TECHNICAL MEMORANDUM on the HYDROGEOLOGY of a

CARA

(Critical Aquifer Recharge Area)
associated with the property of
Three Former City Wells
for the
City of La Center, Washington

location: Clark County Tax Parcel #'s 258910000, 258913000, & 258968000

Date of Report: February 18, 2022

Work Done For:

Nick Bright 3900 NE 425th Street Woodland, WA 98674

Report Prepared By: Roger N. Smith Associates, Inc. RNSA project # 1194



1400 SW Davenport St. Portland, Oregon 97201 TEL (503) 241-5444 email:

RNSAgroundwater@gmail.com



TABLE OF CONTENTS

1.0 INTRODUCTION AND OBJECTIVE OF REPORT	2
2.0 CRITICAL AQUIFER RECHARGE AREA (CARA)	
3.0 HYDROGEOLOGY	
4.0 PROJECT SITE WELLS (FORMER CITY WATER WELLS)	
4 1 WELL #1	
4.2 WELL#2	_
4.3 WELL #3	5
4.3 WELL #3	6
5.0 CONCLUSIONS AND RECOMMENDATIONS	6
6.0 REFERENCES	8
7.0 REPORT LIMITATIONS	

APPENDICES

- A. Site Figures
- B. Tables of Corresponding Well IDs and Well Characteristics
- C1. Well Reports for City of La Center Former Municipal Wells
- C2. Well Reports of Wells Within 1/4 Mile of the Project Site





1.0 INTRODUCTION AND OBJECTIVE OF REPORT

The following memorandum summarizes an investigation of a CARA (Critical Aquifer Recharge Area) located north of the municipal boundary and within the Urban Growth Area of La Center, WA (see Figure 1 and 4). This CARA is associated with three former municipal wells located on property now privately owned. The investigation is specifically related to the proposed development of the three tax parcels 258913000, 258968000 and 258909000 each of which has one of the three former municipal wells located on them (see Figure 2). The intention of the owner of these three parcels is to consolidate parcels 25896800 and 258909000 through a lot-line adjustment and build an 1,840 square foot (SF) duplex on the consolidated property. The remaining parcel, 258913000, will have an 1,840 square foot single family residence constructed on it (source: City of La Center File# 2021-008-BLA). As a condition to the lot-line adjustment the City of La Center on May 13, 2021 required that the CARA designation associated with the former city wells be addressed. The focus of this memorandum is to present known hydrogeologic conditions associated with the project site and surrounding area as well as document the construction and final decommissioning of three municipal water wells. With the removal of the wells and sale of the property to private owner the need for a CARA has been removed and it is proposed in this technical memorandum that the CARA to be vacated.

2.0 CRITICAL AQUIFER RECHARGE AREA (CARA)

The Washington Administrative Code (WAC) <u>Chapter 365-190</u> uses the following definition for a CARA:

"Areas with a critical recharging effect on aquifers used for potable water are areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water".

The area presently designated as a CARA associated with the project site is shown in Figure 4. Defining this area as a critical aquifer recharge area is considered to have originated from the presence of three municipal groundwater production wells installed by the City of La Center. Protection of water quality recharging this aquifer would justify this designation and the boundaries of the area would be set by criteria as designated in WDOE 'Critical Aquifer Recharge Areas Guidance Document (2005). However, all three municipal water wells have been decommissioned and municipal water is now supplied to the city by Clark Public Utilities whose multiple sources are located far from the site (personal communication Barry Lovingood, civil engineer, Clark Public Utilities).

3.0 HYDROGEOLOGY

The local soil and hydrogeology surrounding and beneath the project property affects how and whether any contamination originating from the surface could enter the



underling aquifer. A migration pathway considered the most likely would be through water well borehole outside well casings. This potential pathway is addressed in this memorandum. Two primary sources of information on subsurface conditions have been used in the assessment of the project site, they are: USGS Water Supply Paper 1600 (Mundorff, 1964) and Well Report logs of wells in and near the project property (WDOE, Water Well Reports digital library).

The geology underlying the project site and surrounding area is a regional sedimentary unit referred to as the Troutdale Formation. This formation, in the 1964 USGS report, is divided into an upper member of sand and gravel and a lower member predominantly of silt and clay (see Figures 5 and 5a). Wells drilled on and near the project property are all drilled, from the surface to the bottom of the wells, into the lower member of the Troutdale Formation. Because of the finer grain size predominating, the lower member of the Troutdale Aquifer system is known for lower yield wells. The two wells on the project site (well #1 and #3) had yields of 75 gpm both with specific capacities of 0.88 gpm/ft-dd and well #2 had a yield of 200 gpm and specific capacity of 3.08 gpm/ft-dd. A characteristic of the lower Troutdale member is surface infiltration to the aquifer is impeded by the moderately low permeability of the overlying formation. Examples of this is a clay layer logged in the upper 68 feet of Wells #1 and #2 and a 29-foot-thick clay unit reported in project site Well #3.

Local groundwater table has been reported in the former municipal wells to be between 115 feet (elevation 275 feet) in 1954, and 171 feet (elevation 229) in 1984 (the last available measurement). Regional water table elevation and area water table contours are shown in Figure 3 (from the USGS, 1964). This figure shows the elevation of Wells #2 and #3 (identified as G2 and G3 by the USGS) being at approximate 400 feet and the water table at elevation of about 180 feet (considered too low compared to other measurements). However, Figure 3 shows the flow direction (arrows perpendicular to the water contours) beneath the project property to be south-southwest. This flow direction would have likely been used to define the upgradient outline of the CARA boundary for these public water wells (see Figure 4).

