sheet which dammed the Clark Fork drainage south and east of the quadrangle and formed glacial Lake Missoula. Ice filled the Trout Creek basin with ground moraine and crossed divides into the Trestle Creek drainage. Small alpine valley glaciers occupies high cirques in the upper Trestle Creek drainage after the Purcell Lobe retreated about 12,000 years ago."

The geologic maps revealed that the area of Trestle Creek is underlain by Quaternary Age glacial till (Qgt) and alluvial fan deposits (Qaf). Areas along the shoreline are mapped as Holocene-Pleistocene alluvium and deltaic deposits (Qad) which are representative interbedded alluvium at the mouth of the Pack River and its delta in Pend Oreille Lake deposited prior to the construction of Albeni Falls Dam. The bedrock walls of the Trestle Creek valley consist various Precambrian metamorphic Belt rocks of the Prichard Formation (Ypab, Ypm, Ypd, Ypc) with areas intruded with Middle Proterozoic mafic intrusive rocks (Ymi). Figure 9 presents a regional cross section from the Reed and others (2006) geologic map. As shown on the cross-section Trestle creek is filled in with a thin layer of glacial till overlying the easterly dipping Precambrian Prichard bedrock.

Site Soil and Geologic Conditions – Visual inspection of soils determined that the shallow soils at the Site consist of brown silty sand with varying amounts of clay and gravel, typical of glacio-fluvial and alluvial fan deposits found in area. These sediments appear to be deposited as valley fill during that last period of glaciation. A well was installed at the site in March 2022 and the well log is presented in Figure 10. This well (D0090671) encountered a mixture of clay, silt and gravel (interpreted to be the alluvial fan deposits) to a depth of 20-feet, where wet clay and gravel was encountered from 20 to 40-feet (inferred to be glacial till), overlying a large gravel and coarse sand deposits to the full depths explored of 80 feet (inferred to be ancestral alluvial or flood deposits). Groundwater was first encountered at a depth of 50 feet, with the static water level rising to 15 feet below grade after the well was installed. This is indicative of a saturated aquifer that is under confined to semi-confined conditions.

A second older well is also located on the site, approximately 150 feet northwest of the new well. No well log or construction details were found for this well. Table 1 presents the GPS measurements collected on the two wells located at the project site.

Table 1: Information on wells located at the project site

Source Name	Well Tag	Township	Range	Section	QQ Q	Latitude	Longitude
New Well	D0090671	57N	01E	16	SWSW	48.28325	-116.35153
Old Well	No tag	57N	01E	16	SWSW	48.28360	-116.35190

Groundwater Conditions – Groundwater in the Trestle Creek drainage consists of two aquifer systems. These comprise a shallow unconfined to semi-confined unconsolidated sediment aquifer that is bounded on all sides by the bedrock. Yields from these saturated silt, sand and gravel sediments can be 10's to 100's of gallons per minute (gpm), and are highly dependent upon the silt and clay content which can decrease the permeability of the soil. Water recharging these aquifers would primarily be from precipitation, snow pack, and bedrock fracture springs in the headwaters of the drainage. Water availability in the shallow unconsolidated aquifer may vary dependent upon weather and precipitation patterns. The nature and extent of the shallow unconsolidated valley fill aquifers is highly variable, with some areas containing confined to semi-confined aquifer conditions due to overlying lacustrine silt and clay sediments or clay rich till deposits. Recharge to these aquifers is primarily in the form of precipitation infiltration, surface water infiltration, and recharge from deeper bedrock aquifers.

The second groundwater system is within the fractures within the Precambrian argillite and siltites bedrock. The bedrock fractures can vary in size and yield. Yields from these bedrock fractures are typically low, less than 10 gpm. Groundwater yields within the granite bedrock can vary dependent upon the thickness of the fractures, numbers of fractures screened through, precipitates in the fractures, well screen, and dependent on well construction (well efficiency). Water in the bedrock fractures are typically under some hydraulic head and may have an upward migration that recharge the valley fill aquifers, and/or emanate at the ground surface as springs.

IDWR Water Well Logs - An Internet search of the Idaho Department of Water Resources water well database was conducted. A GIS search criterion of ½-mile radius from the property was entered, as shown in Figure 11 and 12. Thirty-one (31) groundwater wells were identified within the ½-mile search radius of the site within the IDWR database. Two wells were located on the valley walls and founded within the fractured bedrock. The remaining 29 well logs were within the unconsolidated aquifer (one well within the database was the new well recently installed at the site).

The well logs reviewed for this analysis are presented in Table 2. The well logs were reviewed for geology and groundwater conditions. These wells generally intercepted two hydrogeologic systems: 1) a shallow unconsolidated unconfined aquifer system located within the valley fill sediments in the incised valley of Trestle Creek, and 2) a fractured basement bedrock aquifer which is located within the valley walls and the bedrock beneath the unconsolidated aquifer. This hydrogeologic unit is the basement rock which is present at an elevation above that of the surrounding regional unconsolidated aquifer. Well logs reviewed for this analysis are attached to this report.

The sand & gravel valley aquifer system is the main water supply directly associated with this project site. Groundwater yields within the sand and gravel aquifer can vary dependent upon amount of silt and clay in the matrix, well screen length, and dependent on well construction (well efficiency). Generally, in the area northwest of the site, it appears that the sand and gravel with some cobble/boulder aquifer has sustained yields ranging from 15 to 100+ gpm, well above the required needs of a domestic well. Review of well logs in the immediate area of the site indicates that the groundwater directly below the site is hosted within the Rathdrum Prairie aquifer system.

One well (D0090671) identified in the search is located in the eastern portion of the site. This well was completed to a depth of 80 feet below grade. The well log encountered a mixture of clay, silt and gravel to a depth of 20-feet, where wet clay and gravel was encountered from 20 to 40-feet overlying a large gravel and coarse sand deposits to the full depths explored of 80. Groundwater was first encountered at a depth of 50 feet, with the static water level rising to 15 feet below grade after the well was installed. This is indicative of a saturated aquifer that is under confined to semi-confined conditions.

Groundwater in the sand and gravel aquifer in the area of the site is recorded at depths of approximately 10 to 30 feet below grade, dependent upon topographical elevation of the well head. Data reviewed is representative that the Trestle Creek valley fill aquifer is bounded by bedrock in the drainage. Groundwater depths in the wells are generally shallow throughout the drainage and appear to be within 10 to 20 feet of the ground level. The groundwater flows down the drainage in a southwesterly direction towards the project site, where it discharges to the hydrologic system of Lake Pend Oreille.

Table 2: Summary of Well Log Information															
Well ID	Permit ID	Metal Tag Number	Owner	Township	Range	QQ	Qtr	Sect.	Production (gpm)	Static Water (FT)	Casing Depth (FT)	Total Depth (FT)	Construction Date	Casing Diam (in.)	Aquifer Type
270784	756704		HARVEY KOHWER	57N	01E	NE	SW	16	15	20	26	26	4/9/1980	6	Gravel
414166	843991	D0051273	PEND OREILLE BONNER DVLP LLC	57N	01E	NE	SW	16	0	18	7	39	12/6/2006	6	Sand & Gravel
414167	843992	D0051274	PEND OREILLE BONNER DVLP LLC	57N	01E	NE	SW	16	0	17	9	39	12/10/2006	6	Sand & Gravel
414168	843993	D0051275	PEND OREILLE BONNER DVLP LLC	57N	01E	NE	SW	16	0	14	10	39	12/12/2006	6	Sand & Gravel
272314	755106		FRED BURNSIDE	57N	01E	NW	SW	16	5	18	32	34	12/9/1969	6	Sand & Gravel
414615	844447	D0046379	BILL TRUBY	57N	01E	SE	SW	16	30	10	58	58	12/15/2006	6	Sand
268538	758349		CHARLOTTE TURNER	57N	01E	SE	SW	16	60	17	59	60	3/17/1992	6	Gravel
269956	757442		BILL FREEMAN	57N	01E	SE	SW	16	50	24	62	72	8/21/1986	6	Sand & Gravel
270229	756933		DENNIS MC DANIEL	57N	01E	SE	SW	16	10	15	77	77	10/13/1982	6	Gravel
270284	756614		NORM ROSENBERGER	57N	01E	SE	SW	16	15	20	50	50	10/3/1980	6	Sand & Gravel
271695	755271		JIM BOSSINGHAM	57N	01E	SE	SW	16	5	20	42	60	9/28/1971	6	Decom. Granite
388892	817724	D0033864	BILL TRUBY	57N	01E	SE	SW	16	30	10	58	58	6/23/2004	6	Gravel/Boulders
388893	817725	D0033865	BILL TRUBY	57N	01E	SE	SW	16	30	10	58	58	6/23/2004	6	Gravel/Boulders
396069	825437	D0035550	BILL TRUBY	57N	01E	SE	SW	16	12	-1	40	220	10/21/2004	6	Shale
	904126	D0090671	Valiant Idaho Club	57N	01E	SW	SW	16	180	15	70	80	3/9/2022	8	Sand & Gravel
268819	757954		ROGER BEST	57N	01E	SW	SW	16	30	15	30	35	3/20/1990	8	Sand & Gravel
271845	755421		AL SYLVESTER	57N	01E	SW	SW	16	20	20	40	40	3/1/1973	6	Pea Gravel
401133	830531	D0039942	CRAIG HATFIELD	57N	01E	SW	SE	16	7	160	322	322	3/9/2005	6	Shale
271846	755422		DON WENZEL	57N	01E	Gvt-1		21	15	25	52	52	2/25/1973	6	Pea Gravel
271847	755423		JEB C BEST	57N	01E	Gvt-1		21	20	16	31	31	2/26/1973	6	Sand & Gravel
271848	755424		JEB C BEST	57N	01E	Gvt-1		21	20	15	30	30	2/27/1973	6	Sand
271849	755425		WALTER RUBERG	57N	01E	Gvt-1		21	15	25	58	58	2/24/1973	6	Pea Gravel
269700	757187		TIM MC DANIELS	57N	01E	NE	NW	21	30	25	44	43	8/1/1984	6	Sand & Gravel
271424	755781		FRED DARK	57N	01E	NE	NW	21	15	30	54	54	12/23/1975	6	Sand
271498	755855		RAY MC GINNIS	57N	01E	NE	NW	21	20	20	40	40	4/27/1976	6	Sand & Gravel
272316	755108		FRED DARK	57N	01E	NE	NW	21	20	25	56	56	10/15/1969	6	Coarse Sand
272320	755112		GORDON MEAD	57N	01E	NE	NW	21	10	20	54	54	10/10/1969	6	Sand
412230	841974	D0045026	DOLORES POOLMAN	57N	01E	NE	NW	21	30	20	55	60	9/7/2006	6	Pea Gravel
270147	756851		ELIZABETH MC MILLAN	57N	01E	NW	NW	21	50	25	58	60	4/4/1982	6	Gravel
453840	888703	D0079525	VALIANT IDAHO LLC	57N	01E	NW	NW	21	150	10	72	77	8/16/2019	6	Sand/Grvl/Cobble

TD = Total Depth of well exploration in feet
SWL = Static Water Level below ground surface in feet at time of drilling
AF = Artesian Flow; bgs = below ground surface
Shaded data is from well at/nearest to the subject site.
Source Aquifer is documented from well drillers log and their interpretation of the geology

Site Groundwater Conditions

The site groundwater conditions immediately east of the lake are controlled by the geologic conditions within the alluvial fan deposits at the mouth of Trestle Creek. Interpretations are based on the observations of the new well installed by Valiant located approximately 200 feet east of the ordinary high water mark where the proposed community boat dock project is located. As state above, the recent well completed along the access road to the site encountered a mixture of clay, silt and gravel to a depth of 20-feet, where wet clay and gravel was encountered from 20 to 40-feet overlying a large gravel and coarse sand deposits to the full depths explored of 80. The first saturated soil was not encountered until approximately 50 feet below the ground level.

At the time of drilling, on March 8, 2022 groundwater was first encountered in the soils at a depth of 50 feet below ground surface. This is interpreted to be the upper saturated thickness of the aquifer, and is estimated to be at an approximate elevation of 2027 feet (NAVD88). However, after installation of the well, the aquifer pressure in the semi-confined raised the level to a noted depth of 15 feet below ground level. This corresponds to an approximate static water level elevation of 2062 feet (NAVD88). At the time of drilling, the lake was recorded at an elevation of 2055.67 feet (NAVD88), or approximately 6.33 feet lower in elevation than the static water level in the new well. Table 3 summarizes data from the new groundwater well and its relationship to Lake Pend Oreille Lake levels. Data from March 9, 2022 was from installation of the well, March 29, 2022 from the pump test conducted on well, and November 30, 2023, from a site visit WNR Group conducted at the site.

Table 3: Information on Water Level Elevations in Site Well & Lake Pend Oreille

	Lake Pend Oreille		New GW Well			
DATE	Elev (ft) - NGVD29	Elev. (ft) NAVD88	Depth to GW (ft-bgs)	Elev (ft) - NGVD29	Elev. (ft) NAVD88	GW-SW Elev. Diff.
March 9, 2022	2051.80	2055.67	15.00	2058.13	2062.00	6.33
March 29, 2022	2051.45	2055.32	16.00	2057.13	2061.00	5.68
Nov 30, 2023	2051.41	2055.28	17.75	2055.38	2059.25	3.97

Note: Ground Elevation at New Well = ~2077 ft (NAVD88) / ~2073.13 ft (NGVD29); Casing stickup = +2.1 ft
Lake Pend Oreille summer level Elevation = ~2066.37 ft (NAVD88) / ~2062.5 ft (NGVD29)
Lake Pend Oreille Flood Stage Elevation = ~2067.37 ft (NAVD88) / ~2063.5 ft (NGVD29)
Lake Pend Oreille high winter level Elevation = ~2058.87 ft (NAVD88) / ~2055.0 ft (NGVD29)
Lake Pend Oreille low winter level Elevation = ~2054.87 ft (NAVD88) / ~2051.0 ft (NGVD29)

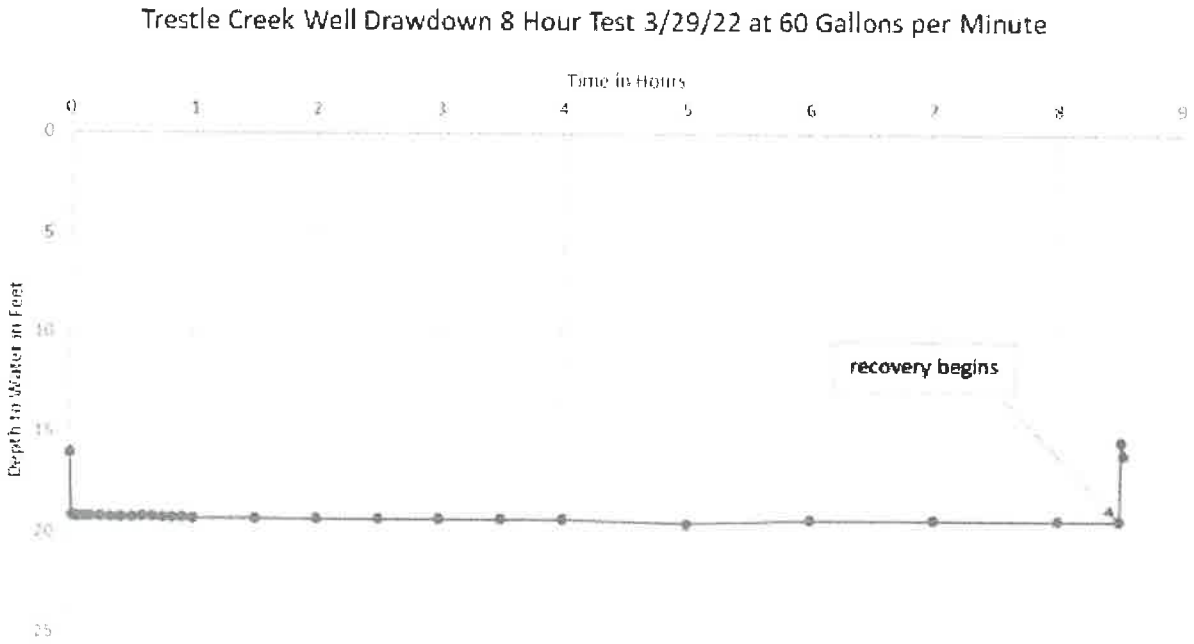
A second well measurement event occurred on November 30, 2023. During this site visit, the depth to groundwater was measured at 19.85 feet below the top of casing, equivalent to 17.75 feet bgs (the casing has 2.1 feet of stick-up above ground level). This corresponds to an approximate static water level elevation of 2059.25 feet (NAVD88). On November 30, 2023, the lake was recorded at an elevation of 2055.28 feet (NAVD88), or approximately 3.97 feet lower in elevation than the static water level in the new well.

These recordings document that the static water level in the groundwater well, which is approximately 200 feet east of the shoreline/high water mark of the lake, is higher than the lake level elevation. This would confirm that groundwater flow is towards the lake. The difference in elevation varied from 6.33 feet in March 2022 to 3.97 feet in November 2023. The higher difference in March would support that the groundwater is at its higher elevation during the spring runoff, and in November at its lowest elevation when it is after the domestic high water use period and recharge to the aquifer is at its lowest. It should be noted that the lake level is approximately the same elevation which shows the groundwater change is

resulting in a lower gradient, which would correspond to a lower velocity and recharge of groundwater to the lake.

The aquifer characteristic were evaluated during a pump test on the new well on March 29, 2022 (Sewell, 2022), approximately 20 days after installation and development of the well. This evaluation was conducted to test the well (identified as "new well" in this report) for a potential future water source for residential use. The well was pumped at a constant rate of 60 gpm for eight hours. After the initiation of pumping, the water level in the well dropped immediately 3.2 feet below the static water level of 16 feet recorded at the start of the test. This is indicative of a confined to semi-confined aquifer, that would drop quickly as the pressure in the aquifer is immediately reduced from the initiation of pumping. After 3 minutes of pumping, the water level decreased another 0.1 feet, then dropped another 0.1 feet 120 minutes into the test where it remained at that level through the length of the 8.5 hour (510 minute) pump test. Total drawdown of the 60 gpm constant rate test was 3.4 feet. After the cessation of pumping, the water level recovered to its static water conditions within two minutes. Graph 1 presents the data collected during this constant rate pump test on the New Well (Sewell, 2022).

Graph 1: Graph of water level data from 8.5 hour pump test conducted on New Well (Sewell, 2022)



During the pump test, Sewell also monitored the "old well" located approximately 150 feet northwest of the pumping well. No drawdown was observed in the well during this test. Although Sewell concluded that the pump test radius of influence did not reach this well, this conclusion can not be verified without knowing the well construction details, specifically what depth and soil formation the well is screened through. A well log on the "old well" could not be found for this review.

The pump test does confirm the hydrogeologic interpretations of the well log that the saturated groundwater interval is within a confined to semi-confined aquifer, located at depth below the lake level. This would lead us to conclude that the groundwater is not "directly" discharge to the lake below the shoreline of the proposed project, but is being conveyed through a confined interval below the low water mark of the lake at the project. The groundwater eventually directly recharges to the lake off-shore of the

project area where it would migrate back into the lake water column through a more porous facies change medium, or where the overlying clay layer at the site is absent.

Lake Pend Oreille Setting

Lake Pend Oreille is thought to have formed in an older river valley that was controlled by faults. Recent studies have determined that most of the lake substrate consists mainly of silt, sand, gravel, cobble, bedrock debris, some boulders, and some bedrock outcrops (Barton and others, 2013). Unconsolidated sediments in the substrate originated from glaciation, megafloods, lacustrine, and terrestrial and subaqueous landslide processes, and from tributary inflows into the lake. Bedrock surrounding most of the lake is comprised of Precambrian Belt Supergroup metasedimentary formations, which form steep slopes that can frequently have landslides and rock slides that fall into the lake (Barton and others, 2013). Lake Pend Oreille was scoured by multiple advances and retreat of the Cordilleran Ice Sheet which advanced into the Purcell Trench, scoured by the ice age floods, and then subsequently filled with glacial outwash and flood deposits. The lake is now dammed at the south end by thick glacial and flood deposits that underlie Farragut State Park, which formed an undisturbed end moraine.

The shoreline morphology is subdivided into the variable zone and the subvariable zone. The variable zone is where lakebed elevations are between normal maximum summer full pool and normal minimum winter low pool. Subvariable zone is where lakebed elevations are lower than the lake's normal minimum winter low pool elevation.

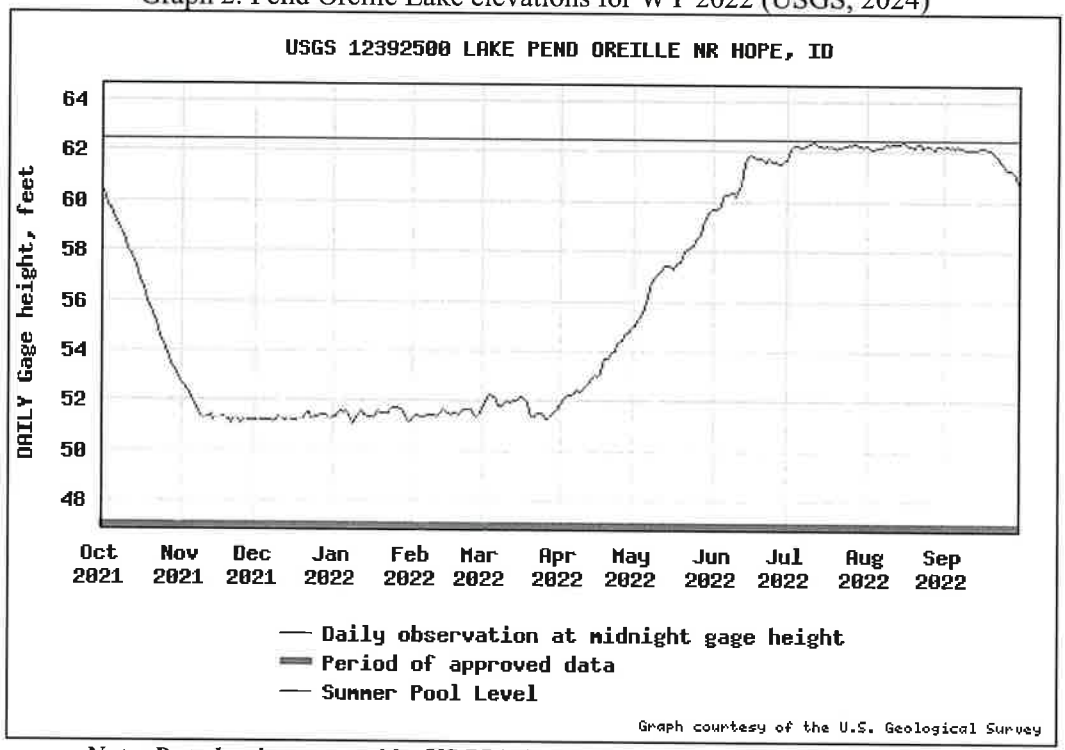
Major tributaries to the lake include the Clark Fork and Pack River, in addition to many smaller stream/creek tributary valleys such as Trestle Creek. The outfall of the lake is through the Pend Oreille River which is controlled by Albeni Dam near the Idaho/Wahington state border.

Lake Pend Oreille is a regulated lake that maintains winter and summer levels. The lake is typically held at the summer level of 2062 – 2062.5 feet (NGVD29) by the end of June or early July, and is held at that level until the 3rd Sunday of September, when water is drained from the lake. The winter level is either maintained at 2051 feet or 2055 feet (NGVD29), depending a decision made by Idaho Fish and Game Commission for kokanee spawning. Graph 2 shows the measured lake level at the USGS station 12392500 located near Hope, Idaho for water year 2022 and Graph 3 for water year 2023 (USGS, 2023). As shown on the graph, the lake level begins to rise in March-April and reaches near full pool by July. The summer level is maintained for approximately three months before the elevation is allowed to drop for the winter management period.

At the project site, groundwater and surface water from the Trestle Creek drainage directly discharge to Lake Pend Oreille. At the bottom/mouth of the Trestle Creek drainage, the groundwater is in hydraulic continuity with the lake and will rise and fall dependent upon lake levels. However, this aquifer connection may be out in the lake due to the confining levels observed at the site and discussed previously in this report.

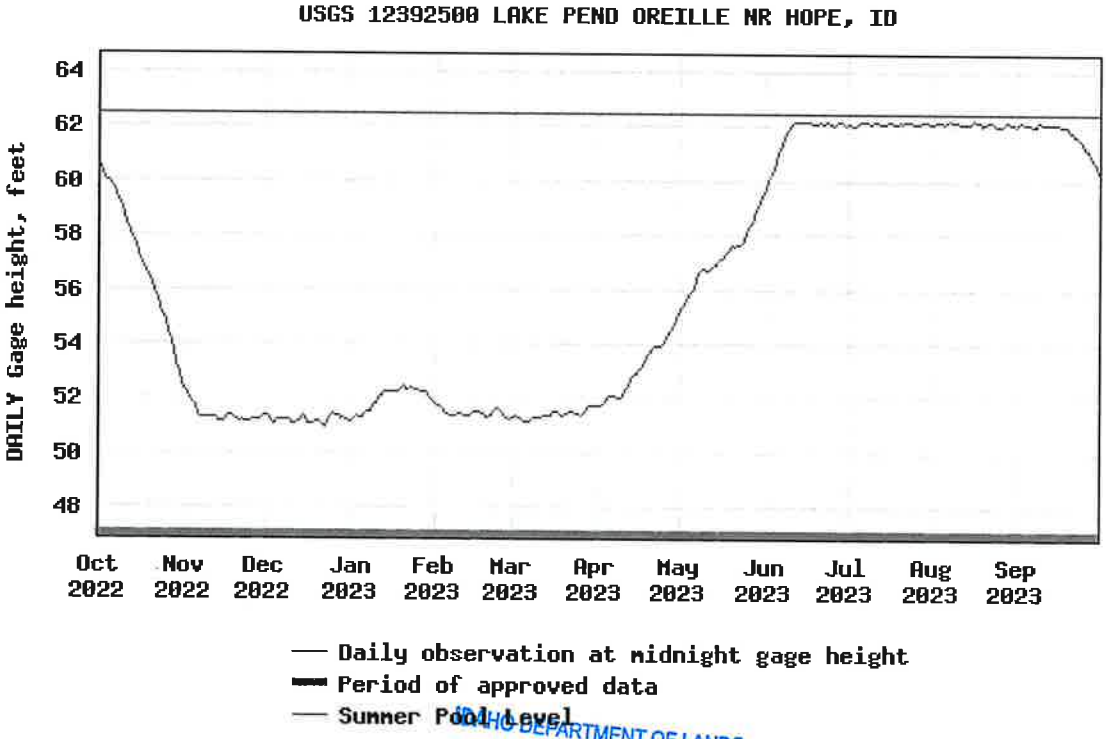
Shoreline characteristics just northwest of the site is documented in the Rain Shadow Research Inc. (2008) report. In summary, the shoreline characteristics near the site consist of sandy and gravelly deposits, with the larger clasts eroded from the alluvial fan, which contains debris from glacial till and angular and subangular clasts certainly eroded from the Prichard Formation (Lewis et al, 2006). The excavations completed for this study revealed soil profiles of reworked sand and gravel over poorly sorted, extremely gravelly deposits that are either reworked channel gravels or reworked gravels from the Trestle Creek alluvial fan. Clayey and pebbly glacial till deposits underlie the reworked gravels at the study site. The exposed sides of the existing boat dock sloughs at the site were dug through extremely gravelly and cobbly sandy loam alluvial fan deposits.

Graph 2: Pend Oreille Lake elevations for WY 2022 (USGS, 2024)



Note: Data levels presented by USGS is in NGVD29. For NAVD88 add 3.87 feet. Daily gage height is value + 2000 feet.

Graph 3: Pend Oreille Lake elevations for WY 2023 (USGS, 2024)



Note: Data levels presented by USGS is in NGVD29. For NAVD88 add 3.87 feet. Daily gage height is value + 2000 feet.

The shoreline around the "island" which is proposed to be excavated is comprised of the old excavation spoils that originally dug the sloughs where the boat docks were located. Our visual observations during the October 10, 2023 site visit, documented that the "island" is approximately 10 to 12 feet above the existing lake bed level, and consist of a mixture of silt, sand and gravel fill material. Photos 1 and 2 shown site conditions at the "island" during our October 2023 site visit. As shown in the photos, the proposed excavation phase of the project will be conducted during the winter low water levels, and no excavation will be conducted into the groundwater table. Any groundwater beneath the island footprint is directly connected to the lake level and waters of the lake and do not appear to be directly connected to the groundwater observed in the wells in the area east of the shoreline.

Photo 1: Looking NE across slough mouth to Lake Pend Oreille. "Island" consists of silts, sands, and cobbles. Water in slough drainage is rain water runoff flowing towards lake water to the left.

Photo 2: Looking North across slough to "Island". Fill material consists of silts, sands, and cobbles. Water in slough drainage is rain water runoff flowing towards lake water to the left.

Stream Morphology

The stream morphology of the lower Trestle Creek area is best described in the River Design Group (RDG) report dated August 2023. This report presents the restoration plan for improving aquatic habitat and fish passage on the NFTC. This segment of the creek is interpreted to have been artificially constructed as an irrigation canal in the 1900's (RDG, 2023). It currently bifurcates from Trestle Creek approximately ½-mile upstream from the NFTC discharge point into the lake. The start of NFTC is located in the NW¼SW¼SE ¼ Section 16, T57N, R01E (see Figure 13). The proposed restoration design will reactivate the historical confluence of NFTC and Trestle Creek and enhance the stream corridor habitat conditions for fish and the vegetated flood plain.

Trestle Creek: Trestle Creek flows within a deeply incised tributary valley that has steep bedrock slopes (Figure 6). The valley floor is filled in with glacial and alluvial sediments, bounded on the valley walls with Precambrian metasedimentary rocks of the Prichard Formation. Trestle Creek is approximately 8-miles long with the headwaters to the northeast on the southeastern slope of Trestle Ridge (USGS(a)). Water within the creek is derived from precipitation, snow melt, and from groundwater springs in the headwaters of the drainage. No detailed flow measurements were reviewed for this study. The creek discharges directly to Lake Pend Oreille south of the project site near the boat ramp. Photo 3 is a view of Trestle Creek looking downstream approximately 1/8-mile upstream of its outlet into the lake. Photo 4 is a view of the outlet/mouth of Trestle Creek into Lake Pend Oreille at the low lake water level.

Trestle Creek appears to be hydraulically connected to the coarser valley fill in the headwaters to about one mile upstream of its outlet to the lake. Through this reach of the creek, the valley is fairly steep and the creek is inferred to be gaining water from the shallow aquifer in the unconsolidated valley fill sediments. In the lower one mile of the creek, the gradient appears to become lower, as it begins to flow over the alluvial fan deposits identified on the geologic maps. Well logs also appear to show a shallow clay dominant layer upon which the creek may be perched and separated from the Trestle Creek valley aquifer.

Photo 3: Photo of Trestle Creek looking northwest to its outlet into Lake Pend Oreille.

Photo 4: Photo of Trestle Creek looking southwest to its outlet into Lake Pend Oreille.

North Fork Trestle Creek (NFTC): NFTC bifurcates from Trestle Creek approximately ½-mile upstream from the NFTC discharge point into the lake. NFTC was constructed as an artificial channel/diversion canal in the early to middle 1900's (RDG, 2023) and there is no control structure at the inlet. NFTC experiences fluctuating flow levels commensurate with flows of Trestle Creek. The channel typically experiences peak flow discharge during the spring in response to rain-on-snow events and snow melt during the spring rain events. Within the area east of the project, NFTC transitions from an entrenched, confined system with small step pools downstream of the Montana Link railroad crossing to a moderately entrenched, riffle dominated channel in the downstream reach near the confluence with Lake Pend Oreille (RDG, 2023). The NFTC maintains a relatively straight alignment throughout its reach. Photo 5 presents a photo of the NFTC approximately 200 feet upstream of its outlet into the lake slough. From our observations, it appears the NFTC is perched on top of a more clayey soil through its lower reach.

Currently, NFTC's outfall is into the old slough which was excavated during the initial construction of the boat dock area (Figure 13). Right before entering the slough, the NFTC is conveyed through a culvert, which is perched above the lake level. Outfall from the culvert is onto some large boulder rip-rap along the slough boundary. Photo 6 is taken looking to the south at the outfall into the slough. The proposed restoration project will abandon this outfall and realign the creek so it flows directly to Trestle Creek. Project realignment and drawings for this restoration project is provided in the RDG 2023 report. Once this restoration is completed, the NFTC will not have influence on, or be influenced by, the proposed community dock project.

Photo 5: Photo of NFTC on 11/10/2022 upstream of the project site.

Photo 6: Picture of the outlet of NFTC into the old slough immediately downstream of culvert.

GROUNDWATER-SURFACE WATER HYDRAULIC CONTINUITY

In a more regional sense, all groundwater and surface water is hydraulically connected, just at varying degrees. For this site, the WNR Group looked at all available data reviewed and discussed previously to develop an understanding of the extent of hydraulic continuity between Trestle Creek, NFTC and the groundwater aquifer in the Trestle Creek drainage.

In order to develop an understanding of the extent of hydraulic continuity in the area, the WNR Group used available data, especially well logs, and developed two cross-sections for the area. Traverse location of the cross sections developed are shown on Figure 13. Groundwater levels depicted on the cross-sections were those recorded by the driller at the time of drilling. Lithologic soils of the unconsolidated sediments were classified into three main groups:

1) Soils which are primarily comprised of Clay and have some minor components of sand and gravel (***shown in blue color on the cross-sections***). These are the least permeable soils reviewed in the well logs.
2) Soils which are primarily comprised of Sand with varying amounts of gravels and/or boulders (***shown in yellow on the cross-section***). These are porous and permeable soils reviewed in the well logs.
3) Soils that are primarily comprised a Gravel, Cobbles and Boulders with minor amounts of silt and sand (***shown in gray color on the cross-sections***). These are the most porous and permeable soils reviewed in the well logs.

Cross-section A was constructed east-west along the linear direction of the Trestle Creek drainage. Figure 14 presents the conceptual hydrogeologic interpretation in the lower two-mile portion of the drainage. As shown on the cross-section, Trestle Creek drainage soils become coarser grained as you traverse up the drainage, with more clay dominated deposited near the lake. These can be interpreted as fine-grained overbank deposits from Trestle Creek deposited over the older alluvial fan deposits. With the finer grained soils in the lower portions of the valley fill sediments, this would reduce groundwater flow rates to the lake within this zone. However, coarser material is present at depth, in which the groundwater would preferentially flow through the coarser higher permeable sediments.

Trestle Creek traverses up to 8 miles within the steeply incised channel. Water in the creek is primarily derived from precipitation, snow melt, and groundwater seeps in the headwaters of the drainage. In the upper portion of the drainage (right side of Figure 14), the creek flows above a porous and permeable gravel and boulder sediment. Through these reaches, the creek is in hydraulic continuity with the shallow unconfined groundwater. As the creek flows down valley, immediately downstream of the bifurcation of NFTC, the creek flows above a clay dominant soil (till) which is less permeable and porous. This soil grades down valley to a clay with less gravel. The aquifer appears to transition to a semi-confined to confined aquifer, as the water is forced into the more porous soils beneath the clay dominant soils. The creek is perched on top of the clay and not in hydraulic continuity with the underlying aquifer. This stratigraphic setting is continued westerly to the mouth of the drainage, where it appears the semi-confined aquifer is located at depth below the lake level. These conditions were confirmed in 1) the drilling of the new well as saturated soil was observed at 50 foot depth, but static water level in the well raised to 15 feet bgs, and 2) the pump test on the new well had an immediate drawdown in the water level indicative of a confined aquifer setting. It appears the confined aquifer continues out beneath the lake, where at some location the groundwater would discharge to the lake where the overlying confining clay soils are not present.

Figure 15 presents a cross-section across the lower portion of the Trestle Creek valley, immediate east of the site. As shown on this cross-section, the groundwater in the aquifer is in the confined sands and gravels below the clay dominated soils. This clay rich soil extends across the width of the valley.

Although NFTC appears to flow directly on top of the clay, Trestle Creek appears to flow on top of some alluvial fill gravels located above the clay dominated (glacial till) soil deposits.

The hydraulic connection at the immediate location of the island does not appear to be affected or in hydraulic continuity with the aquifer, or the creeks east of the island. Any "groundwater" beneath the footprint of the island would be in direct hydraulic connection with the lake water. As such, if any water is encountered, it would be a reflection of the lake level, and not the aquifer of the Trestle Creek drainage. Due to the fact that the creeks enter the lake east of the island, creeks flows will not have an impact on or be impacted from, any "groundwater" observed within the footprint of the island.

IMPACTS OF ISLAND EXCAVATION

As referenced earlier, the plan for the project site is to develop a new proposed community dock project located north of the outfall of Trestle Creek into Lake Pend Oreille. As part of the community dock project, removal of the previous constructed "island" is proposed to restore the shoreline to its ancestral natural lakebed levels. This "island" was created during the initial excavation of the sloughs which hosted the existing docks. Specific information directly related to the "island" footprint is described in the Intermountain Resources (IMR) document dated 2008:

The site had extensive dredging to create the existing configuration of the boat basin back channels and also to divert the North Branch of Trestle Creek to the basin. It appears this was done to route water through the narrow back channel basins in an attempt to reduce the tendency of back channels to become stagnant. There was also regular maintenance dredging performed at the north end of the basin to clear the circulation outlet of the back basin, though it appears to have been generally unsuccessful.

It is also stated in the document that the exact date if construction of the island is not known, but is thought to be done in the decade following the completion of Albeni Falls Dam, which was in 1955.

The excavation of the "island" under this proposed project will be below the high water line. However, excavation will occur during the time when the lake is at winter pool levels. No excavation of materials at the "island" site will occur below the winter pool levels. As a result of the hydrogeology discussed previously, any water encountered within the footprint of the "island" is not interpreted to be hydraulically connected to the Trestle Creek aquifer, but is a reflection of the lake water system. Therefore, if the lake level is located below the bottom of the proposed excavation level, no infringement into the lake hydrologic system will occur.

CONCLUSIONS

The WNR Group has performed a preliminary hydrogeologic review to determine the hydraulic connection of surface and groundwater in the lower Trestle Creek drainage. Specifically, the study was conducted in order to assist the regulatory agencies with understanding the hydrologic regime in the immediate area of the proposed project, and to assist with determining if the proposed project, specifically the excavation of the "island," will have any impact on the surface and groundwater.

Review of data suggests that the hydrogeologic conditions at the site is a valley fill aquifer which is unconfined in the headwaters and then transitions to confined conditions in the lower portions of the valley. At these locations, the Trestle Creek and NFTC surface water appears to be perched above a clay interval which separates the surface water from the groundwater. The surface water of Trestle Creek and NFTC discharges directly to the lake waters of Lake Pend Oreille, and does not traverse the "island." Groundwater at the lower part of the valley is under confined conditions, of which the aquifer interval (that layer which is conveying water) flows beneath the shoreline at the lake and the "island." It is inferred that the groundwater will discharge into the lake somewhere off shore where the confining clay

layer is absent. Water directly below the footprint of the "island" is a projection of lake water, and as such would not affect the lower confined aquifer.

In our opinion, the project (excavation of the island and subsequent fill of the sloughs) will have no effect on surface or groundwater in the area of the site.