In the next section construction, lithology and decommissioning of the three project-site public wells are discussed. With the description of the wells incorporated with our understanding of the hydrogeologic characteristics of the area, a case is presented to remove the requirement for a CARA from this area as it is no longer needed to protect a public water system now abandoned.

4.0 PROJECT SITE WELLS (FORMER CITY WATER WELLS)

There are three former public groundwater production wells on the project site, one on each of the three original tax parcels (see Section 1.0 and Figure 2). In this report these wells are referred to here as Wells #1, #2 and #3 although other designations have been assigned to these wells by various authorities and a correlation of the well numbers to the wells is presented in Tables 1 and 2 (see Appendix B). The following summarizes each well construction, lithology and decommissioning.



4.1 Well #1

The first well (identified here as Well #1a) has a Water Report number of 270260 (see Appendix C1). This well was drilled into tax parcel #258910000 to a reported depth of 231 feet in December, 1951. This well was tested and found capable of producing 75 gallons per minute (gpm) with a drawdown of 85 feet which calculates to a specific capacity of 0.88 gpm/ft dd. This is considered a low yield (and specific capacity) for a municipal well. The well log describes a lithology beginning with 68 feet of clay below the ground surface, followed by a 29-foot unit of clay and sand, overlying 123 feet of loose wet sand ('quicksand'), then a 4-foot-thick coarse water-bearing sand with some gravel at a depth of between 227 and 231 feet below grade. A steel casing for Well #1a extends from the surface to a reported depth of 229 feet (note: this is considered an error as later well work reported the casing extended to a depth of 255 feet). The original well casing had no perforations or well screen, requiring the well to draw water directly from the bottom of the well casing.

Documents obtained from the Washington Dept. of Ecology indicated the city commissioned a second (identified in this report as Well #1b with a Well Report ID# 8100 (see Appendix C1). This boring event occurred in October, 1953 and resulted in a borehole drilled to 490 feet (no casing installed below 100 feet). Flow on the boring resulted in a yield of only 12 gpm and according to the well report, the boring was 'abandoned'.

Alterations were recorded for Well #1a in July, 1980 (described below). In the interim, another project-site well (Well #2) was drilled and constructed (described in Section 4.2).

In 1980 the city had Well #1a altered in an effort to increase yield and decrease sand content in well water (see Well Report ID# 8101 in Appendix C1). This alteration involved perforating the well casing between the depths of 235 and 242 feet, telescoping a 6" slotted casing from 239 to 255 followed by installing a gravel filter pack between the 8" and 6" casings the depth of 255 up to 255 feet while the 8" casing was being pulled up to expose the slotted pipe to the aquifer. This work restored yield in Well #1a to 72 gpm and increased specific yield to 1.92 gpm/ft-dd. Then, sometime between 1980 and December, 2015 the city ceased to use Well #1a and the well was decommissioned in 2015 (see decommissioning Well Report ID #1313139, Appendix C1). Decommissioning included cutting off the 8" steel casing at a depth of 221 feet and pulling the steel casing out while filling the borehole with 3/4" bentonite chips. Removal of the steel casing and plugging the bore hole with bentonite is a good technique for decommission a well because it reduces likelihood of any infiltration conduits remaining in the former well borehole outside the steel casing. Bentonite is a natural clay commonly used in decommissioning water wells because when hydrated by groundwater it swells and tightly seals surrounding pores and cavities. Hydrated bentonite has very low permeability (commonly used to seal the bottom of ponds and canals). Methods described in the decommissioning well report for Well #1a, indicates the drillers (license #1294) followed methods that met Washington State decommissioning standards as described in WAC 173-160-381.



In addition to the decommissioning of Well #1a, it should be noted the presence of the 68-foot-thick clay layer logged from the ground surface would act as a natural barrier to any surface contamination that might occur in the vicinity of the former well.

4.2 Well #2

The second project site well (Well #2) was installed on tax parcel #258913000 (described as being 100 feet northeast of Well #1a). The well borehole was drilled to a depth of 252 feet in August, 1954. This well had an 8" diameter casing extending from the surface to a maximum depth of 252 feet. Well #2 was tested and found capable of producing 200 gallons per minute (gpm) with a drawdown of 65 feet (specific capacity of 3.08 gpm/ft dd). This is considered a good yield for the lower member of the Troutdale aquifer and more than twice that of Well #1a. The drill well log indicates the same stratigraphy as Well #1a, i.e., a 68-foot layer of clay underlying the property, followed by 29 feet of clay and sand, overlying 123 feet of loose wet sand ('quicksand'). The water bearing unit, however, was a 19-foot-thick coarse water-bearing sand with some gravel between 231 and 250 feet below grade. The well was bottomed in 'blue lava ash', considered here as clay (see well report ID 270759 in Appendix C1). The casing for Well #2 was perforated between the depths of 242 and 250 feet, in the water-bearing coarse sand and gravel zone.

Well #2 was used by the city from 1953, when it was installed, until some unknown time before December 10, 2015 when the well was decommissioned. The 'abandonment' log indicates the process followed that was used for Well #1a was also used for Well #2. All 252 feet of steel casing was removed and ¾" diameter bentonite chips were poured into the borehole while the casing was being removed (see abandonment well report ID #1313208 in Appendix C1). As with Well #1a, the procedure described by the licensed driller meets State decommissioning guidelines.

4.3 Well #3

The third well (Well #3) was installed on tax parcel #25896800. The borehole for this well was drilled to a maximum depth of 281 feet in November 1984. An 8" diameter steel casing extends from the surface to a depth of 223 feet where a stainless-steel telescoping screen with three intervals of slot sizes was installed from a depth of 220.25 feet to a final depth of 257 feet. The interval of borehole between 257 and 281 was filled with pea-gravel. The casing is reported to have been cut at a depth of 257 feet and presumed to have been pulled back to 223 feet to expose the stainless-steel screen to the surrounding aquifer. A gravel filter pack was reported as having been installed between 33.5 feet and 90 feet. However, this is considered an error as no water was logged in this zone and no screens are presumed to have been installed in that interval. It is presumed the gravel pack was placed behind the interval where the stainless-steel screen was installed (i.e., between 220'3" and 257').



A flow test was done on Well #3 using an air-lift drill stem set at 256 feet. Results indicated a yield of 75 gpm with an 85-foot drawdown (specific capacity of 0.88 gpm/ft-dd). The specific gravity of Well #3 was the same as that for Well #1.

Well #3 was available for use by the city until its decommissioning in December, 2015 (see 'abandonment' well report #1313048 in Appendix C1). The decommissioning of Well #3 occurred at the same time as Well #1 and #2. The well casing in Well #3 was cut off at a depth of 255 feet and the borehole was filled with 3/4" bentonite chips as the steel casing was pulled out of the ground.

All three former city water wells were decommissioned in December of 2015 by the same licensed driller (license #1294) and based on the decommissioning logs all procedures followed State regulations for decommissioning water wells.

4.4 Local Wells

A search of additional well reports was completed for an area within ¼ mile of the project site. Six well reports were found. The well locations of these wells are shown on Figure 2. Note that most wells were located only within the ¼ section and only within the section resulting in poor identification of actual well location. Wells ranged from 100 feet to 503 feet deep and yields of between 3 and 20 gpm. Well logs for these wells are presented in Appendix C2.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The designation of the three tax parcels (258913000, 258968000 and 258909000) and surrounding area located adjacent and north of La Center municipal boundary as being in a Critical Aquifer Recharge Area is based on the presence of three La Center municipal groundwater wells all located in these three tax parcels. Since the formation of the CARA, these municipal wells have all been decommissioned and the property on which the city wells existed has been sold to private owners, preventing any future installation of municipal wells. Water well reports have been obtained for all three municipal wells from WDOE digital files. These reports show lithology of the aquifer and construction of wells.

Review of well construction, site lithology, hydrogeology and decommissioning process suggests that municipal use of groundwater from this property has ceased and will not occur in the future. The decommissioning of the wells is considered to have been done according to Washington State standards. Also, lithology of the area indicates that a unit of clay unit between 29 and 68-feet thick exists below the ground surface and is considered likely to act as a barrier to any future inadvertent releases of contaminants originating on the project property. Therefore, the conclusion of this memorandum is that the CARA is no longer necessary for the former municipal wells and could be vacated.





The proposed development of the three tax parcels on which the three municipal wells were located would be for residential use. The owner has indicated that a single-family dwelling and a duplex will be constructed on the property. These structures will obtain water from a municipal water system operated by Clark Public Utilities which obtain water far from the project site. Sewage from the new structures will be delivered to a municipal treatment plant through a pipe system located in North Fork Road, no drainfields are planned for this development.

Based on the findings and documents presented in this memorandum, it is our conclusion that the aquifer system will not be threatened by the proposed development and the City of La Center may consider vacating the CARA designation of the project property and surrounding area.



6.0 REFERENCES

- 1. Morgan, L., 2005, Critical Aquifer Recharge Areas Guidance Document, Washington State Department of Ecology, Water Quality Program, Publication #05-10-028.
- 2. Mundorff, M.J., 1964, Geology and Ground-Water Conditions of Clark County Washington, with a Description of a Major Alluvial Aquifer Along the Columbia River, Geological Survey Water-Supply Paper 1600



7.0 REPORT LIMITATIONS

Possession of this report, or a copy thereof, does not carry with it the right of publication. This report is solely for the use and information of the initial employer (client) unless otherwise noted in writing, and shall only be used with properly written qualification and in its entirety.

Data used in this report was developed based on data collected from one site visit and from data obtained from publicly available reports. RNSA has no authority over data developed by authors of reports or well logs and presumes data is correct and accurate. RNSA takes no responsibility for errors or omissions created by them.

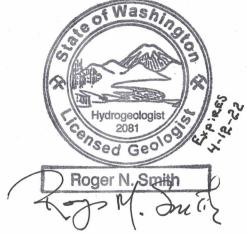
The liability of the consultant (RNSA), its employees and subcontractors are limited to the initial employer (client) only, and only up to the amount of the fee actually received for services provided.

Although data developed by RNSA and presented in this report were collected, analyzed and interpreted in accordance with generally accepted professional standards; extrapolation of the data based on subsurface soil and ground water sampling data does not guarantee similar conditions exist between observation and sampling points. No other warranty, express or implied, is made. Therefore, anyone using the information presented in this report does so at his or her own risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. Further, we do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

If conditions have not been identified during this study, such a finding, or lack thereof, should not therefore be construed as a guarantee of the absence of such conditions at or nearby a site, but rather the result of the services performed within the scope, limitations, and cost of the work assigned and performed.

The above limiting conditions describe the assumptions and parameters under which a professional hydrogeological opinion is rendered. In accepting this opinion, the client understands and accepts these limiting conditions as a necessary outcome of the need to strike a balance between reasonable inquiry and exhaustive analysis.