LIMITING CONDITIONS

This limited hydrogeologic letter report has been prepared for the exclusive use of Valiant Idaho II, LLC and their assigns, in accordance with the standards of the environmental consulting industry at the time the services were performed. This work has been performed for the sole purpose of assisting in the interpretation of groundwater aquifer conditions for siting of a future municipal supply production well. This letter report is governed by the specific scope of work authorized for the WNR Group and is not intended to be relied upon by any other party unless specified by Valiant Idaho II, LLC. The findings presented herein are based upon readily available government information reviewed as of the date the assessment was performed and review of a limited number of readily available hydrogeologic documents for the area near the Site. Geologic and hydrogeologic data is limited for the subject area and interpretations were made for the conclusions presented in this report. The findings and conclusions presented herein should not be assumed to be an accurate representation of present-day conditions, but only interpretations based on professional judgment. This assessment only presents a professional opinion as to what type of aquifer may be encountered beneath the Site and does not warranty any quantities of water which may be withdrawn. No other warranty is presented within, or implied.

We appreciate the opportunity to be of service to Valiant Idaho II, LLC in providing our interpretation of groundwater conditions at the Site. Should you have any questions regarding this letter report, please do not hesitate to call us at your earliest convenience.

Very truly yours,
Water & Natural Resource Group, Inc.

Eugene N.J. St.Godard, R.G., L.Hg.
Principal Hydrogeologist/Owner
WNR Group, Inc.

REGISTERED PROFESSIONAL GEOLOGIST
EUGENE
ST.GODARD
862
STATE OF IDAHO

Signed: February 9th, 2024

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

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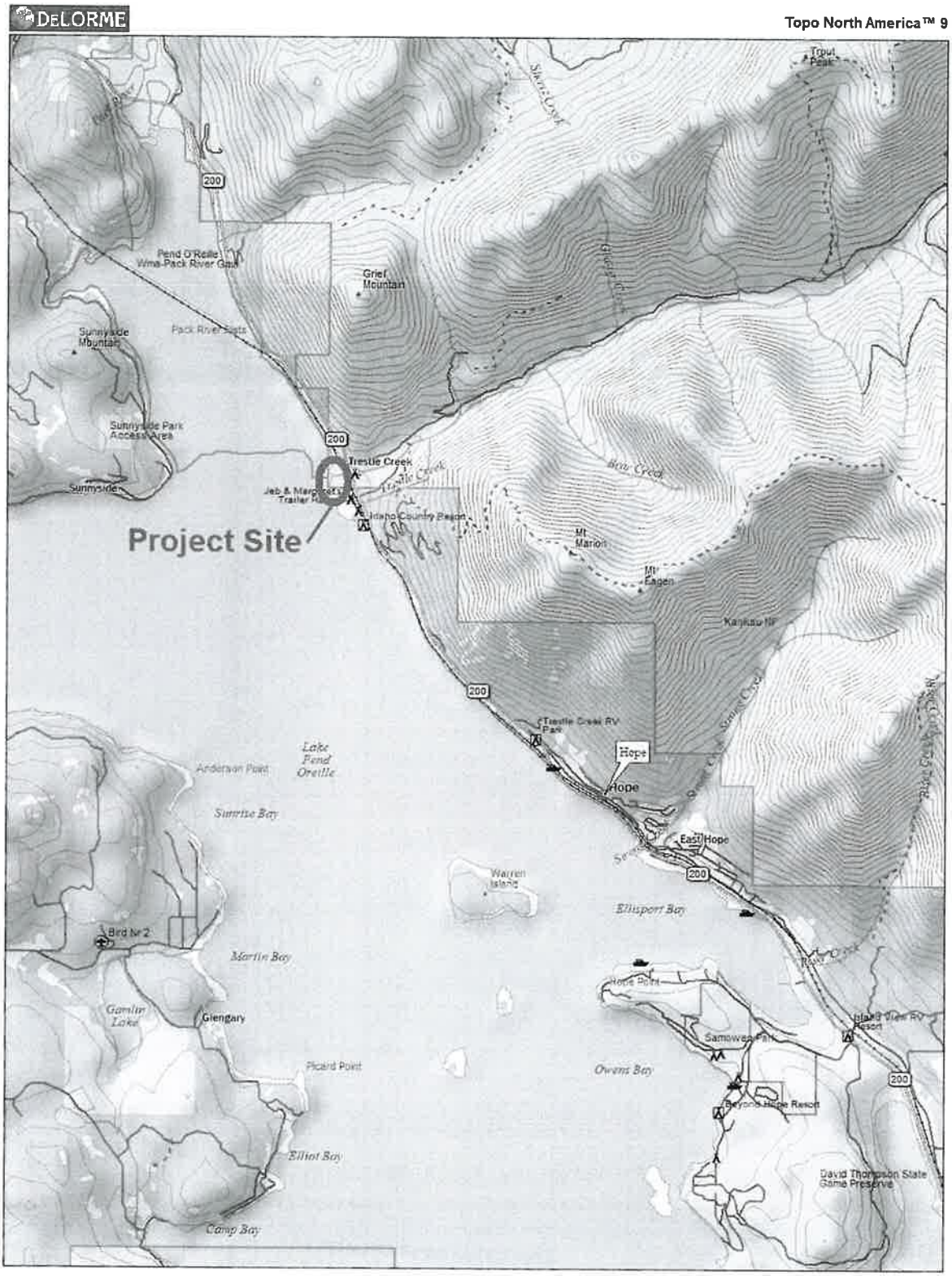


Figure 1: Site Vicinity Map

Figure 2: Site Location Aerial Map.

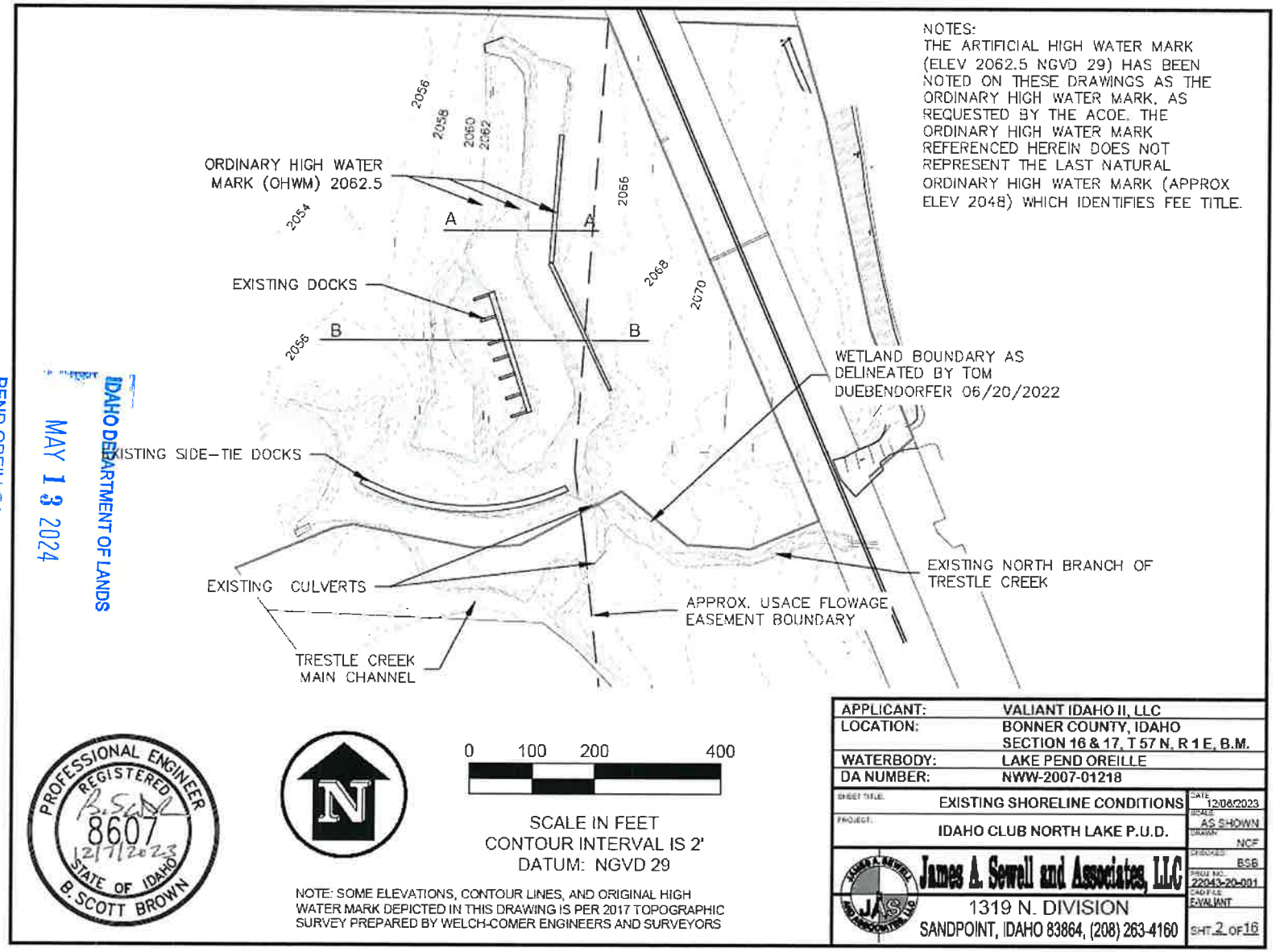


Figure 3: Engineering Drawing of Current Configuration of Site (J.A. Sewell & Associates, 2023b).

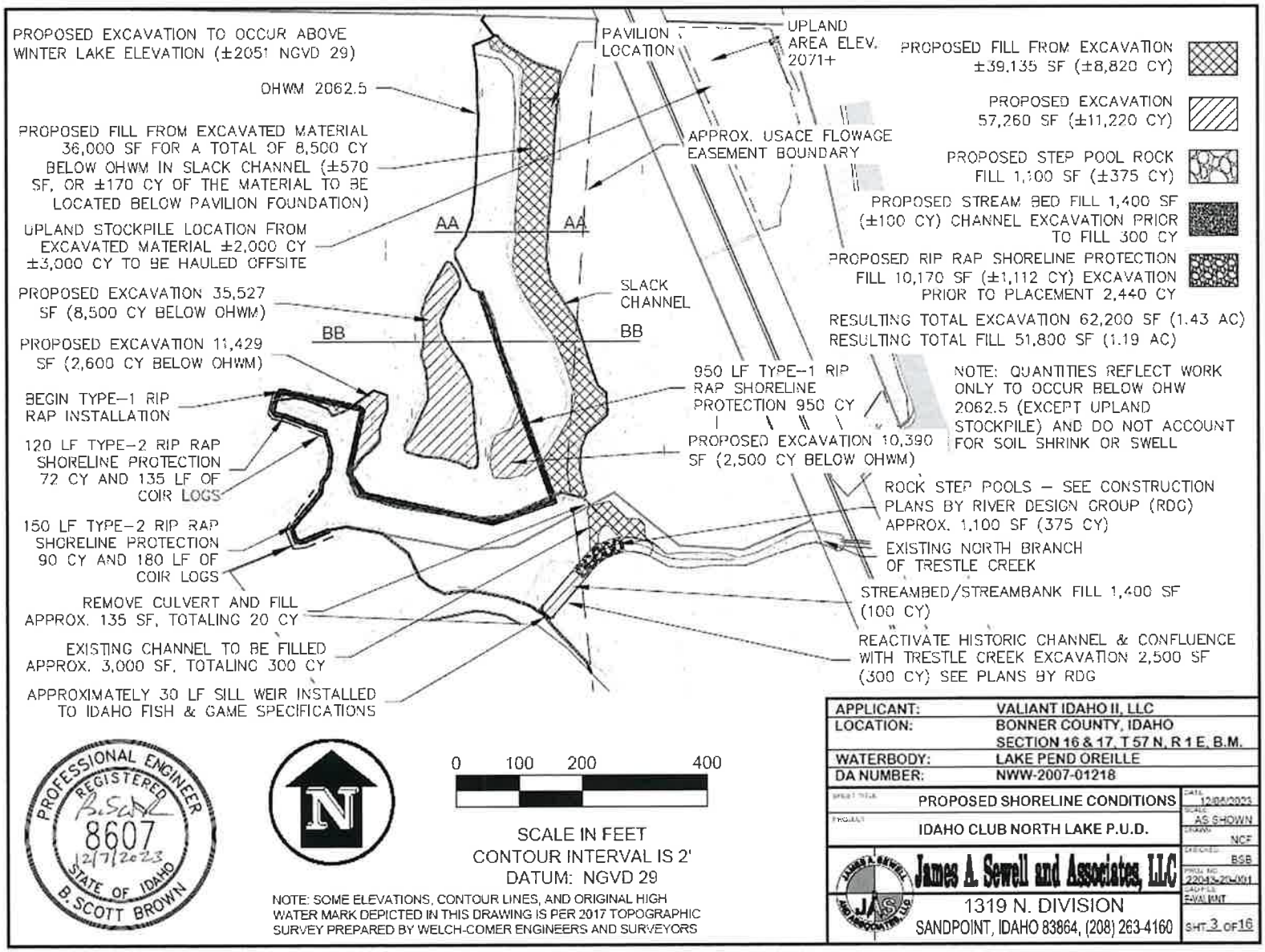


Figure 4: Engineering Drawing of Proposed Project Actions at Site (J.A. Sewell & Associates, 2023b).

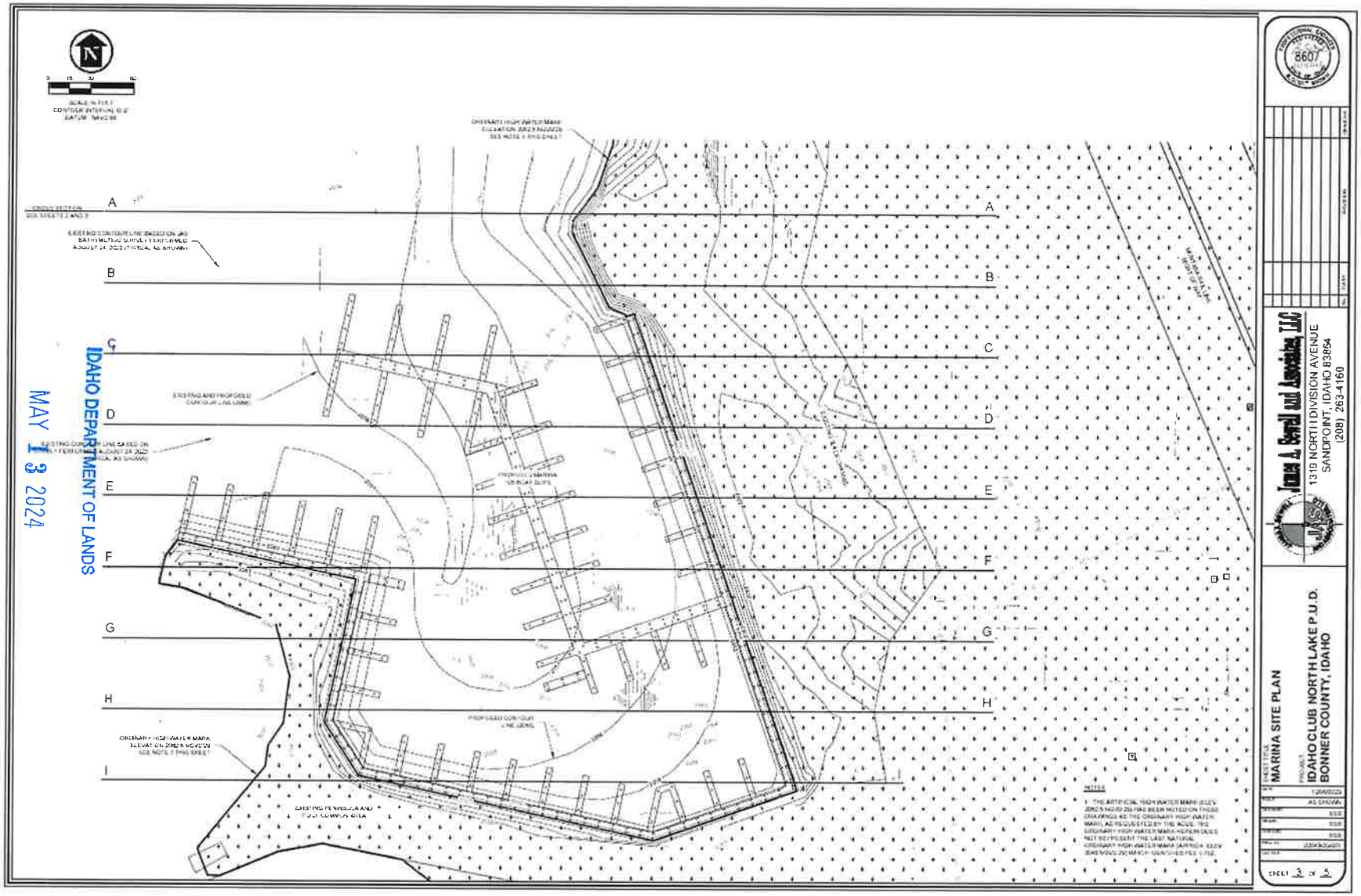


Figure 5: Engineering Drawing of Final Proposed Project at Site (J.A. Sewell & Associates, 2023b).

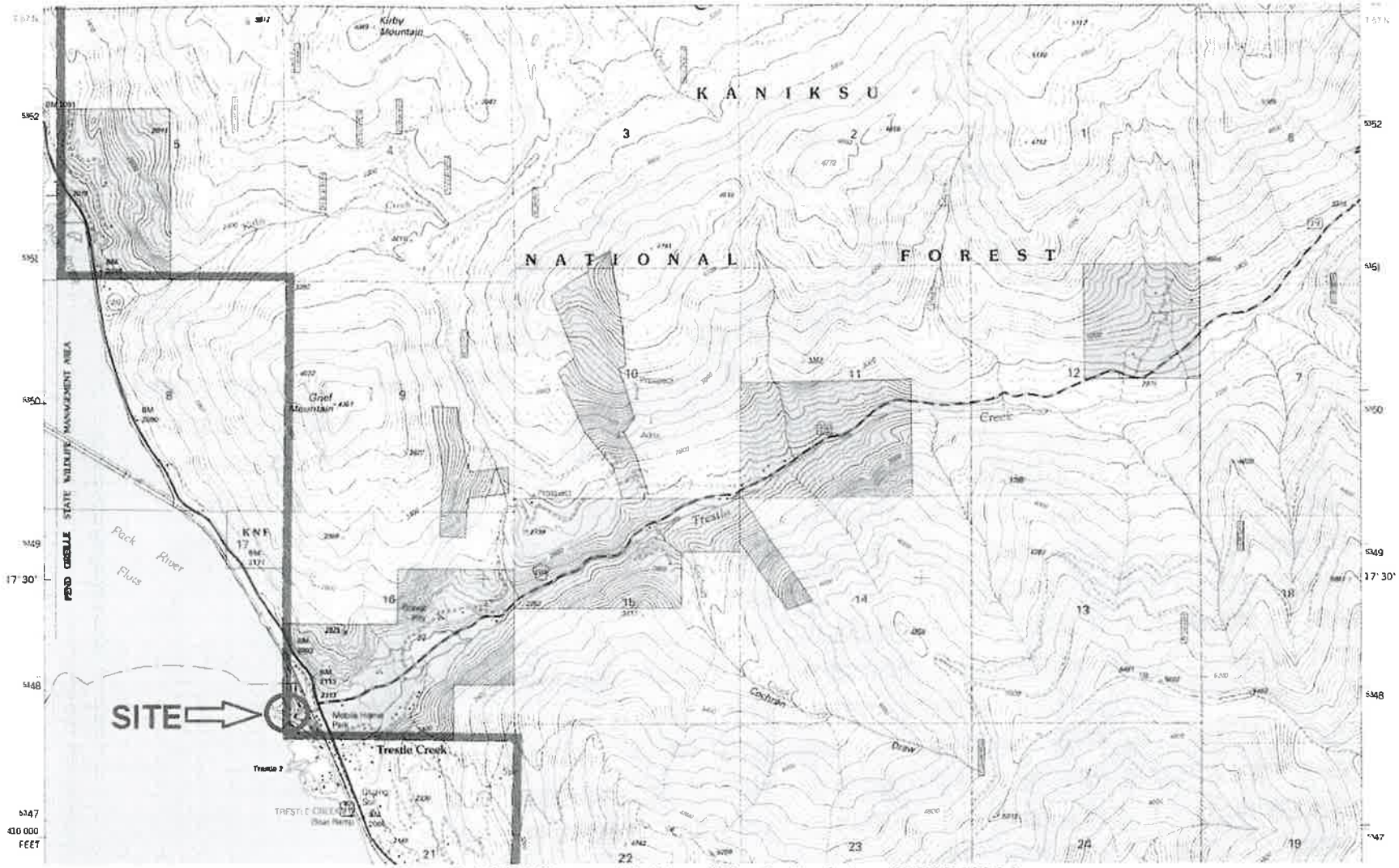


Figure 6: USGS Topographic Map of Trestle Creek Area (USGS 1996a).