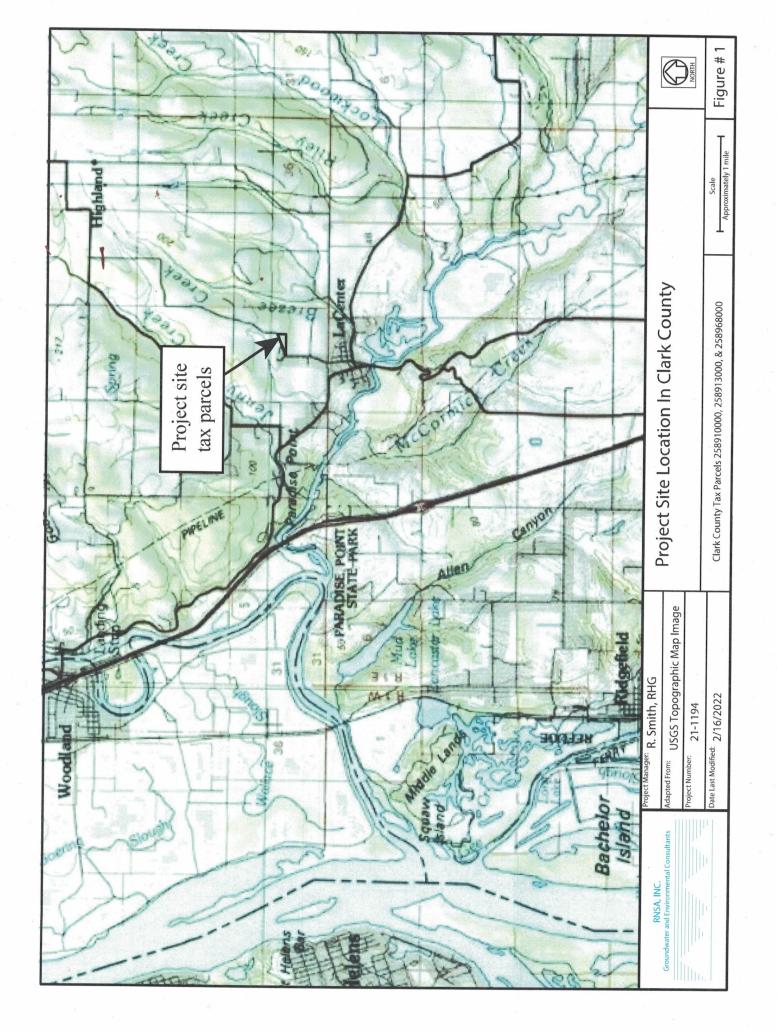


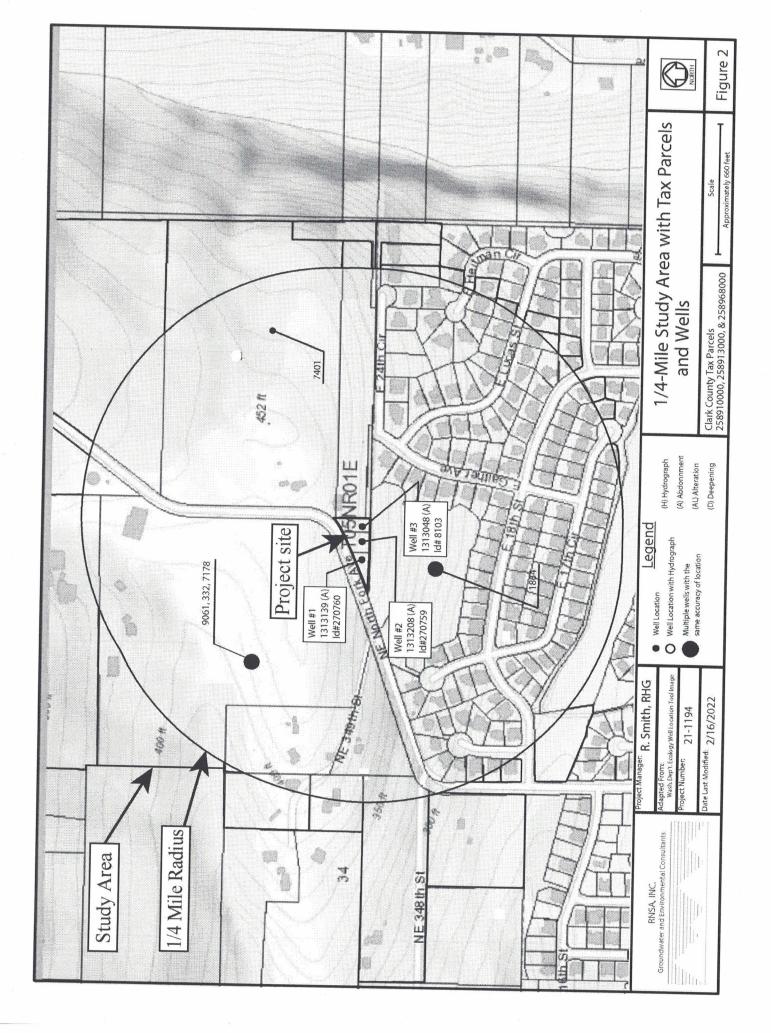
Washington Prof. Reg. Geologist/Hydrogeologist No. 2081

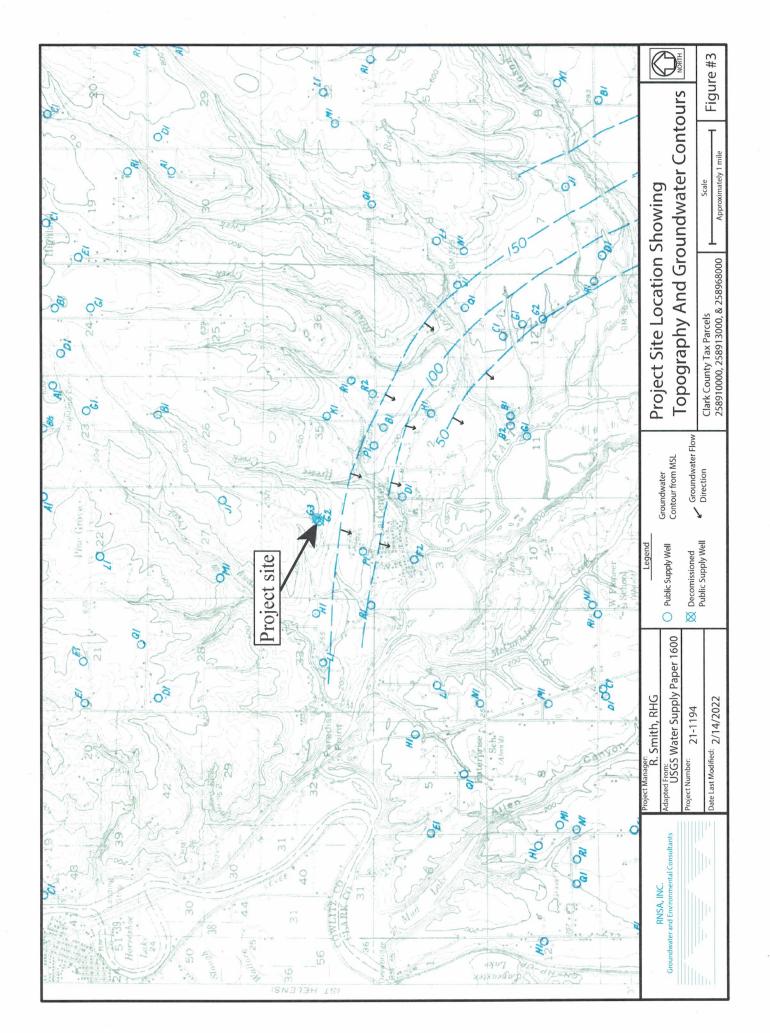


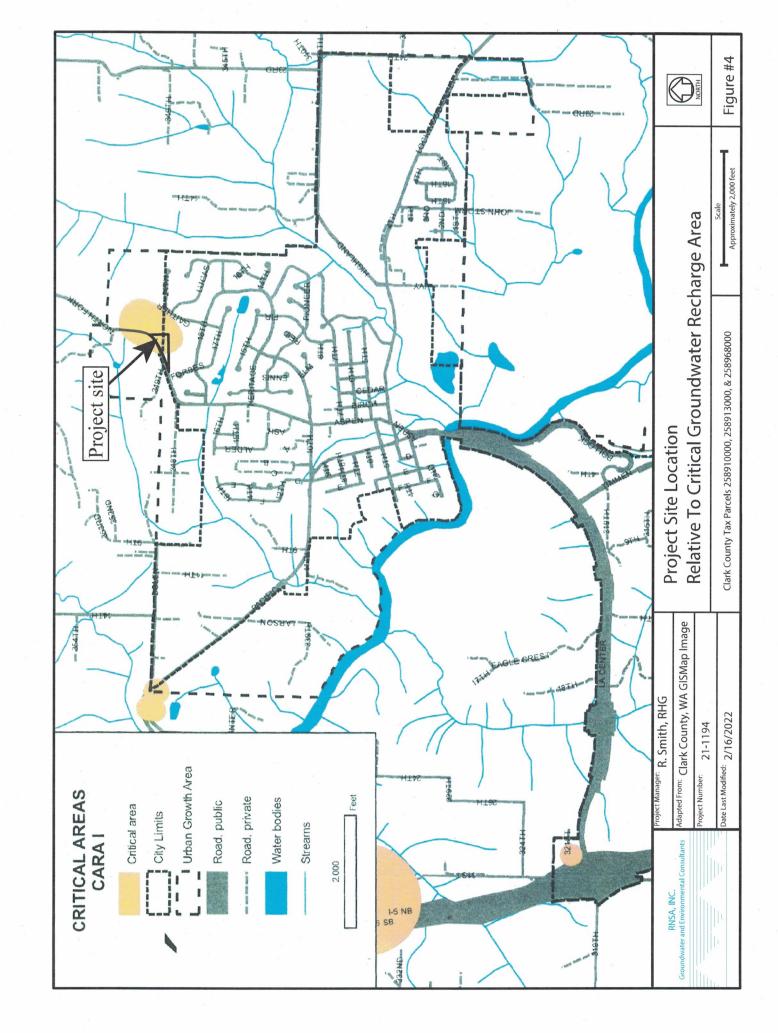
APPENDIX A

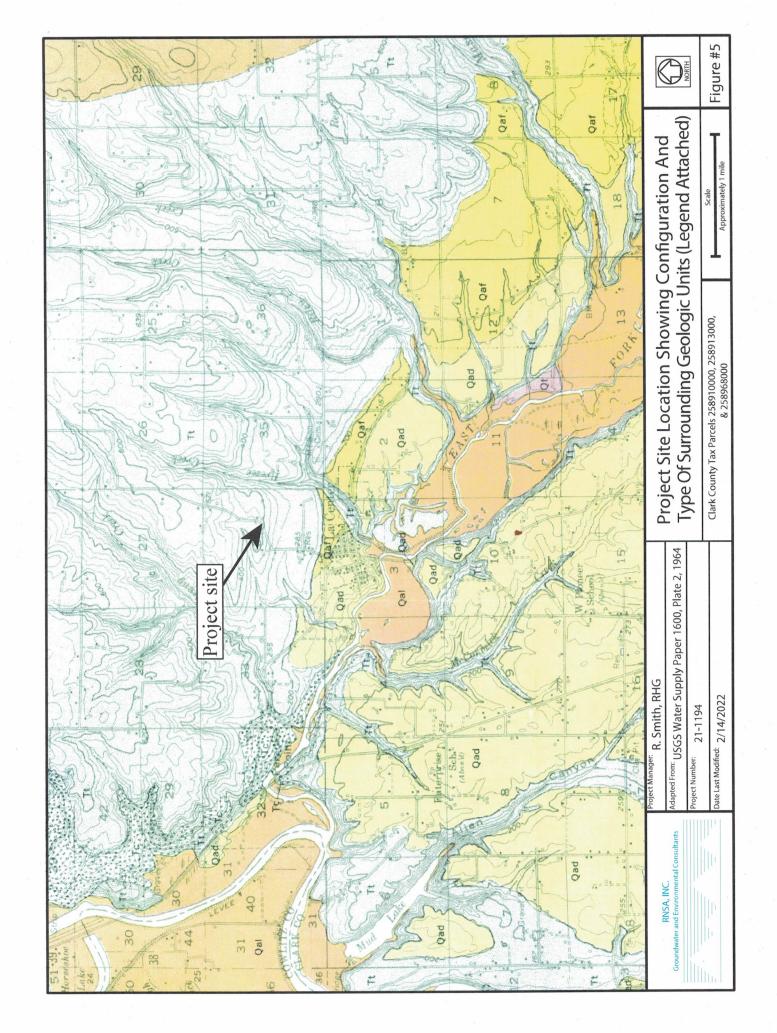
Figures

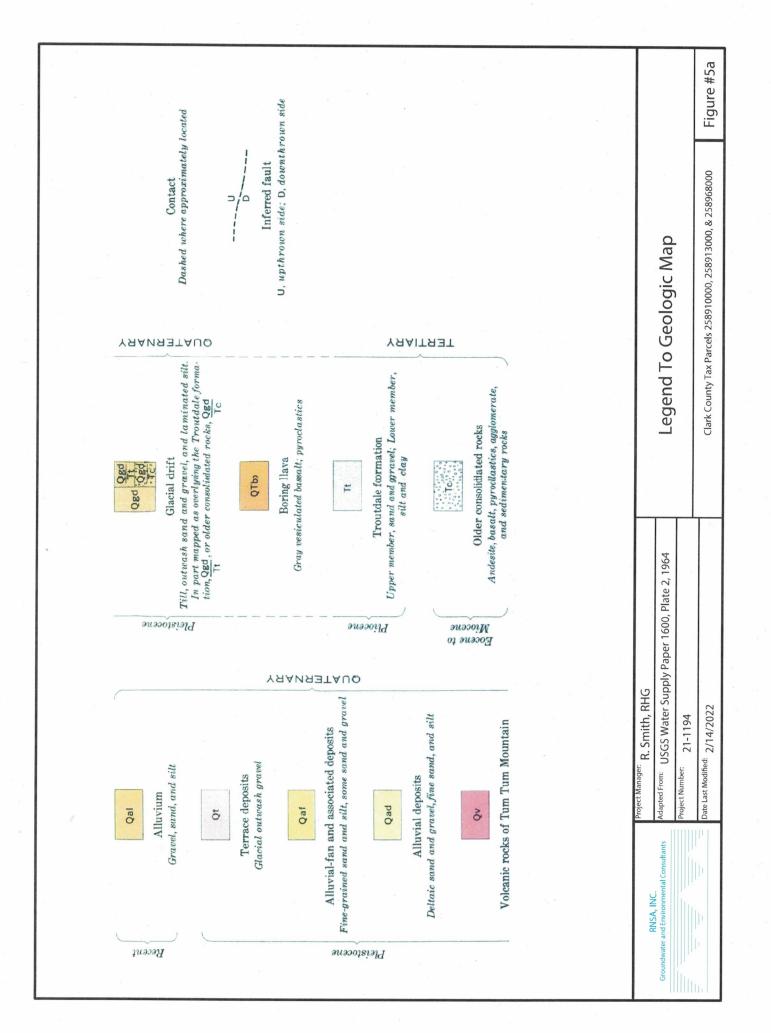












APPENDIX B

Tables of Corresponding Well IDs and Well Characteristics

Table 1: Three Former City of La Center Municipal Wells (decommissioned)

Well Logs Well Available Screens	Well	Well Logs Well Depth Available Screens (As Listed By USGS)	Total Well Depth (As Listed By Abandoning Driller)	Washington State Well Report Id # (Abandonment)	Notice of Intent to Abandon	USGS Well Id #	USGS Well Location Well Id# Tax Parcel#	USGS Well Location Tax Parcel Position Well Id # Tax Parcel # On Project Site
>	>	N/A	255	1313139	AE34869 [△]	N/A	258910000*	West
>	z	252	252	1313208	AE34870 [△]	34G3	258913000*	Middle
>	>	231	281	1313048	AE34871 [∆]	3462	*0008968000	East
C						The second line of the second li		

^ASource: WDOE Water Well Report

*Source: Clark County GIS

Table 2: City of La Center Former Municipal Well Correlations

Well#	Drill Date	Well Report Id #	Abandonment Date	Well Report Abandonment Well Id #	USGS Well #	Well Location Tax Parcel #	Well Location Tax Parcel Position Tax Parcel # On Project Site
1(a)	12/1/1951	2780760	12/2/2015	1313139	N/A	258910000	West
1(a) (perforated)	7/24/1980	8101	12/2/2015	1313139	N/A	258910000	West
1(b)	10/1953	8100	1953	N/A	N/A	258910000	West
2	8/1954	270759	11/30/2015	1313208	34G ₂	258913000	Middle
3	11/5/1984	8103	12/2/2015	1313048	34G ₃	258968000	East