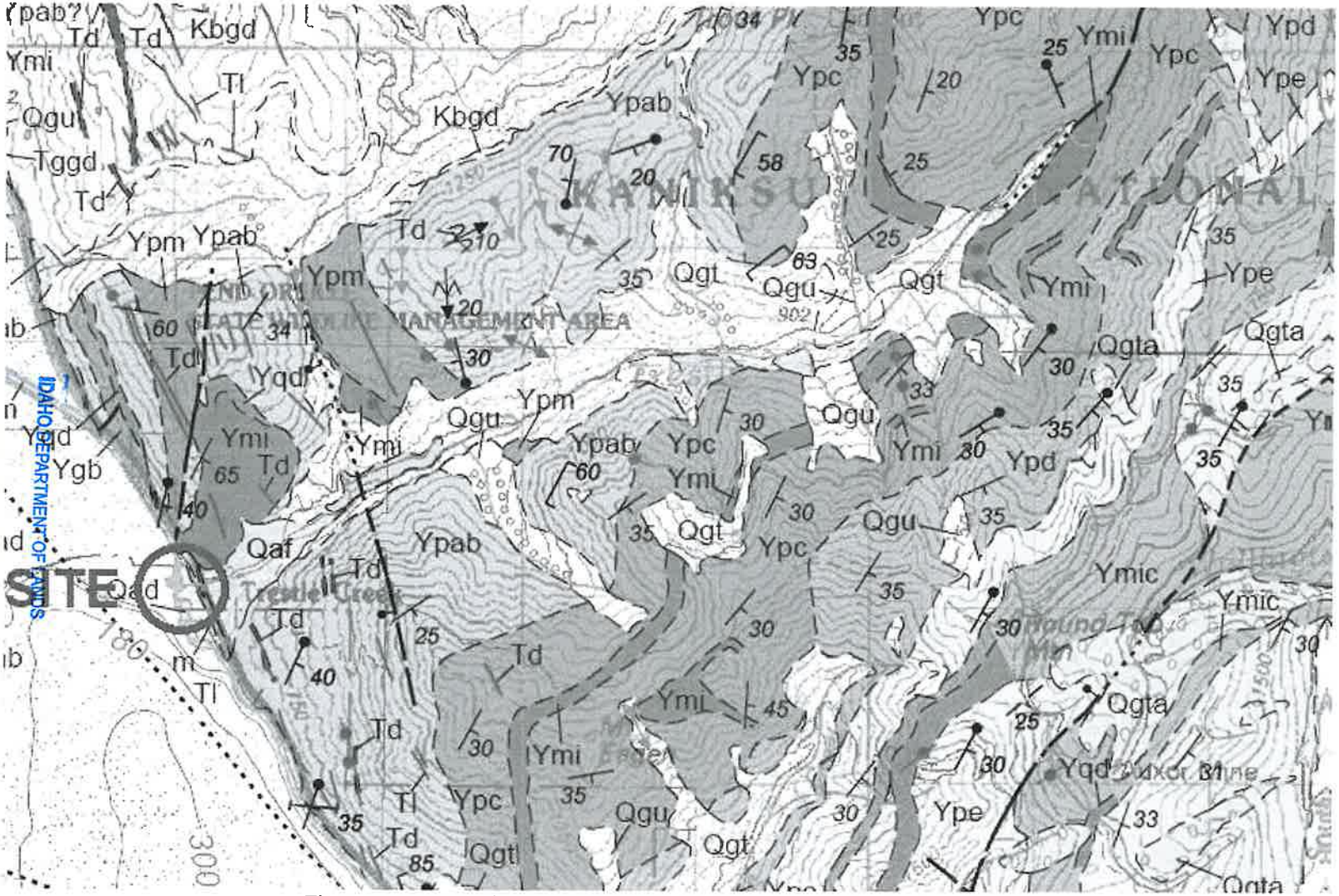
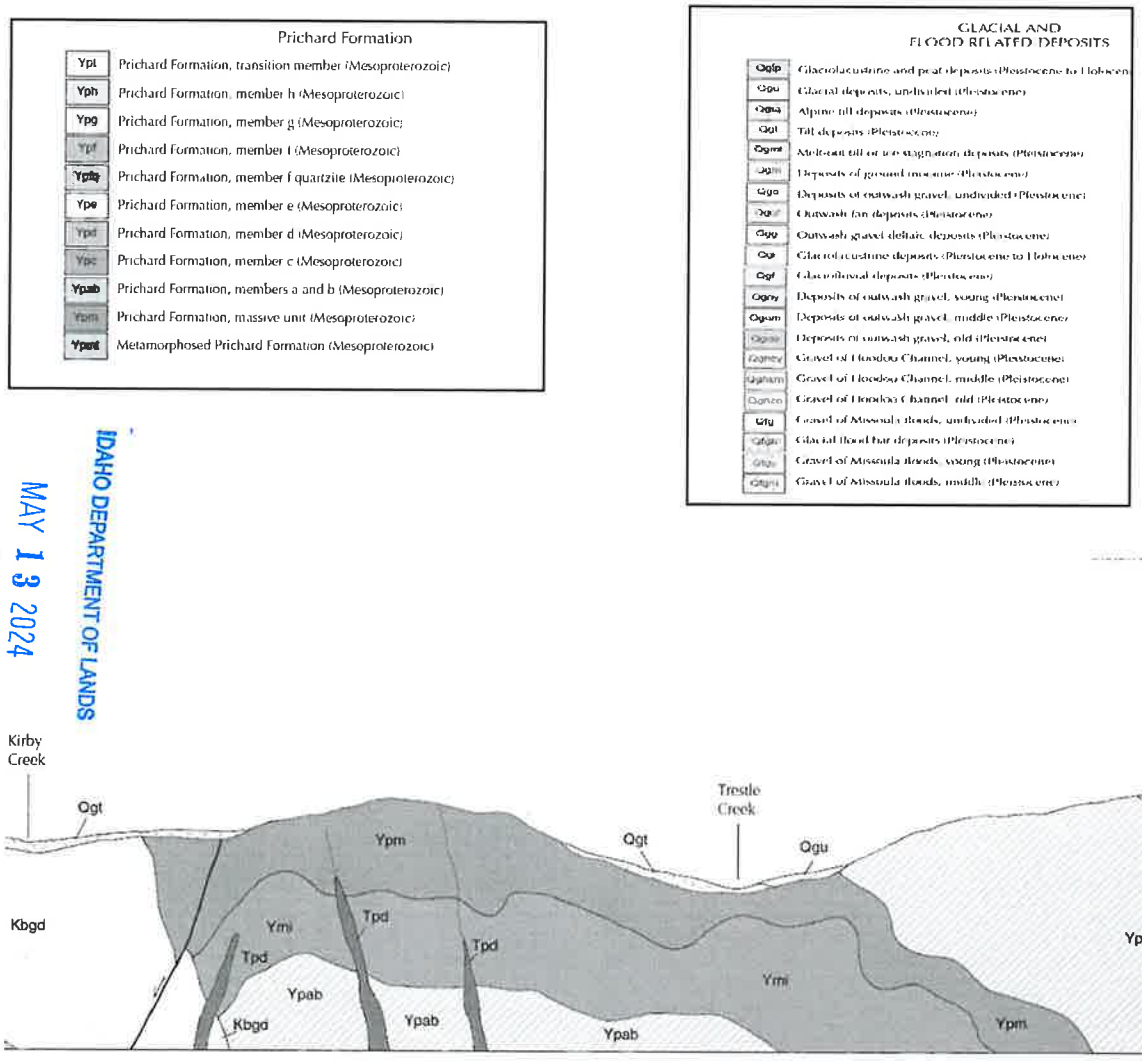


Figure 7: USGS Geologic Map of the Trestle Creek area (Miller & others, 1999).

Figure 8: Geologic Map of the lower Trestle Creek area (Reed & others, 2006). See key in Figure 9.



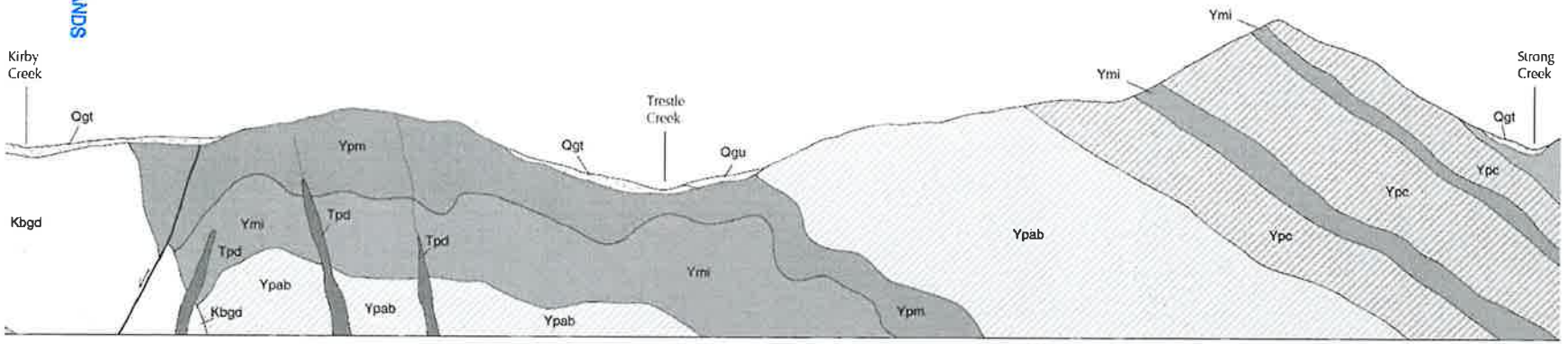


Figure 9: Geologic Cross-Section (NW-SE) across Trestle Creek drainage (Reed & others, 2006).

Form 238-7
6/07

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 0090671
Drilling Permit No. 96-9897 90411216
Water right or injection well #
2. OWNER: Valiant Idaho Club
Name Valiant Idaho Club
Address 310
City Celebration State FL Zip 34747
3.WELL LOCATION:
Twp. 57 North ☒ or South ☐ Rge. 01 East ☒ or West ☐
Sec. 16 1/4 SW 1/4 SW 1/4
Gov't Lot County Bonner
Lat. 48 ° 17.0040 (Deg. and Decimal minutes)
Long. -116 ° 21.1080 (Deg. and Decimal minutes)
Address of Well Site Hwy 200 And Trestle Creek
City Sandpoint
Lot. Blk. Sub. Name
4. USE:
☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection
☐ Other
5. TYPE OF WORK:
☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other
6. DRILL METHOD:
☒ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other
7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method/procedure
Bentonite	0	60	65 Bags	Gravity

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/ Schedule	Material	Casing	Liner	Threaded	Welded
8"	-2	70	322	Steel	☒	☐	☐	☒
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 75
9. PERFORATIONS/SCREENS:
Perforations ☐ Y ☒ N Method
Manufactured screen ☒ Y ☐ N Type Allied
Method of Installation Set

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
70	80	.080		7in	Stainless	Steel

Length of Headpipe Length of Tailpipe
Packer ☒ Y ☐ N Type K
10.FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method

11. FLOWING ARTESIAN:
Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG)
Describe control device Valve Cap

12. STATIC WATER LEVEL and WELL TESTS:
Depth first water encountered (ft) 50 Static water level (ft) 15
Water temp. (°F) 45° Bottom hole temp. (°F) 45°
Describe access port WPT Cap
Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
60	180	8 hours

Test method: Pump ☒ Bailer ☐ Air ☐ Flowing artesian ☐
Water quality test or comments: Light - Clear
13. LITHOLOGIC LOG and/or repairs or abandonment:

Boro Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water Y	Water N
12	0	60	Surface Seal	X	
8	0	20	Clay silt gravel		X
8	20	40	Wet clay gravel	X	
8	40	80	Large gravel, course Sand		
			Water		

RECEIVED
MAY 03 2022
IDWR/NORTH

Completed Depth (Measurable): 80
Date Started: March 8-22 Date Completed: March 9-22
14. DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
Company Name Universal Drilling Co. No. 6510
*Principal Driller Scott Hille Date April 1-22
*Driller Austin Hille Date April 1-22
*Operator II Austin Hille Date April 1-22
Operator I Date
* Signature of Principal Driller and rig operator are required.

Figure 10: Drillers Geologic Well Log installed at the project site (IDWR, 2023).

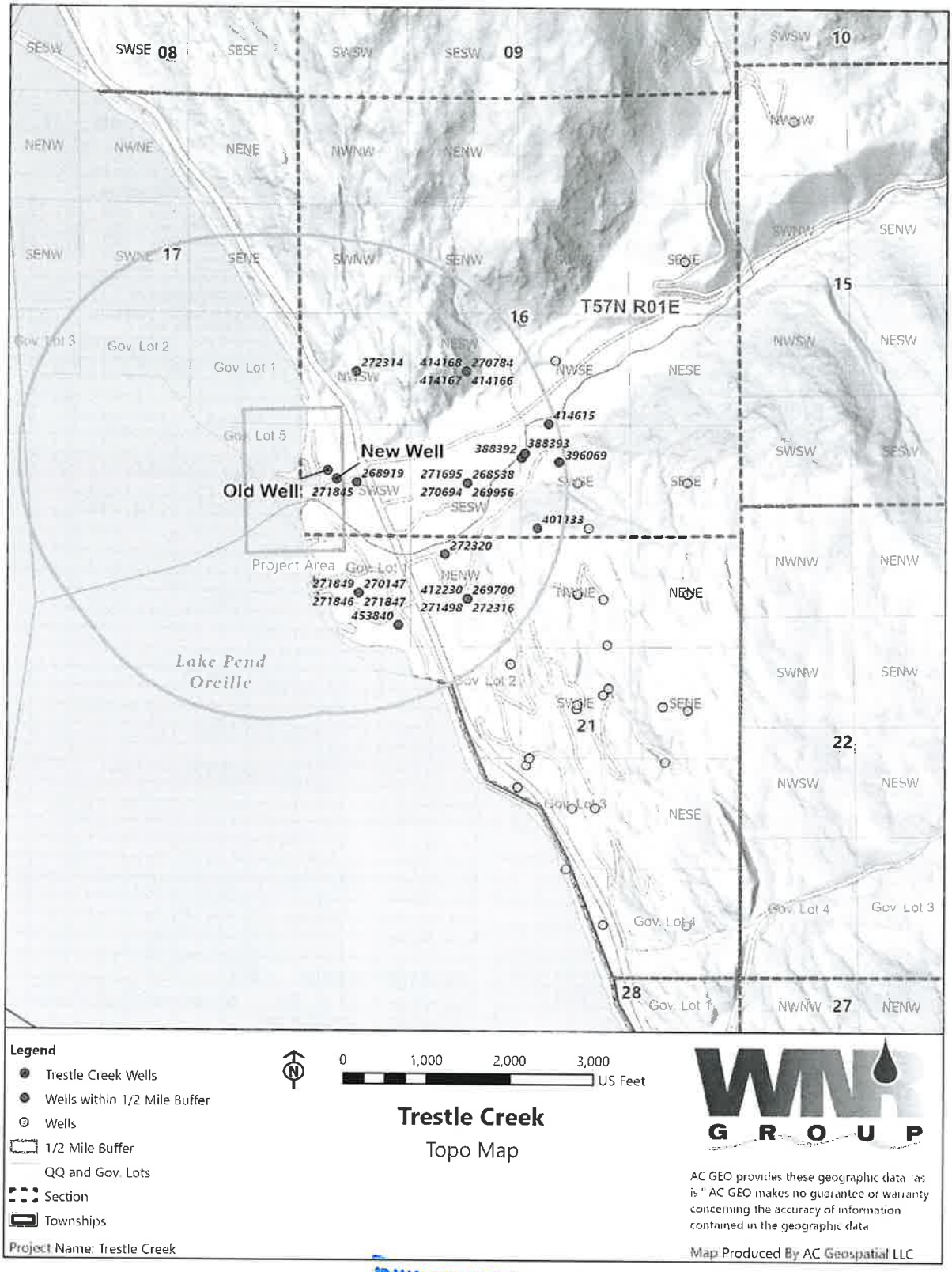


Figure 11: Groundwater Well Proximity Topographic Map Showing Wells within ½-Mile of Site. Well Logs and Figure Well Reference No. is provided in Table 2 (IDWR July 2023)

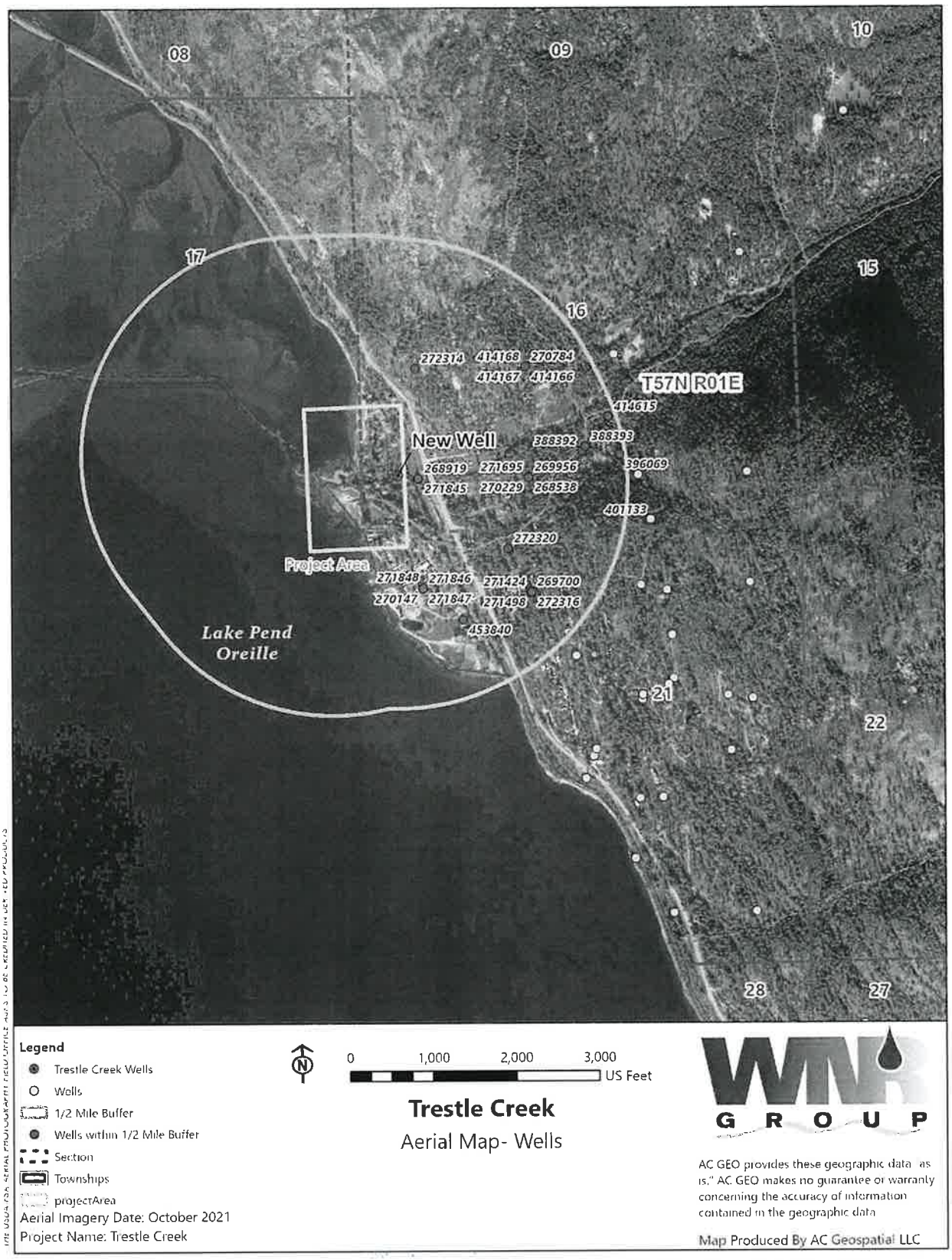


Figure 12: Groundwater Well Proximity Aerial Map Showing Wells within ½-Mile of Site. Well Logs and Figure Well Reference Nos. is provided in Table 2 (IDWR July 2023)