APPENDIX C1

Well Reports
for
City of La Center
Former Municipal Wells

	T	ŧ
Well		la
1 10-11		10

Well Report 1.D.#270760

W211 # 1. TATE OF WASHINGTON
DEPARTMENT OF CONSERVATION
AND DEVELOPMENT WELL LOG No Appli Date December 1, 1951 #1307A Cert. J. Ferron Source. Location: State of WASHINGTON Clark County_ SW 1/ NE 1/ sec. 34T. 5 Address Route 4. Method of Drilling Owner Town of LaCenter Address Land surface, datum. above CORRE-LATION (Transcribe driller's terminology literally but paraphrase as necessity, in parentheses material water-bearing, so state and record static level if reported. Give depths in feet below his surface datum unless otherwise indicated. Correlate with stratigraphic column, if feesible. Poling log of materials, list all casings, perforations, streams, etc.) 68 Clay and sand 29 97 Ouicksand & little water 108 11 Quicksand 89 197 Onicksand & some 7 204 Quicksand 212 Heavy sand 220 Sand & some gravel Coarse sand and Pump test: Dim: 8" 2311 SWL: not known

Turn up

D.D.

851 (over)

Well#19

CORRE-	LOG.—Continued	No_	/	
LATION	Material		THICKNESS (feet)	DEPTH (feet)
		Depth forward		
	Yield 75 g.p.m.			
	Casing: 8" dia. from 0 to 229".	26 lbs.	per foc	
	Perforations: no			
			. \	
			,	
			1.2	
31			11 - 14 · 14	VI.
			1-	
				-
			. i	三多次
449-45)		NG-49 26 745-Z.	_

	P 94.0	/	/	
(STATE OF WASHINGT	ON.	(53	
,	DEPARTMENT OF CONSERVA	TION	Fac Mi	
	- AND DEVELOPMENT-			
VELL LO		mli/_#33		
ate Of	ctoher 19.53 Perm	1552	1	
lecord by				2
	Well driller's record			
Otta Cta				
	State of WASHINGTON			N.
County	Clark			
Area_				
Map.				11
SW_	KNE K see 3h T. 5 N. R. 1	DIAGRAM OF	ECHON IN	HEAT IN
Drilling C	B. T. Peles			. ,
Addre	the first the second of the se	P14		•
	od of Drilling Della de	المستعا	19.	
O-in-	Com of TaCenter			
Owner	a La Center, Washington		Ġ.	
Addre	C. MOOY C.	سوم وتعلق سيسون دادي. الراج الراج	7	1
	face, dalum below		44 4 4	
Ting 2ml	DEIGW		1 344	7
		Tutchesan	Depris (feet)	
CORRE	MATERIAL	(feet)	(feet)	
CORRE	MATERIAL	(feet)	(feet)	
CORRE	MATERIAL	(feet)	(feet)	
CORRE- LATION : (Transmaterial w surface dat ing log of t	scribe driller's terminology literally but paraphylos has a ter-bearing, so state and record static level if o periods of term unless to the wise indicated. Correlated in stratigraph materials, list all casings perforations decided as the literature of the literat	(feet)	(feet)	
CORRE- LATION : (Transmaterial w surface dat ing log of t	scribe driller's terminology literally but parable has a ter-bearing, so state and record static lavel if operand. term unfeas otherwise indicated. Correlate in stratugraph materials, list all casings perforations of charges atc.)	(feet)	entheses. if t below land- ible. Pollow-	
CORRELATION :	scribe driller's terminology literally but pare the sater-bearing, so state and record static lavel if spicrosd, turn unless otherwise indicated. Correlately the strategraph materials, list all casings, perfore tions, scenes, etc.)	(feet)	entheres. If t below land- ible. Pollow	
CORRELATION :	scribe driller's terminology literally but parethres as a ter-bearing, so state and record static level if epicited, term unless otherwise todiested. Correlate eith stratigraph materials, list all casings, perforations, casess, etc.) Clay Silty clay Gravel	(feet)	entheses, if t below landible. Pollow-	
CORRELATION :	scribe driller's terminology literally but parelly by as a ter-bearing, so state and record static level if a ported term unless otherwise indicated. Correlate with strategrap materials, list all casings, perforations, cheering, etc.) Cloy ABA Cravel Yellong Clay	(feet) necessery, in partitive depths in feeting column, if feeting 25, 33, 11, 11	entheres. if t below land- ible. Follow-	
CORRELATION :	scribe driller's terminology literally but parely has as ater-bearing, so state and record static level if sported term uniters of the wrise indicated. Correlate in stratugraph materials, list all casings perforations of charges atc.) Cloy AB Silty clay Gravel Yellow clay Hard rook	necessery, in par sive depths in fee nic column, if fee	tolow landible Pollow 25 58 59 100	
CORRELATION : (Trammaterial wasurisce daing log of second	scribe driller's terminology literally but parefur a star-bearing, so state and record static level if sported, term unless otherwise indicated. Correlated with stratigraph materials, list all casings, perforestions, etc.) Clay Silty clay Gravel Yellow clay Hard rook Soft blue rock	(feet) necessery, in partitive depths in feeting column, if feeting 25, 33, 11, 11	entheses if t below and ihis. Pollow	
CORRELATION : (Trammaterial wasurisce daing log of second	scribe driller's terminology literally but parethree as a ter-bearing, so state and record static level if epicired. Item unless otherwise todiested. Correlated with stratigrap materials, list all casings, perforations, cases, etc.) Clay Silty clay Gravel Yellow clay Hard rook Soft blue rock	necessery, in par sive depths in fee nic column, if fee	tolow landible Pollow 25 58 59 100	
CORRELATION : (Trammaterial wasurisce daing log of second	scribe driller's terminology literally but parelly by as a ter-bearing, so state and record static level if pointed term unless otherwise indicated. Correlate in strature materials, list all casings, perforations generally classes, etc.) Cloy ABA Cloy ABA Cloy Clay Gravel Yellow Clay Hard rook Soft blue rock Dimr 1901 x 82	necessery, in par sive depths in fee nic column, if fee	tolow landible Pollow 25 58 59 100	
CORRELATION : (Trammaterial wasurisce daing log of second	scribe driller's terminology literally but parely on as ater-bearing, so state and record static level if sported term unless otherwise indicated. Correlate in stratugrapmaterials, list all casings perforations generally stratugrapmaterials, list all casings perforations generally Silty Clay Gravel Yellow Clay Hard rook Soft blue rock Teste Dims 1901 x 8x Swll: not given	necessery, in par sive depths in fee nic column, if fee	tolow landible Pollow 25 58 59 100	
CORRELATION : (Trammaterial wasurisce daing log of second	scribe driller's terminology literally but parely his he ater-bearing, so state and record static level if sported from unfeas otherwise indicated. Correlate in stratugraph materials, list all casings perforations of charges atc.) Cloy AB Silty clay Gravel Yellow clay Rard rook Soft blue rock Test. Dims 490° x 8* Silts not given	(feet) necessery, in particle of the property of the period of the perio	tolow landible Pollow 25 58 59 100	
CORRELATION : (Trammaterial wasurisce daing log of second	scribe driller's terminology literally but paraphylogical attar-bearing, so state and record static level if our cited term unfeas otherwise indicated. Correlate in stratugraphy materials, list all casings perforations (charles etc.) Silty clay Gravel Yellow clay Rard rook Soft blue rock Test. Dims 490° x 8* Shil: not given	(feet) necessery, in particle depths in feeting on the feeting of	t below landible. Pollow-	
CORRELATION : (Trammaterial wasurisce daing log of second	scribe driller's terminology literally but parelly by as a ter-bearing, so state and record static level if ported, term unless otherwise indicated. Correlated in stratugrap materials, lite all casings, perforations, clearing, etc.) Clow PB A Clay Gravel Yellow Clay Hard rook Soft blue rock Tester Dime 190° x 8° SML: not given	(feet) naccessey, in particle of the particle	entheses. If t below landible. Pollow	The state of the s
CORRELATION : (Trammaterial wasurisce daing log of second	scribe driller's terminology literally but parelly by as a ter-bearing, so state and record static level if ported, term unless otherwise indicated. Correlated in stratugrap materials, lite all casings, perforations, clearing, etc.) Clow PB A Clay Gravel Yellow Clay Hard rook Soft blue rock Tester Dime 190° x 8° SML: not given	(feet) naccessey, in particle of the particle	t below landible. Pollow-	
CORRELATION : (Trammaterial wasurisce daing log of second	scribe driller's terminology literally but parely on he ater-bearing, so state and record static level if sported term unites otherwise indicated. Correlate with strategraph materials, list all casings perforations of the materials, list all casings perforations of the materials of the clay Gravel Yellow Clay Gravel Yellow Clay Hard rook Soft blue rock Test: Dimr 1901 88 SWL: not given Casing: 88 dia steel from Note: Well produced about 1	(feet) necessary, in particle of the particle	t below landible. Pollow-	
CORRELATION : (Trammaterial wasurisce daing log of second	scribe driller's terminology literally but parely on he ater-bearing, so state and record static level if sported term unites otherwise indicated. Correlate with strategraph materials, list all casings perforations of the materials, list all casings perforations of the materials of the clay Gravel Yellow Clay Gravel Yellow Clay Hard rook Soft blue rock Test: Dimr 1901 88 SWL: not given Casing: 88 dia steel from Note: Well produced about 1	(feet) necessary, in particle of the particle	t below landible. Pollow-	
CORRELATION : (Trammaterial wasurisce daing log of second	scribe driller's terminology literally but parely on he ater-bearing, so state and record static level if pointed term unters otherwise indicated. Correlate with stratugrap materials, list all casings perforations generally gravel Cloy Silty clay Gravel Yellow clay Hard rook Soft blue rock Test: Dimr 1901 x 8x Swl.: not given Casing: 8x dis steel from Note: Well produced about 1	(feet) necessary, in particle of the particle	t below landible. Pollow-	