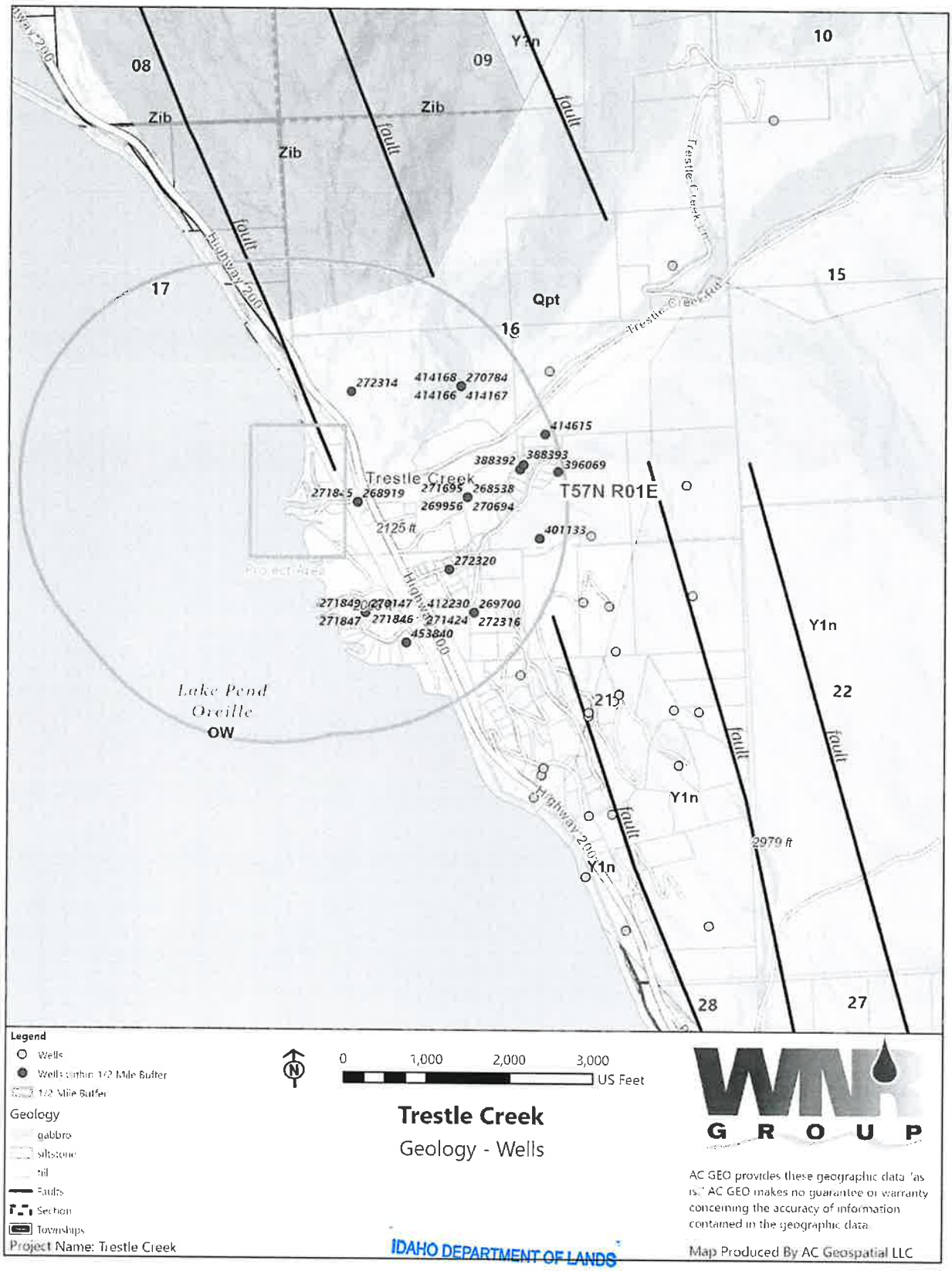


Figure 12: Groundwater Well Proximity Geologic Map Showing Wells within ½-Mile of Site. Well Logs and Figure Well Reference No. is provided in Table 2 (IDWR July 2023)

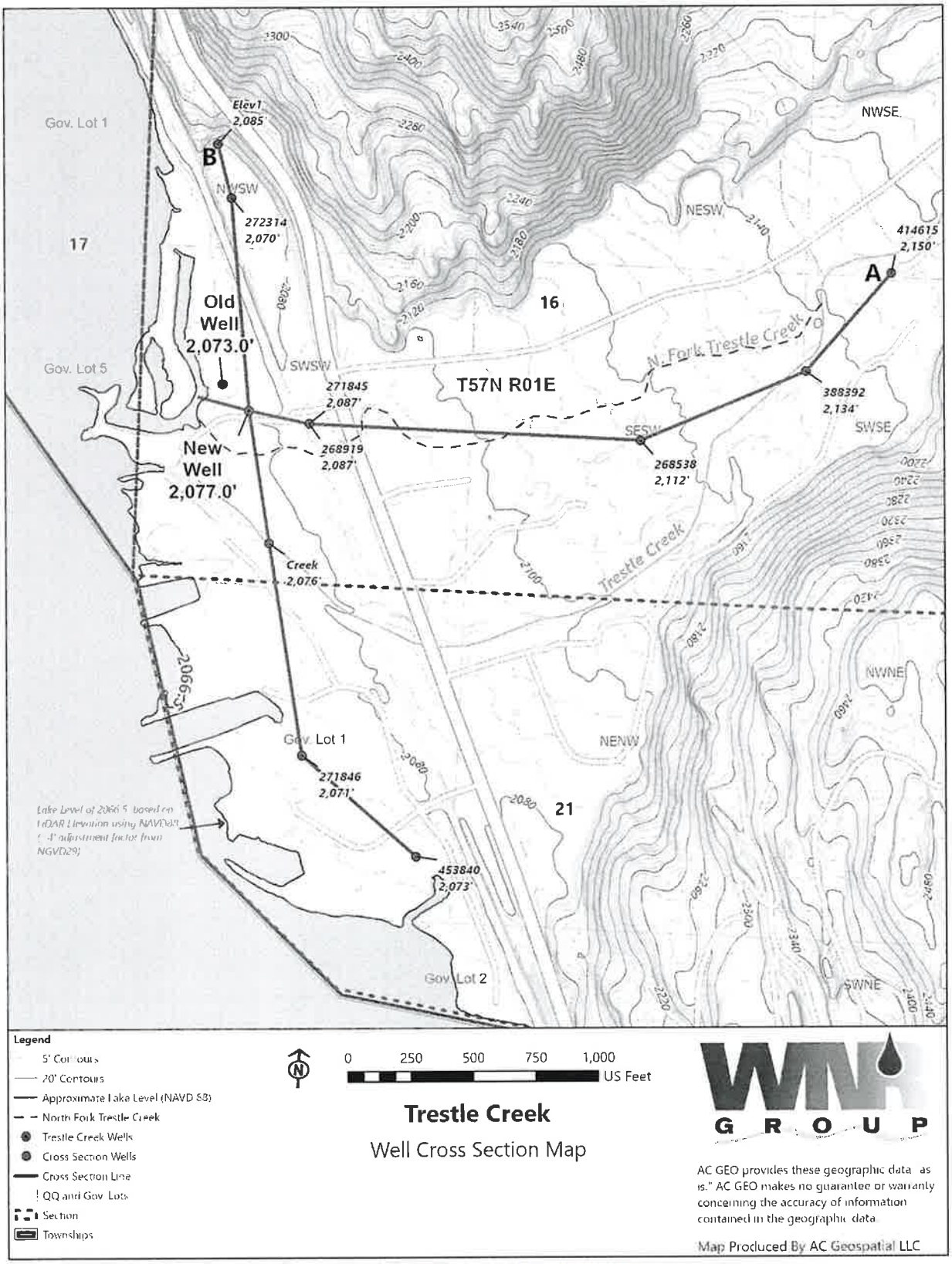


Figure 13: Map showing location of NFTC and location of Cross-sections developed for this report.

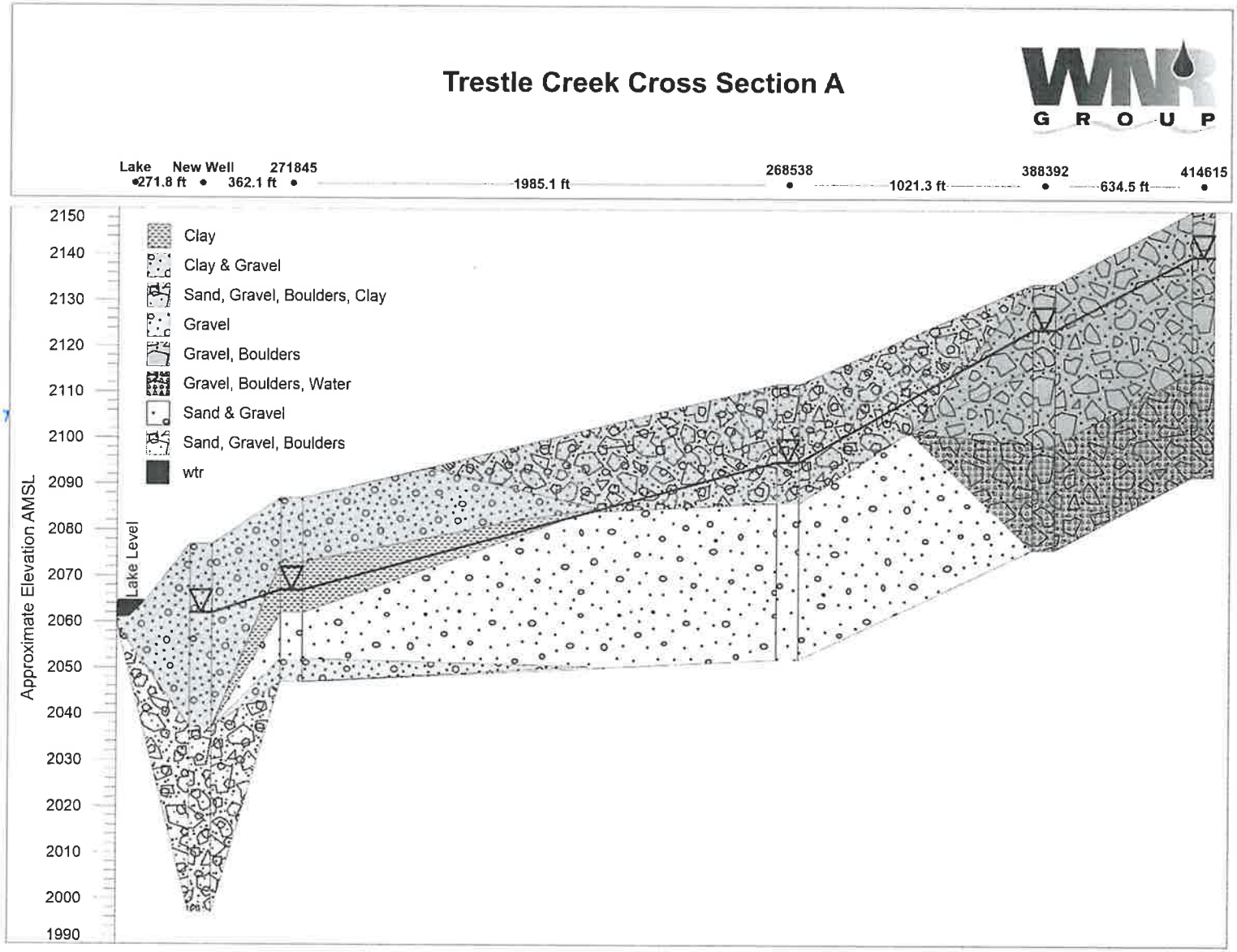


Figure 14: E-W Cross-section traversing down the Trestle Creek Valley. Well logs from IDWR (2023) database.

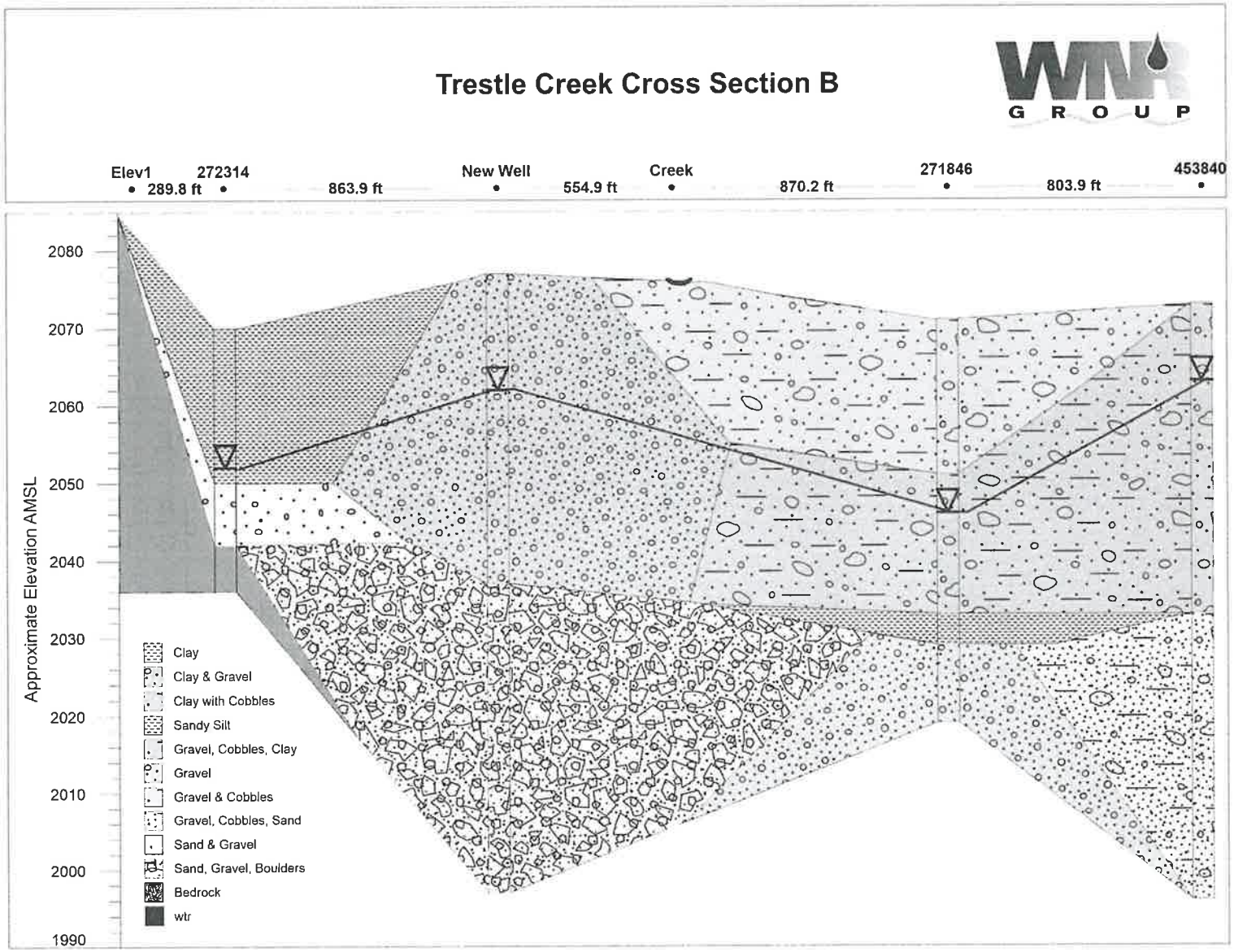


Figure 15: N-S Cross-section traversing across the lower Trestle Creek Valley. Well logs from IDWR (2023) database.

ATTACHMENT A

WELL LOGS

Form 238-7
6/07

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 0090671
Drilling Permit No. 96-9897 904126
Water right or injection well #

2. OWNER: Valient Idaho club
Name Valient Idaho Club
Address 310
City Celebration State FL Zip 34747

3.WELL LOCATION:
Twp. 57 North ☒ or South ☐ Rge. 01 East ☒ or West ☐
Sec. 16 10 acres 1/4 SW 40 acres 1/4 SW 160 acres 1/4
Gov't Lot ____ County Bonner
Lat. 48 ° 17.0040 (Deg. and Decimal minutes)
Long. -116 ° 21.1080 (Deg. and Decimal minutes)
Address of Well Site Hwy 200 And Trestle Creek
(Give at least road or road + distance to road or landmark) City Sandpoint
Lot. ____ Blk. ____ Sub. Name ____

4. USE:
☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection
☐ Other ____

5. TYPE OF WORK:
☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other ____

6. DRILL METHOD:
☒ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other ____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method/procedure
Bentonite	0	60	65 Bags	Gravity

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/ Schedule	Material	Casing	Liner	Threaded	Welded
8"	-2	70	322	Steel	☒	☐	☐	☒
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 75

9. PERFORATIONS/SCREENS:
Perforations ☐ Y ☒ N Method ____
Manufactured screen ☒ Y ☐ N Type Allied
Method of installation Set

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
70	80	.80		7in	Stainless	Steel

Length of Headpipe ____ Length of Tailpipe ____
Packer ☒ Y ☐ N Type K

10.FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method

11. FLOWING ARTESIAN:
Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) ____
Describe control device Well cap

12. STATIC WATER LEVEL and WELL TESTS:
Depth first water encountered (ft) 50 Static water level (ft) 15
Water temp. (°F) 45° Bottom hole temp. (°F) 45°
Describe access port Well cap

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
60	180	8 hours

Test method: Pump ☒ Bailer ☐ Air ☐ Flowing artesian ☐

Water quality test or comments: Light - Clear

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water Y	Water N
12	0	60	Surface Soil	X	
8	0	20	Clay Silt gravel		X
8	20	40	Wet clay gravel	X	
8	40	80	Large Gravel, Course Sand		
			Water		

RECEIVED
MAY 05 2022
IDWR/NORTH

Completed Depth (Measurable): 80
Date Started: March 8-22 Date Completed: March 9-22

14. DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Universal Drilling Co. No. 650
*Principal Driller Scott Hille Date April 1 22
*Driller Austin Hille Date April 1-22
*Operator II Austin Hille Date April 1-22
Operator I ____ Date ____

* Signature of Principal Driller and rig operator are required.

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Resources

POSTED

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

N

WELL OWNER

Name Harvey Kohler

Address Box 173 Sandpoint Ida. 83864

Owner's Permit No. 96-80-N-152

NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

METHOD DRILLED

☐ Cable ☒ Air Rotary ☐ Dug ☐ Other

WELL CONSTRUCTION

Diameter of hole 6 inches Total depth ______ feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
___ inches	___ inches	___ feet	___ feet
___ inches	___ inches	___ feet	___ feet
___ inches	___ inches	___ feet	___ feet
___ inches	___ inches	___ feet	___ feet
___ inches	___ inches	___ feet	___ feet

Was casing drive shoe used? ☒ Yes ☐ No

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☒ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☒ Torch

Size of perforation 1/4 inches by 8? inches

Number	From	To
___ perforations	23' feet	26' feet
___ perforations	___ feet	___ feet
___ perforations	___ feet	___ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name ______

Type ______ Model No. ______

Diameter ___ Slot size ___ Set from ___ feet to ___ feet

Diameter ___ Slot size ___ Set from ___ feet to ___ feet

Gravel packed? ☐ Yes ☒ No Size of gravel ______

Placed from ______ feet to ______ feet

Surface seal depth 18' Material used in seal ☐ Cement grout ☐ Puddling clay ☒ Well cuttings

Sealing procedure used ☐ Slurry pit ☐ Temporary surface casing ☐ Overbore to seal depth

LOCATION OF WELL

Sketch map location must agree with written location.

N / W / E / S

Subdivision Name Trestle Creek Estates

Lot No. 1 Block No. 2

County Bonner

NE ¼ SW ¼ Sec. 16, T. 57 Ⓝ/S, R. 1 Ⓔ/W

7. WATER LEVEL

Static water level 20 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow ______

Temperature ______ °F. Quality ______

Artesian closed-in pressure ______ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Other air Lift

Discharge G.P.M.	Draw Down	Hours Pumped
15	none	2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6"	0	2	Top Soil		✓
6"	2	18	Clay & Gravel		✓
6"	18	26	Gravel & water	✓	

RECEIVED MAY 2? 1980 Department of Water Resources Northern District Office

IDAHO DEPARTMENT OF LANDS MAY 13 2024 PEND OREILLE LAKE AREA

RECEIVED JUN 20 1980 Department of Water Resources Northern District Office

RECEIVED MAY 6 1980 Department of Water Resources

10.

Work started 4-8-80 finished 4-9-80

11. DRILLERS CERTIFICATION

Firm Name Sand Rock Drilling Firm No. 248

Address Star Rt. Libby Mont. Date 4-26-80

Signed by (Firm Official) Donald L. McCracken

and

(Operator) Donald L. McCracken

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE COPY TO THE DEPARTMENT

Form 238-7
11/97

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

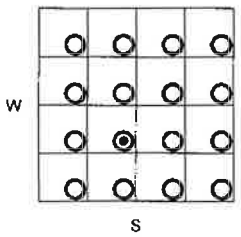
OFFICE USE ONLY
Inspected by
Twp. ____ Rge. ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat. : : Long : :

ENTERED

1. WELL TAG NO. D 0051273
DRILLING PERMIT NO. 83991
Other IDWR No.

2. OWNER
Name PEND OREILLE BONNER DEVELOPMENT
Address 151 CLUBHOUSE WAY
City SANDPOINT State ID Zip 83864

3. LOCATION OF WELL by legal description
Sketch map location must agree with written location.



Twp. 57 North ◉ or South ○
Rge. 1 East ◉ or West ○
Sec. 16 ____ 1/4 (10 acres) NE 1/4 (40 acres) SW 1/4 (160 acres)
Gov't Lot ____ County Bonner
Lat. : :
Long : :

Address of Well
0.2 mile up Trestle Creek Rd on left City Sandpoint
(Give at least name of road + Distance to Road or Landmark)

Lt. ____ Blk. ____ Sub. Name ____

4. Use
○Domestic ○Municipal ◉Monitor ○Irrigation
○Thermal ○Injection ○Other ____

5. TYPEOF WORK check all that apply (Replacement etc.)
◉New Well ○ Modify ○Abandonment ○Other ____

6. DRILL METHOD
◉Air Rotary ○Cable Tool ○Mud Rotary ○Other ____

7. SEALING PROCEDURES

SEAL / FILTER PACK			AMOUNT	Method
Material	From	To	Sacks or pounds	
Bentonite Slurry	0'	18'	3 sacks	Overbore

Was drive shoe used? ○ Y ◉ N Shoe Depths(s) 7"
Was drive shoe seal tested? ○ Y ◉ N How? N/A

8. Casing / Liner

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1	7'	0.250	Steel	◉	○	◉	○
					○	○	○	○
					○	○	○	○
					○	○	○	○

Length of Headpipe N/A Length of Tailpipe N/A

9. PERFORATIONS / SCREENS
Perforations Method N/A
Screens Screen Type PVC

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
29'	39'	10	N/A	2"	PVC	○	○
						○	○
						○	○

. STATIC WATER LEVEL OR ARTESIAN PRESSURE
18' ft. below ground Artesian pressure N/A lb.

Depth flow encountered N/A ft. Describe access port or control devices: N/A

11. WELL TESTS
○Pump ○Bailer ○Air ○Flowing

Yield Gal. / Min.	Drawdown	Pumping Level	Time

Water Temp. 50 Bottom Hole Temp. ____
Water Quailty test or comments Good
Depth first Water 17'

12. LITHOLOGIC LOG: (Describe repairs or abandoment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	1	Topsoil		☑
10	1	17	Cemented gravel and sand		☑
6	17	39	Sand and gravel	☑	

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

RECEIVED
AUG 10 2007
IDWR/North

Completed Depth 39' (Measurable)
Date Started 12-04-06 Completed 12-06-06

13. DRILLER'S CERTIFICATION
I/we certify that all minimum well construction standards were complelied with at the time the rig was removed.
Company Name Intermountain Drilling Firm No. 513
Firm Official [signature] Date 8-6-07
and
Driller or Operator [signature] Date 8-6-07
(Sign once if Firm Official & operator)

FORWARD WHITE COPY TO WATER RESOURCES

57N 2E 16

Form 238-7
11/97

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

OFFICE USE ONLY
Insepcted by
Twp. ____ Rge. ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat. : : Long : :

ENTERED

1. WELL TAG NO. D 0051274
DRILLING PERMIT NO. 843992
Other IDWR No.

2. OWNER
Name PEND OREILLE BONNER DEVELOPMENT
Address 151 CLUBHOUSE WAY
City SANDPOINT State ID Zip 83864

3. LOCATION OF WELL by legal description
Sketch map location must agree with written location.

N / W / E / S

Twp. 57 North ◉ or South ○
Rge. 1 East ◉ or West ○
Sec. 16 ____ 1/4 (10 acres) NE 1/4 (40 acres) SW 1/4 (160 acres)
Gov't Lot ____ County Bonner
Lat. : :
Long : :

Address of Well
0.2 mile up Trestle Creek Rd on left City Sandpoint
(Give at least name of road + Distance to Road or Landmark)

Lt. ____ Blk. ____ Sub. Name ____

4. Use
○Domestic ○Municipal ◉Monitor ○Irrigation
○Thermal ○Injection ○Other ____

5. TYPEOF WORK check all that apply (Replacement etc.)
◉New Well ○ Modify ○Abandonment ○Other ____

6. DRILL METHOD
◉Air Rotary ○Cable Tool ○Mud Rotary ○Other ____

7. SEALING PROCEDURES

SEAL / FILTER PACK Material	From	To	AMOUNT Sacks or pounds	Method
Bentonite Slurry	0'	18'	3 sacks	Overbore

Was drive shoe used? ○ Y ◉ N Shoe Depths(s) 9'
Was drive shoe seal tested? ○ Y ◉ N How? N/A

8. Casing / Liner

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1	9'	0.250	Steel	◉	○	◉	○
					○	○	○	○
					○	○	○	○
					○	○	○	○

Length of Headpipe N/A Length of Tailpipe N/A

9. PERFORATIONS / SCREENS
Perforations Method N/A
Screens Screen Type PVC

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
29'	39'	10	N/A	2"	PVC	○	○
						○	○
						○	○

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE
17' ft. below ground Artesian pressure N/A lb.

Depth flow encountered N/A ft. Describe access port or control devices: N/A

57 N 1E 16

11. WELL TESTS
○Pump ○Bailer ○Air ○Flowing

Yield Gal. / Min.	Drawdown	Pumping Level	Time

Water Temp. 50 Bottom Hole Temp. ____
Water Quailty test or comments Good
Depth first Water 18'

12. LITHOLOGIC LOG: (Describe repairs or abandoment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	18	Cemented gravel and sand		✓
6	18	39	Sand and gravel	✓	

IDAHO DEPARTMENT OF LANDS
MAY 13 2021
PEND OREILLE LAKE AREA

RECEIVED
MAY 10 2007
IDWR/North

Completed Depth 39'
Date Started 12-06-06 Completed (Measurable) 12-10-06

13. DRILLER'S CERTIFICATION
I/we certify that all minimum well construction standards were complelied with at the time the rig was removed.
Company Name Intermountain Drilling Firm No. 513
Firm Official ____ Date 8-6-07
and
Driller or Operator Keller Date 8-6-07
(Sign once if Firm Official & operator)

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
11/97

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

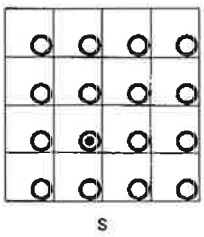
OFFICE USE ONLY
Inspected by
Twp. ____ Rge. ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat. : : Long : :

ENTERED

1. WELL TAG NO. D 0051275
DRILLING PERMIT NO. 843993
Other IDWR No.

2. OWNER
Name PEND OREILLE BONNER DEVELOPMENT
Address 151 CLUBHOUSE WAY
City SANDPOINT State ID Zip 83864

3. LOCATION OF WELL by legal description
Sketch map location must agree with written location.



Twp. 57 North ◉ or South ○
Rge. 1 East ◉ or West ○
Sec. 16 ____ 1/4 (10 acres) NE 1/4 (40 acres) SW 1/4 (160 acres)
Gov't Lot ____ County Bonner
Lat. : :
Long : :

Address of Well
0.2 mile up Trestle Creek Rd on left City Sandpoint
(Give at least name of road + Distance to Road or Landmark)

Lt. ____ Blk. ____ Sub. Name ____

4. Use
○ Domestic ○ Municipal ◉ Monitor ○ Irrigation
○ Thermal ○ Injection ○ Other ____

5. TYPE OF WORK check all that apply (Replacement etc.)
◉ New Well ○ Modify ○ Abandonment ○ Other ____

6. DRILL METHOD
◉ Air Rotary ○ Cable Tool ○ Mud Rotary ○ Other ____

7. SEALING PROCEDURES

SEAL / FILTER PACK Material	From	To	AMOUNT Sacks or pounds	Method
Bentonite Slurry	0'	18'	3 sacks	Overbore

Was drive shoe used? ○ Y ◉ N Shoe Depths(s) 10'
Was drive shoe seal tested? ○ Y ◉ N How? N/A

8. Casing / Liner

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1	10'	0.250	Steel	◉	○	◉	○
					○	○	○	○
					○	○	○	○
					○	○	○	○

Length of Headpipe N/A Length of Tailpipe N/A

9. PERFORATIONS / SCREENS
Perforations Method N/A
Screens Screen Type PVC

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
29'	39'	10	N/A	2"	PVC	○	○
						○	○
						○	○

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE
14' ft. below ground Artesian pressure N/A lb.

Depth flow encountered N/A ft. Describe access port or control devices: N/A

57N 1E 16

11. WELL TESTS
○ Pump ○ Bailer ○ Air ○ Flowing

Yield Gal. / Min.	Drawdown	Pumping Level	Time

Water Temp. 50 Bottom Hole Temp. ____
Water Quality test or comments: Good
Depth first Water 23'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	18	Cemented gravel and sand		☑
6	18	23	Cemented gravel and sand		☑
6	23	39	Sand and gravel	☑	

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

RECEIVED
AUG 10 2007
IDWR/North

Completed Depth 39' (Measurable)
Date Started 12-10-06 Completed 12-12-06

13. DRILLER'S CERTIFICATION
I/we certify that all minimum well construction standards were complelied with at the time the rig was removed.
Company Name Intermountain Drilling Firm No. 513
Firm Official [signature] Date 8-6-07
and
Driller or Operator [signature] Date 8-6-07
(Sign once if Firm Official & operator)

FORWARD WHITE COPY TO WATER RESOURCES

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

ENT'D

RECEIVED
DEC 16 1969
Department of Reclamation

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name Fred & Rosabeth Burnside

Address Box 329 Hope Idaho

Owner's Permit No. 96-69-N-2

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotory ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 34 feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
_____ inches	_____ inches	+1 feet	32 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☑ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☑ Torch

Size of perforation ½" inches by ½" inches

Number	From	To
_____ perforations	28 feet	32 feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☑ No Size of gravel _____

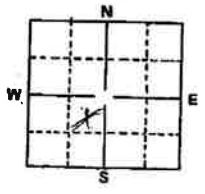
Placed from _____ feet to _____ feet

Surface seal? ☑ Yes ☐ No To what depth 18 feet

Material used in seal ☐ Cement grout ☑ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



26

County Bonner

NW ¼ SW ¼ Sec. 16, T. 57 N, R. 1 E

7. WATER LEVEL

Static water level 18 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow _____

Temperature _____ ° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA Welded cap. Pump to be installed by C & J Plumbing Later

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
5 GPM	12 ft	

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	20	Brown Clay & silt		✓
	20	28	Sand Gravel & Cobbles Clay		✓
	28	34	Boulders Red Rock		✓
	34		Bottom of Hole		

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

10.

Work started 12-3-69 finished 12-9-69

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

C. & J. Plumbing & Heating Inc 178
Driller's or Firm's Name Number

Box L Sandpoint
Address

Donald E. McEuen 12-13-69
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY

Form 238-7
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPORT

MICROFILMED

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Bill Freeman or Darold Sauer

Address 695 Hy 2 Hope, Id. 83836

Owner's Permit No. applied for 96-86-N-59

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☒ Other church camp (specify type)

4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other

Thickness	Diameter	From	To
.250 inches	6 inches	+ 18" feet	62 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

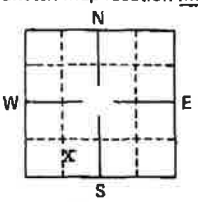
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation ____ inches by ____ inches

Number	From	To
perforations	feet	feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☒ Yes ☐ No
Manufacturer's name Cook
Type stainless steel Model No.
Diameter 6 Slot size 14 Set from 62 feet to 72 feet
Diameter ___ Slot size ___ Set from ___ feet to ___ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel
Placed from ___ feet to ___ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Puddling clay ☐
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port well cap

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name
Lot No. ___ Block No. ___

County Bonner

S SE ¼ SE ¼ Sec. 16, 57 N, T. 1 E N/S, R. E/W.

7. WATER LEVEL

Static water level 24 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow
Artesian closed-in pressure ___ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ___ °F. Quality
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Air ☐ Other

Discharge G.P.M.	Pumping Level	Hours Pumped
50	72	2

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	1	10	large gravel		x
8	10	25	cemented sand & gravel		x
6	25	72	brown sand	x	

RECEIVED
FEB 02 1987
Department of Water Resources

RECEIVED
JAN 27 1987
Department of Water Resources
Northern District Office

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

10.

Work started 8-13-86 finished 8-21-86

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Bronson Water Wells Firm No. 360

Address Box 1 Spirit Lake, Id Date 8-22-86

Signed by (Firm Official) K D Bronson

and

(Operator)

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

n 238-7
3

POSTED

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

N 9B.

1. WELL OWNER

Name Denn's McDaniel

Address Hope

Owner's Permit No. 96-82-N-87

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning) _____

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 inches	+ 1 feet	77 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

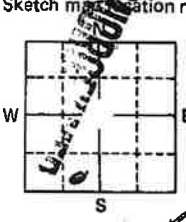
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☒ Torch
Size of perforation 3/16 inches by 4 inches

Number	From	To
20 perforations	71 feet	76 feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 18 Material used in seal: ☐ Cement grout ☒ Puddling clay ☐ Well cuttings
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port welded cap

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____
County Bonner
SE ¼ SW ¼ Sec. 16, T. 57 N/S, R. 1 E/W.

7. WATER LEVEL

Static water level 15 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 42 F. Quality cool

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
10	76	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	2	Top soil		X
6	2	38	boulders gravel		X
6	38	50	gravel		X
6	50	77	Rock	X	

RECEIVED
OCT 25 1982
Department of Water Resources
Northern District Office

0045881

DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

10.

Work started 10-9-82 finished 10-13-82

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Bob Erickson's Firm No. 235
Address RT 3 Box 106 Date 10-15-82
Signed by (Firm Official) _____
and
(Operator) _____

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

Form 238-7
1/78

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

POSTED

1. WELL OWNER

Name Norm Rosenbergen Sr.

Address Tresel creek

Owner's Permit No. 96-80-N-63

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning) _____

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness		Diameter		From		To	
.250	inches	6	inches +	1	feet	50	feet
	inches		inches		feet		feet
	inches		inches		feet		feet
	inches		inches		feet		feet

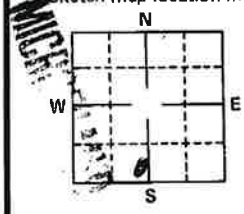
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number		From		To	
	perforations		feet		feet
	perforations		feet		feet
	perforations		feet		feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 18 Material used in seal: ☐ Cement grout ☒ Puddling clay ☐ Well cuttings
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port welded cap

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____
County _____
SE¼ SW¼ Sec. 16, T. 52 N/S, R. 1 E/W.

7. WATER LEVEL

Static water level 20 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 42°F. Quality good

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
15	45	1

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	2	top soil		X
	2	20	gravel Boulders Little clay		X
	20	40	gravel		X
	40	50	gravel-sand	X	

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

RECEIVED
NOV 24 1980
Department of Water Resources
Northern District Office

RECEIVED
DEC 1 1980
Department of Water Resources

10.

Work started 10-2-80 finished 10-3-80

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Bob Peterson's Firm No. 225
Address RT 3 Box 106 Date 10-21-80
Signed by (Firm Official) _____
and
(Operator) _____

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

RECEIVED
NOV 12 1971
Department of Water Administration

1. WELL OWNER

Name Jim Bossingham

Address Bx 285, Hope, Idaho

Owner's Permit No. 96-71-N-72

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☒ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 60 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
.279 inches	6 inches	-0- feet	42 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☐ Yes ☒ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____

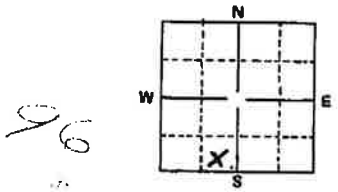
Placed from _____ feet to _____ feet

Surface seal? ☒ Yes ☐ No To what depth 20 feet

Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



96

County BONNER

SE ¼ SW ¼ Sec. 16, T. 57 (N) S, R. 1 (E) W

7. WATER LEVEL

Static water level 20 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow _____

Temperature _____ ° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☒ Bailer ☒ Other Air

Discharge G.P.M.	Draw Down	Hours Pumped
5 gpm		

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	40	Lg. Boulders	✓	
6	40	60	Decomposed GRANite	✓	

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

31107

10. Work started 9-17-71 finished 9-28-71

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Coeur d'Alene Drilling Inc #214
Driller's or Firm's Name Number

1926 N. 5th Cda, Idaho
Address

Doug Dillat 11-10-71
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

Form 238-7
11/97 JGE

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

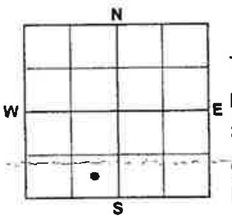
#1

Office Use Only			
Inspected by			
Twp	Rge	Sec	
1/4	1/4	1/4	
Lat: : :	Long: : :		

1. WELL TAG NO. D 0033864
DRILLING PERMIT NO. 0033864
Other IDWR No. 817724

2. OWNER:
Name BILL TRUBY
Address 113 MAIN ST.
City SANDPOINT State ID Zip 83864

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.



Twp. 57 North [X] or South [ ]
Rge. 1 East [X] or West [ ]
Sec. 16 1/4 SE 1/4 SW 1/4
10 acres 40 acres 160 acres
Gov't Lot County BONNER
Lat: Long:
Address of Well Site TRESTLE CREEK City HOPE
(Give at least name of road + Distance to Road or Landmark)
Lt. 6 Blk. 1 Sub. Name TRESTLE CREEK

4. USE:
[X] Domestic [ ] Municipal [ ] Monitor [ ] Irrigation
[ ] Thermal [ ] Injection [ ] Other

5. TYPE OF WORK: check all that apply (Replacement etc.)
[X] New Well [ ] Modify [ ] Abandonment [ ] Other

6. DRILL METHOD:
[X] Air Rotary [ ] Cable [ ] Mud Rotary [ ] Other

7. SEALING PROCEDURES:

Seal/Filter Pack Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	18	300#	TEMPCASE

Was drive shoe used? [X] Y [ ] N Shoe Depth(s) 58'
Was drive shoe seal tested? [X] Y [ ] N How? AIR

8. CASING/LINER:

Diameter	From	To	Guage	Material	Casing	Liner	Welded	Threaded
6	+1.5	58	.250	STEEL	[X]	[ ]	[X]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]

Length of Headpipe Length of Tailpipe

9. PERFORATIONS/SCREENS:
[ ] Perforations Method
[ ] Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
10 ft. below ground Artesian pressure lb.
Depth flow encountered 35 ft. Describe access port or control devices: WELDED CAP

11. WELL TESTS:
[ ] Pump [ ] Bailer [X] Air [ ] Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
30	55	55	1HR

Water Temp. COLD Bottom hole temp. COLD
Water Quality test or comments:
Depth first Water Encounter 35'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	18	GRAVEL/BOULDERS		
6	18	35	GRAVEL/BOULDERS		
6	35	58	GRAVEL/BOULDERS/WATER	X	

RECEIVED
JUN 28 2004
IDWR North

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

Completed Depth 58' (Measurable)
Date: Started 06/23/2004 Completed 06/23/2004

13. DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name MINDEN WATER WELLS,INC. Firm No. 320
Firm Official Edward C. Minden Date 06/23/2004
and
Driller or Operator [signature] Date 06/23/2004
(Sign once if Firm Official & Operator)

57N 1E 16

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
11/97 JGE

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

#2

Office Use Only
Inspected by
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: : : Long: : :

1. WELL TAG NO. D 0033865
DRILLING PERMIT NO. 0033865
Other IDWR No. 817725

2. OWNER:
Name BILL TRUBY
Address 113 MAIN ST.
City SANDPOINT State ID Zip 83864

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 57 North [X] or South [ ]
Rge. 1 East [X] or West [ ]
Sec. 16 ____ 1/4 (10 acres) SE 1/4 (40 acres) SW 1/4 (160 acres)
Gov't Lot ____ County BONNER
Lat: ____ Long: ____
Address of Well Site TRESTLE CREEK
City HOPE
(Give at least name of road + Distance to Road or Landmark)
Lt. 7 Blk. 1 Sub. Name TRESTLE CREEK

4. USE:
[X] Domestic [ ] Municipal [ ] Monitor [ ] Irrigation
[ ] Thermal [ ] Injection [ ] Other

5. TYPE OF WORK: check all that apply (Replacement etc.)
[X] New Well [ ] Modify [ ] Abandonment [ ] Other

6. DRILL METHOD:
[X] Air Rotary [ ] Cable [ ] Mud Rotary [ ] Other

7. SEALING PROCEDURES:

Seal/Filter Pack Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	18	300#	TEMPCASE

Was drive shoe used? [X] Y [ ] N Shoe Depth(s) 58'
Was drive shoe seal tested? [X] Y [ ] N How? AIR

8. CASING/LINER:

Diameter	From	To	Guage	Material	Casing	Liner	Welded	Threaded
6	+1.5	58	.250	STEEL	[X]	[ ]	[X]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]

Length of Headpipe ____ Length of Tailpipe ____

9. PERFORATIONS/SCREENS:
[ ] Perforations Method
[ ] Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
10 ft. below ground Artesian pressure ____ lb.
Depth flow encountered 35 ft. Describe access port or control devices: WELDED CAP

57N 1E 16

11. WELL TESTS:
[ ] Pump [ ] Bailer [X] Air [ ] Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
30	55	55	1HR

Water Temp. COLD Bottom hole temp. COLD
Water Quality test or comments:
Depth first Water Encounter 35'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	18	GRAVEL/BOULDERS		
6	18	35	GRAVEL/BOULDERS		
6	35	58	GRAVEL/BOULDERS/WATER	X	

RECEIVED
JUN 2[illegible]
IDWR North

IDAHO DEPARTMENT OF LANDS
MAY 13 20244
PENDORELLE LAKE AREA

Completed Depth 58' (Measurable)
Date: Started 06/23/2004 Completed 06/23/2004

13. DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name MINDEN WATER WELLS,INC. Firm No. 320
Firm Official Edward A Mundell Date 06/23/2004
and
Driller or Operator [signature] Date 06/23/2004
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
11/97 JGE

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Inspected by
Twp Rge Sec
1/4 1/4 1/4
Lat: : : Long: : :

1. WELL TAG NO. D D0035550
DRILLING PERMIT NO. D0035550
Other IDWR No. 825437

2. OWNER:
Name BILL TRUBY
Address 113 MAIN ST
City SANDPOINT State ID Zip 83864

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 57 North [X] or South [ ]
Rge. 1 East [X] or West [ ]
Sec. 16 1/4 SE (40 acres) 1/4 SW (160 acres) 1/4 (10 acres)
Gov't Lot County BONNER
Lat: Long:
Address of Well Site TRESTLE CREEK
City HOPE
(Give at least name of road + Distance to Road or Landmark)
Lt. 6 Blk. Sub. Name TRESTLE CREEK

4. USE:
[X] Domestic [ ] Municipal [ ] Monitor [ ] Irrigation
[ ] Thermal [ ] Injection [ ] Other

5. TYPE OF WORK: check all that apply (Replacement etc.)
[X] New Well [ ] Modify [ ] Abandonment [ ] Other

6. DRILL METHOD:
[X] Air Rotary [ ] Cable [ ] Mud Rotary [ ] Other

7. SEALING PROCEDURES:

Seal/Filter Pack Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	18	300	TEMP CASED

Was drive shoe used? [X] Y [ ] N Shoe Depth(s) 40
Was drive shoe seal tested? [X] Y [ ] N How? AIR

8. CASING/LINER:

Diameter	From	To	Guage	Material	Casing	Liner	Welded	Threaded
6	+11/2	40	.250	STEEL	[X]	[ ]	[X]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]

Length of Headpipe Length of Tailpipe

9. PERFORATIONS/SCREENS:
[ ] Perforations Method
[ ] Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
0 ft. below ground Artesian pressure 2 lb.
Depth flow encountered 200 ft. Describe access port or control devices: WELL CAP

11. WELL TESTS:
[ ] Pump [ ] Bailer [X] Air [ ] Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
12	200	200	1HR

Water Temp. COLD Bottom hole Temp. COLD
Water Quality test or comments: GOOOD
Depth first Water Encounter 200

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	18	GRAVEL / BOULDERS		
6	18	30	GRAVEL ./ BOULDERS		
6	30	38	GRAVEL ./ BOULDERS / CLAY		
6	38	200	GREY SHALE ./ MED HARD		
6	200	220	GREY SHALE / MED HARD / H20	X	

RECEIVED
IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

Completed Depth 220 (Measurable)
Date: Started 10/15/1904 Completed 10/21/2004

13. DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name MINDEN WATER WELLS,INC Firm No. 320
Firm Official Edward A Thurber Date 10/22/2004
and
Driller or Operator Date 10/22/2004
(Sign once if Firm Official & Operator)

57N 1E 16

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
11/97 JGE

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Inspected by
Twp Rge Sec
1/4 1/4 1/4
Lat: : : Long: : :

1. WELL TAG NO. D 0046379
DRILLING PERMIT NO. 84447
Other IDWR No.

2. OWNER:
Name BILL TRUBY
Address 113 MAIN ST
City SANDPOINT State ID Zip 83864

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 57 North [X] or South [ ]
Rge. 1 East [X] or West [ ]
Sec. 16 1/4 (10 acres) SE 1/4 (40 acres) SW 1/4 (160 acres)
Gov't Lot County BONNER
Lat: Long:
Address of Well Site 442 CREEKSIDE LANE
(Give at least name of road + Distance to Road or Landmark)
City HOPE
Lt. 8 Blk. 1 Sub. Name

4. USE:
[X] Domestic [ ] Municipal [ ] Monitor [ ] Irrigation
[ ] Thermal [ ] Injection [ ] Other

5. TYPE OF WORK: check all that apply (Replacement etc.)
[X] New Well [ ] Modify [ ] Abandonment [ ] Other

6. DRILL METHOD:
[X] Air Rotary [ ] Cable [ ] Mud Rotary [ ] Other

7. SEALING PROCEDURES:

Seal/Filter Pack Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	18	400#	TEMPCASE

Was drive shoe used? [X] Y [ ] N Shoe Depth(s) 58
Was drive shoe seal tested? [X] Y [ ] N How? AIR

8. CASING/LINER:

Diameter	From	To	Guage	Material	Casing	Liner	Welded	Threaded
6	+1.5	58	250	STEEL	[X]	[ ]	[X]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]

Length of Headpipe Length of Tailpipe

9. PERFORATIONS/SCREENS:
[ ] Perforations Method
[ ] Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
10 ft. below ground Artesian pressure N/A lb.
Depth flow encountered 35 ft. Describe access port or control devices: WELL CAP

11. WELL TESTS:
[ ] Pump [ ] Bailer [X] Air [ ] Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
30	55	55	1HR

Water Temp. COLD Bottom hole temp. COLD
Water Quality test or comments: N/A
Depth first Water Encounter 35

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	18	GRAVEL/BOULDERS		
6	18	35	GRAVEL/BOULDERS		
6	35	58	GRAVEL/BOULDERS/WATER	X	

RECEIVED
DEC 26 2006
IDWR/North

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

Completed Depth 58 (Measurable)
Date: Started 12/15/2006 Completed 12/15/2006

13. DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name MINDEN WATER WELLS,INC. Firm No. 320
Firm Official Edwarda Minden Date 12/21/2006
and
Driller or Operator Date 12/21/2006
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

57 N 1 E 16 SE SW

Form 238-7
8/90

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Irving & Charlotte Turner
Address Trestle creek, Hope, Idaho
Drilling Permit No. 96-92-N-21
Water Right Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Well diameter increase
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6" inches	+ 1 feet	59 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

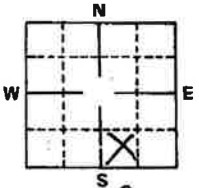
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch ☐ Gun
Size of perforation _____ inches by _____ inches

Number		From	To
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 18+ Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location



Subdivision Name _____
Lot No. _____ Block No. _____
County Bonner
SW ¼ SE ¼ Sec. 16, T. 57 N ☒ S ☐ R. 1 E ☒ W ☐

MICROFILMED JUL 08 1992

7. WATER LEVEL

Static water level 17 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality _____
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
Est. 60 GPM		2 Hours

9. LITHOLOGIC LOG 73466

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
8"	0	26	Sand, Gravel, Boulders		
			some Clay		X
6"	26	60	Sand + Gravel	X	

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

RECEIVED
APR 8 1992
NORTHERN REGION
IDWR

10. Work started 3-6-92 finished 3-7-92

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name AQUA DRILLING & EXPLORATION INC. Firm No. 163
Address P.O. Box 225 CDA, IDAHO 83814 Date 3-7-92
Signed by (Firm Official) Scott M. Braumbres
and
(Operator) Scott M. Braun

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

Form 238-7
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

N C

1. WELL OWNER

Name Roger Best

Address 298 Trailer Haven Rd. Hope, I.D. 83836

Owner's Permit No. 96-90-N-8

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☒ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	8 inches	+ 1 feet	30 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

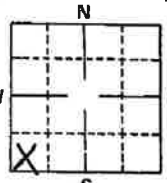
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☒ Yes ☐ No
Manufacturer's name Cook
Type Stainless Steel Model No. 10
Diameter 8" Slot size 20 Set from 30 feet to 35 feet
Diameter ___ Slot size ___ Set from ___ feet to ___ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing
☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port well seal

6. LOCATION OF WELL

Sketch map location must agree with written location



Subdivision Name _____
Lot No. Tax 10 Block No. _____
County Bonner
SW ¼ SW ¼ Sec. 16, T. 57 N, R. 1 E

7. WATER LEVEL

Static water level -15 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 44 °F. Quality Excellent
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
30	35'	1

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
8"	+1	28	Sand, Gravel and Boulders		X
	28	35	Sand, Gravel	X	

RECEIVED
MAR 27 1990
REGION
IDWR

RECEIVED
APR 2 1990
Department of Water Resources

101332

IDAHO DEPARTMENT OF LANDS
MAY 13 2024

10. PEND OREILLE LAKE AREA
Work started 3-12-90 finished 3-20-90

11. DRILLERS CERTIFICATION DL

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Bob Pitts & Sons Firm No. 235
Address Sandpoint, ID Date 3-20-90
Signed by (Firm Official) Dale Pitts
and
(Operator) _____

MICROFILMED
JUN 21 1991

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

Dept of Water Administration
State House Annex 2
Boise Idaho 83707

RECEIVED
INFO
Department of Water Administration

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Al & Rose Sylvester

Address Hope Ida.

Owner's Permit No. 96-73-N-7

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotory ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6" inches Total depth 40 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness		Diameter		From		To	
.082-.80	inches	6.65	inches	+ 1	feet	40	feet
	inches		inches		feet		feet
	inches		inches		feet		feet
	inches		inches		feet		feet
	inches		inches		feet		feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☒ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☒ Torch

Size of perforation ½" and inches by ____ inches

Number		From		To	
____	perforations	36	feet	40	feet
____	perforations	____	feet	____	feet
____	perforations	____	feet	____	feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name ____

Type ____ Model No. ____

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel ____

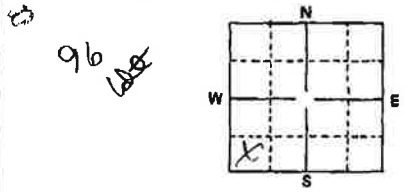
Placed from ____ feet to ____ feet

Surface seal? ☒ Yes ☐ No To what depth 18 feet

Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



County Boonner

SW ¼ SW ¼ Sec. 16, T. 57 N, R. 1 E

7. WATER LEVEL

Static water level 20 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. ____

Temperature ____ ° F. Quality ____

Artesian closed-in pressure ____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

Well Test By Driller

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
20 GPM	5'	1½ hrs

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6"	0	14	Clay & Gravel		X
	14	25	Hard pan Clay		X
	25	35	Sand & Gravel		X
	35	40	Pea Gravel w/ Water	X	

IDAHO DEPARTMENT OF LANDS

MAY 13 2024

PEND OREILLE LAKE AREA

GO3256

10.

Work started 2-21-73 finished 3-1-73

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Gold Brick Drilling

Donald L McCracken 248
Driller's or Firm's Name Number

Rt 2 Box 508 Libby Mont
Address

Donald L McCracken 3-3-73
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

Dept. of Water Administration
Statehouse Annex 2
Boise Idaho 83720

RECEIVED
MAR 13 1973
Department of Water Administration

ENTD

1. WELL OWNER

Name Don Wenzel

Address Hope Ida

Owner's Permit No. 96-73-N-8

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6" inches Total depth 52 feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
0.280 inches	6 5/8 inches	+1 feet	52 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☑ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☑ Torch

Size of perforation ½" inches by _____ inches

Number	From	To
_____ perforations	48 feet	52 feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name _____

Type _____ Model No. _____

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Diameter ___ Slot size ___ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☑ No Size of gravel _____

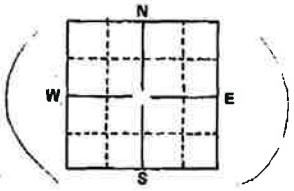
Placed from _____ feet to _____ feet

Surface seal? ☑ Yes ☐ No To what depth 18 feet

Material used in seal ☐ Cement grout ☑ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



96

County Bonner

Lot #1 ¼ ¼ Sec. 21 T. 57 N. R. 1 E. W.

7. WATER LEVEL

Static water level 25' feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow _____

Temperature _____ ° F. Quality _____

Artesian closed-in pressure _____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA Well Sealed By Driller

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
15 GPM	5'	2 Hrs.

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6"	0	20	Cobbles - clay - Gravels		✓
"	20	38	Hard pan clay w/ cobbles		✓
"	38	42	Sandy Silt		✓
"	42	52	Pea Gravel w/ water	✓	
		52	Bottom of Hole		

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

C02358

10.

Work started 2-24-73 finished 2-25-73

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Gold Brick Drilling.

Ronald L McCracken 248
Driller's or Firm's Name Number

RT 2 Box 508 Kalispell Mont.
Address

Ronald L McCracken 3-3-73
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

RECEIVED 1973 Department of Water Administration

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

RECEIVED 19-1973

1. WELL OWNER

Name Jack & Margaret Best

Address Hope Ida

Owner's Permit No. 96-73-N-9

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotory ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole ____ inches Total depth 31 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
0.280 inches	6⅝ inches	+ 1 feet	31 feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☒ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☒ Torch

Size of perforation ____ inches by ____ inches

Number	From	To
Knd. perforations	27 feet	31 feet
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name ____

Type ____ Model No. ____

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel ____

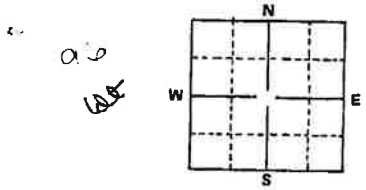
Placed from ____ feet to ____ feet

Surface seal? ☒ Yes ☐ No To what depth 18 feet

Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



County Bonner

Lot ¼ ¼ Sec. 24, T. 52 N, R. 1 E

7. WATER LEVEL

Static water level 16 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow ____

Temperature ____° F. Quality ____

Artesian closed-in pressure ____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

Well Scaled By Driller

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
20 GPM	5'	2hr

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
	0	10	Gravel & cobbles		X
	10	17	Clay & Gravel		X
	17	24	Silty Clay		X
	24	31	WATER Sand & Gravel	X	

IDAHO DEPARTMENT OF LANDS

MAY 13 2024

PEND OREILLE LAKE AREA

C03-57

10.

Work started 2-25-73 finished 2-26-73

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Gold Brick Drilling

Donald L McCracken 248
Driller's or Firm's Name Number

RT 2 Box 508 Libby Mont.
Address

Donald L McCracken 3-3-73
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name: Jebe Margaret Best

Address: Hope Ida

Owner's Permit No.: 96-73-N-10

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 5/8 inches Total depth 30 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
0.280 inches	6 5/8 inches	+ 1 feet	30 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☒ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☒ Torch

Size of perforation 1/2 [illegible] inches by ____ inches

Number	From	To
perforations	25 feet	30 feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name ____

Type ____ Model No. ____

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel ____

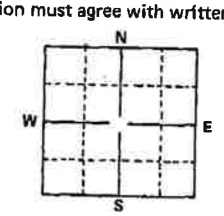
Placed from ____ feet to ____ feet

Surface seal? ☒ Yes ☐ No To what depth ~~25~~ 18 feet (Error by Sec.)

Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



County: Bonner

Lot 1 ¼ ____ ¼ Sec. 21, T. 57 N, R. 1 E

7. WATER LEVEL

Static water level 15 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow ____

Temperature ____ °F. Quality ____

Artesian closed-in pressure ____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

Well Seal By Driller

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
20 GPM	5'	2 hrs.

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6"	0	18	Clay cobbles & Gravel		X
	18	25	Silty Clay		X
	25	30	water Sand	X	

C03259

10.

Work started 2-26-73 finished 2-27-73

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Gold Brick Drilling
Donald L McCracken
Driller's or Firm's Name 218 Number

RT 2 Box 508 Libby Mont
Address

Donald L McCracken 3-3-73
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

ENTD

RECEIVED
Department of Water Administration

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1. WELL OWNER

Name WALTer F. RuBerg

Address Hope Ida

Owner's Permit No. 96-73-N-11

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotory ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6" inches Total depth 58 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
0.280 inches	6⅝ inches	+1 feet	58 feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☒ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☒ Torch

Size of perforation ½" inches by ____ inches

Number	From	To
____ perforations	54 feet	58 feet
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name ____

Type ____ Model No. ____

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel ____

Placed from ____ feet to ____ feet

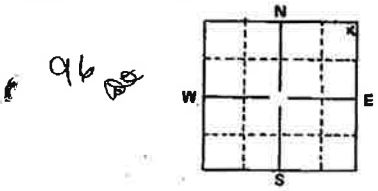
Well was Sealed. Error By Sa 18

Surface seal? ☒ Yes ☐ No To what depth 18 feet

Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



96

County Bonner

Govn. Lot #1 ¼ ¼ Sec. 21 T. 57 N R. 1 E

7. WATER LEVEL

Static water level 25 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow ____

Temperature ____ ° F. Quality ____

Artesian closed-in pressure ____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA Well seal By Driller

☒ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
15 GPM	5'	2 Hrs

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6"	0	4	Clay		✓
"	4	15	Cobbles & Gravel		✓
"	15	32	Clay cobbles w/ Gravel		✓
"	32	40	Sand & Silt	✓	
"	40	58	Pea Gravel	✓	
		58	Bottom of Hole		

IDAHO DEPARTMENT OF LANDS

MAY 13 2024

PEND OREILLE LAKE AREA

10.

Work started 2-22-73 finished 2-24-73

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Donald L McCracken Bell Brick Drilling 248
Driller's or Firm's Name Number

RT 2 Box 508 Libby Mont.
Address

Donald L McCracken 3-3-73
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY

Form 238-7
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

ENT'D

N

1. WELL OWNER

Name Mr + Mrs Jim McDaniels

Address Box 1934 Sandpoint Idaho

Owner's Permit No. 96-84-N-86

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 inches	+ 1 feet	43.6' feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

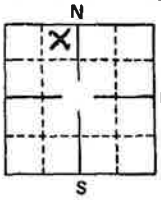
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number		From	To
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet
_____	perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 18' Material used in seal: ☐ Cement grout
☒ Bentonite ☒ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing
☐ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____
County Bonner
NE ¼ NW ¼ Sec. 21, T. 57 ☐N ☐S, R. 1 ☐E ☐W.

7. WATER LEVEL

Static water level 25 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 50 °F. Quality clear
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
25-30 gpm	Air test approx	

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	2	top		✓
	2	23	clay bound - gravel and boulders		✓
	23	43	Coarse sand + gravel	✓	

RECEIVED
SEP 4 1984
Department of Water Resources

RECEIVED
AUG 28 1984
Department of Water Resources
Northern District Office

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

C04331

10.

Work started 8-1-84 finished 8-1-84

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Intermountain Drilling
Firm Name _____ Firm No. 252
Address Rt 1 Box 312 Priest River Date 8-26-84
Signed by (Firm Official) Norman D. Hoyer
and
(Operator) Same

MICROFILMED

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

RECEIVED
MAR 10 1976

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Fred Dart.

Address Hope, Idaho

Owner's Permit No. 96-75-N-92

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☑ Cable ☐ Rotory ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 54 feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
17/64 inches	6 5/8 inches	+ 1 feet	54 feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☑ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☑ Torch

Size of perforation 1/2 inches by Rnd. inches

Number	From	To
20 perforations	50 feet	54 feet
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name ____

Type ____ Model No. ____

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☑ No Size of gravel ____

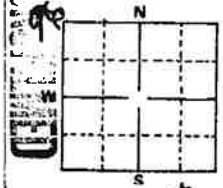
Placed from ____ feet to ____ feet

Surface seal depth 18 Material used in seal ☐ Cement grout ☐ Puddling clay ☑ Well cuttings

Sealing procedure used ☑ Slurry pit ☐ Temporary surface casing ☐ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name Trestle Creek

Lot No. ____ Block No. ____

County Bonner Idaho

NE ¼ NW ¼ Sec. 21, T. 57 N, R. 1 E

7. WATER LEVEL

Department of Water Resources

Static water level 30 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow ____

Temperature ____ ° F. Quality ____

Artesian closed-in pressure ____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
15 GPM	6'	2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6"	0	8	Silt		✓
	8	25	clay & cobbles		✓
	25	35	fractured bedrock clay		✓
	35	47	Silt & Clay		✓
	47	54	Water Sand	✓	

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

C03620

10.

Work started 12-15-75 finished 12-23-75

11. DRILLERS CERTIFICATION

Firm Name Gold Bug Drilling Firm No. 248

Address Box 50 Libby Mont. Date 12-24-75

Signed by (Firm Official) Donald L McCracken

and

(Operator) Donald L McCracken

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE COPY TO THE DEPARTMENT

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

RECEIVED
JUN 18 1976
Department of Water Resources

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Ray McGinnis

Address RT 2 Box 260 Post Falls Ida

Owner's Permit No. 96-76-N-65

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or injection

4. METHOD DRILLED

☑ Cable ☐ Rotory ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 40 feet

Casing schedule: ☑ Steel ☐ Concrete

Thickness	Diameter	From	To
17 inches	6 5/8 inches	+1 feet	40 feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet
____ inches	____ inches	____ feet	____ feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☑ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☑ Torch

Size of perforation 1/2" inches by ____ inches

Number	From	To
24 perforations	36 feet	40 feet
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name ____

Type ____ Model No. ____

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Diameter ____ Slot size ____ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☑ No Size of gravel ____

Placed from ____ feet to ____ feet

Surface seal depth 18 Material used in seal ☐ Cement grout ☐ Puddling clay ☑ Well cuttings

Sealing procedure used ☐ Slurry pit ☐ Temporary surface casing ☑ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.

96

Subdivision Name Trestle Creek

Lot No. ____ Block No. ____

County Bonner Co.

NE¼ NW¼ Sec. 21 T. 57 N R. 1 E

7. WATER LEVEL

Static water level 20 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow ____

Temperature ____ ° F. Quality ____

Artesian closed-in pressure ____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
20	10'	2

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	20	Clay cobbles & gravel		✓
	20	35	Silt & Gravel		✓
	35	40	Sand & Gravel w/ water	✓	

IDAHO DEPARTMENT OF LANDS
RECEIVED
MAY 13 2024
PEND OREILLE LAKE AREA

003692

10.

Work started 4-25-76 finished 4-27-76

11. DRILLERS CERTIFICATION

Firm Name Gold Brick Well Drilling Firm No. 248

Address RT 2 Box 508 Libby Mont Date 5-29-76

Signed by (Firm Official) Donald L McCracken

and

(Operator) Donald L McCracken

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

1969

Department of Reclamation

1. WELL OWNER

Name Fred Dach & John Muir

Address Hope, Idaho

Owner's Permit No. 96-69-N-4

2. NATURE OF WORK

☑ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☑ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☑ Cable ☐ Rotory ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 56 feet

Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 5/8 inches	+1 1/2 feet	56 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☑ No

Perforated? ☑ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☑ Torch

Size of perforation 1/2" inches by Round inches

Number	From	To
perforations	52 feet	56 feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☑ No

Manufacturer's name ______

Type ______ Model No. ______

Diameter ___ Slot size ___ Set from ___ feet to ___ feet

Diameter ___ Slot size ___ Set from ___ feet to ___ feet

Gravel packed? ☐ Yes ☑ No Size of gravel ______

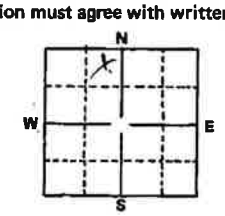
Placed from ______ feet to ______ feet

Surface seal? ☑ Yes ☐ No To what depth 20 feet

Material used in seal ☐ Cement grout ☑ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



96

County Bonner

NE ¼ NW ¼ Sec. 21, T. 57 N, R. 1 E

7. WATER LEVEL

Static water level 25 feet below land surface

Flowing? ☐ Yes ☑ No G.P.M. flow ______

Temperature ______ °F. Quality ______

Artesian closed-in pressure ______ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☑ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
20 GPM	10'	

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6"	0	20	Gravel & Boulders		—
	20	24	Boulder		—
	24	35	Gravel & Boulders		—
	35	45	Sand with Boulders		—
	45	56	Coarse Sand w/water	—	
		56	Bottom of Hole		

IDAHO DEPARTMENT OF LANDS

MAY 13 2024

PEND OREILLE LAKE AREA

10.

Work started 10-13-69 finished 10-15-69

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Drillers or Firm's Name: F. Rushing & Hunter Number: 178

Address: Libby, Mont.

Signed By: Don McCracken Date: 10-15-69

USE ADDITIONAL SHEETS IF NECESSARY

Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Well ID No.
Inspected by
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: : : Long: : :

1. WELL TAG NO. D 0045026
DRILLING PERMIT NO. 841974
Water Right or Injection Well No.

2. OWNER:
Name Dolores Poolman
Address 31 Derby Ln
City Ossining State NY Zip 10562

3. LOCATION OF WELL by legal description:
You must provide address or Lot, Blk, Sub. or Directions to well.
Twp. 57 North ☒ or South ☐
Rge. 1 East ☒ or West ☐
Sec. 21, ____ 1/4 (10 acres) NE 1/4 (40 acres) NW 1/4 (160 acres)
Gov't Lot ____ County Bonner
Lat: N48 : 16 : 835 Long: W116 : 20 : 855
Address of Well Site Trestle Creek – creek side Ln (Give at least name of road + Distance to Road or Landmark) City Sandpoint
Lt. ____ Blk. ____ Sub. Name

4. USE:
☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

5. TYPE OF WORK check all that apply (Replacement etc.)
☐ New Well ☐ Modity ☐ Abandonment ☐ Other

6. DRILL METHOD:
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
Bentonite	0	30	3x0	Temp casing

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 55
Was drive shoe seal tested? ☐ Y ☒ N How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6	+1	55	280	Steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____
Packer ☐ Y ☒ N Type

9. PERFORATIONS/SCREENS PACKER TYPE
Perforation Method
Screen Type & Method of Installation Johnson

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
55	60	35		5	stainless	☐	☒
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
20 ft. below ground Artesian pressure ____ lb.
Depth flow encountered 55 ft. Describe access port or control devices:
Well Seal
57N 1E 21

12. WELL TESTS:
☒ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
30	0	20	2

Water Temp. 47 Bottom hole temp.
Water Quality test or comments:
Depth first Water Encounter 55

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
8	0	30	Cobbles – Sand		✓
6	30	55	Cobbles – Sand		✓
6	55	60	Pea Gravel	X	

RECEIVED
OCT 11 2006
IDWR/North

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

Completed Depth 59' (Measurable)
Date: Started 9-5-06 Completed 9-7-06

14. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
Company Name Bob Pittsinson Firm No. 27
Principal Driller Dale Gobb Date 9-7-06
and
Driller or Operator II ____ Date
Operator I ____ Date
Principal Driller and Rig Operator *Required*.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
6/07

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D D00 79525

Drilling Permit No. 868703

Water right or injection well #

2. OWNER: Valiant Idaho LLC

Name Valiant Idaho LLC

Address 310 Charleston Pl

City Celebration State FL Zip 34747

3. WELL LOCATION:

Twp. 57 North [X] or South [ ] Rge. 01 East [X] or West [ ]

Sec. 21 ____ 1/4 NW 1/4 NW 1/4

Gov't Lot ____ County Bonner

Lat. 48° 16.710 (Deg. and Decimal minutes)

Long. -116° 20.704 (Deg. and Decimal minutes)

Address of Well Site Trailer Haven Road

(Give at least name of road + Distance to Road or Landmark) City Trestle Creek

Lot. ____ Blk. ____ Sub. Name ____

4. USE:

[X] Domestic [ ] Municipal [ ] Monitor [ ] Irrigation [ ] Thermal [ ] Injection
[ ] Other ____

5. TYPE OF WORK:

[X] New well [ ] Replacement well [ ] Modify existing well
[ ] Abandonment [ ] Other ____

6. DRILL METHOD:

[X] Air Rotary [ ] Mud Rotary [ ] Cable [ ] Other ____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method/procedure
Bentonite	0	58	75 Bags	Mix

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/ Schedule	Material	Casing	Liner	Threaded	Welded
8 5/8	-2	72	322	Steel	[X]	[ ]	[ ]	[X]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]

Was drive shoe used? [X] Y [ ] N Shoe Depth(s) 72

9. PERFORATIONS/SCREENS:

Perforations [ ] Y [ ] N Method ____

Manufactured screen [X] Y [ ] N Type Allied

Method of installation Set

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
72	77	100		7 in	Stainless	Steel

Length of Headpipe 2 feet Length of Tailpipe ____

Packer [X] Y [ ] N Type K

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft³)	Placement method

11. FLOWING ARTESIAN:

Flowing Artesian? [ ] Y [X] N Artesian Pressure (PSIG) ____

Describe control device Well Cap

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 10 Static water level (ft) 10

Water temp. (°F) 45° Bottom hole temp. (°F) 45°

Describe access port Well cap

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
40	150 plus	2 Hours

Test method: Pump [ ] Bailer [ ] Air [X] Flowing artesian [ ]

Water quality test or comments: Clean

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water Y	Water N
12	0	58	Surface Soil	X	
8	0	40	Gravel, cobble, Clay	X	
8	40	77	Gravel, cobble, Sand Water	X	

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

RECEIVED
SEP 10 2019
IDWR / NORTH

Completed Depth (Measurable): 77 feet

Date Started: Aug 15-19 Date Completed: Aug 16-19

14. DRILLER'S CERTIFICATION:

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Universal Drilling Co. No. 650

*Principal Driller Scott Hill Date Aug 17-19

*Driller Austin Hill Date Aug 17-19

*Operator II Dylan Hill Date Aug 17-19

Operator I ____ Date ____

* Signature of Principal Driller and rig operator are required.

Form 238-7
1/78

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Ross M. or Elizabeth A. Mc Millan

Address 8015 E. Bonne Spokane, WA

Owner's Permit No. 96-82-N-8

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning) _____

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 inches	+ 2 feet	58 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Diameter ____ Slot size ____ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 20 Material used in seal: ☐ Cement grout ☒ Puddling clay ☒ Well cuttings
Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.

N
W E
S

Subdivision Name _____
Lot No. _____ Block No. _____

County Bonner

NW ¼ NW ¼ Sec. 21, T. 57 N, R. 1 E.

7. WATER LEVEL

Static water level 25 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☒ Cap ☐ Plug
Temperature cold °F. Quality Excellent

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
50	—	½ hr

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
8	0	26	Boulders		X
6	26	60	Gravel	X	

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

RECEIVED
JUN 11 1982
Department of Water Resources

RECEIVED
JUN 8 1982
Department of Water Resources
Northern District Office

10.

Work started 4/4/82 finished 4/4/82

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Associated Well Drillers Inc Firm No. 245
Address Box 723 C'DA Date 4/6/82
Signed by (Firm Official) Bud Thornton
and
(Operator) Robert T Wright

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclama[...] within 30 days after completion or abandonment of the [...]

Location Corrected by IDWR To:
T57N R01E Sec. 21 NWNENW
By: segbert 2012-04-02

1. WELL OWNER

Name Gordon F Meade

Address Box 285 Hope Ida

Owner's Permit No. 96-69-N-8

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotory ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth ____ feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
.025 inches	6 .250 inches	+1.8 feet	54 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☒ Yes ☐ No

How perforated? ☐ Factory ☐ Knife ☒ Torch

Size of perforation 1/2 inches by 2 inches

Number	From	To
perforations	50 feet	54 feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name ____

Type ____ Model No. ____

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Diameter ___ Slot size ___ Set from ____ feet to ____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel ____

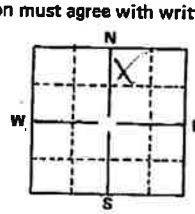
Placed from ____ feet to ____ feet

Surface seal? ☒ Yes ☐ No To what depth 20 feet

Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



96

County Bonner

NW ¼ NW ¼ Sec. 21, T. 57N N/S R. 1 E/W

7. WATER LEVEL

Static water level 20 feet below land surface

Flowing? ☐ Yes ☒ No G.P.M. flow ____

Temperature ____ °F. Quality ____

Artesian closed-in pressure ____ p.s.i.

Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
10+ GPM	10'	

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6"	0	10	Gravel & Clay		✓
	10	15	Gravel & Boulders		
	15	25	Boulders w/ Sand		
	25	35	fine Sand w/ clay		
	35	54	Water Sand	✓	
		54	Bottom of Hole		

112346

10.

Work started 10-9-69 finished 10-10-69

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is true to the best of my knowledge.

Driller's or Firm's Name: O. L. Blumberg Drilling Number # 178

Address: Libby Mont.

Signed By: Don McEachern Date 10-15-69

USE ADDITIONAL SHEETS IF NECESSARY

Form 238-7
7/98
Starships Consulting and Management Services

IDAHO DEPARTMENT OF WATER RESOURCES

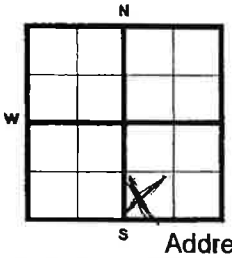
WELL DRILLER'S REPORT

Office Use Only
Inspected by_____
Twp____Rge____Sec____
____1/4____1/4____1/4
Lat: : : Long: : :

1. WELL TAG NO. D0039942
Drilling Permit No: 830531
Other IDWR No.

2. OWNER **Well Number:** 920
Name Hatfield, Craig & Gayla
Address 208 Monte Vista Dr
City Bakersfield State CA Zip 93305

3. LOCATION OF WELL by legal description
sketch map location must agree with written location



Twp. 57 ☑ North or ☐ South
Rge. 1 ☑ East or ☐ West
Sec. 21 SW 1/4 SE 1/4 ____ 1/4
Gov't Lot ____ County BONNER
Lat: : : Long: : :

Address of Well Site Angle Creek Rd
off of Eagan Mtn Rd City Hope/Trestle Cree
(Give at least name of road + Distance to Road or Landmark)
Lt. ____ Blk. ____ Sub. Name ____

4. USE:
☑ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5. TYPE OF WORK check all that apply (Replacement, etc.)
☑ New Well ☐ Modify ☐ Abandonment ☐ Other ____

6. DRILL METHOD
☑ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENTONITE	0	18	250 lbs	Overbore

Was drive shoe used? ☑ Y ☐ N Shoe Depth(s) 18
Was drive shoe seal tested? ☐ Y ☑ N How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
4	-6	322	.160	PVC	☐	☑	☐	☐
6	+2	18	.250	Steel	☑	☐	☑	☐

Length of Headpipe ____ Length of Tailpipe ____

9. PERFORATIONS/SCREENS
☑ Perforations Method Skill Saw
☐ Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
306	322	18 X 6	50	4	PVC	☐	☑

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
160 ft. below ground Artesian pressure ____ lb.
Depth flow encountered 305 ft. Describe access port or control devices: Welded Cap

57N 1E 21

11. WELL TESTS:
☐ Pump ☐ Bailer ☑ Air ☐ Flowing Artesi

Yield gal./min.	Drawdown	Pumping Level	Time
7			1hr

Water Temp. Cold Bottom Hole Temp Cold
Water Quality test or comments: Clear
Depth first Water encountered 305

12. LITHOLOGIC LOG:(Describe repairs or abandonment)

Bore Diam	From	To	Remarks: Lithology, Water Quality, Temperature	Water Y	Water N
8	0	9	Broken Shale	☐	☑
8	9	18	Shale Gray	☐	☑
6	18	42	Shale Gray	☐	☑
6	42	50	Shale Brown	☐	☑
6	50	72	Shale Gray	☐	☑
6	72	81	Shale gray fractured	☐	☑
6	81	107	Shale Gray	☐	☑
6	107	116	Shale Brown	☐	☑
6	116	305	Shale Gray	☐	☑
6	305	317	Shale Gray	☑	☐
6	317	322	Shale Gray	☐	☑

RECEIVED
MAR 14 2005
IDWR/North

IDAHO DEPARTMENT OF LANDS
MAY 13 2024
PEND OREILLE LAKE AREA

Completed Depth 322 (Measurable)
Date: Started 3/3/2005 Completed 3/9/2005

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name H20 WellService, Inc. Firm No. 448
Firm Official [signature] Date 3-10-
and
Supervisor or Operator [signature] Date 03/09/05
Todd Morgan (Sign Once if Firm Official and Operator)