and the second s			We	211
le Original and First Copy with	Moll#	WATER	WELL	REP

Welkeport 1. U. # 810]

STATE OF WASHINGTON

Lam A	-0			
•		Application	No.	

OWNER: Name Town of La Center	Address La Center, Washington 98629		
2) LOCATION OF WELL: County Clark	Address	N. R.	Lw.m.
	Allenta and Allent		
earing and distance from section or subdivision corner	(10) WELL LOG:	-	
B) PROPOSED USE: Domestic Ti Industrial D Municipal D		and struc	ture, and
Irrigation Test Well Other	Formation: Describe by color, character, size of material show thickness of aquifers and the kind and nature of the stratum penetrated, with at least one entry for each ch	e materia	d in each ormation.
4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL	FROM	TO
New well Method: Dug Bored			
Despend Cable Driven Rotary Jetted	Original well was not producing		
Meconstitution of The Control of the	to full capacity and pumping sand.		
5) DIMENSIONS: Diameter of well 8 inches.	The state of the s		
Drilled & A Depth of completed well 255 A.	8" casing originally was install	ed	
The second secon	to 255 ft.		
6) CONSTRUCTION DETAILS:	The second secon		
Casing installed: 5 Tham from 225 ft. to 239 ft.	7-21-80 to 7-24-80		
Threaded O'-O'K-tellpacker tt. to tt.	Used Star Perforator for		
Welded 10 "Diam. from "t, to ""	112 perf. 235 - 242		
Perforations: Yes D No.	Original 40 Perf. 242 - 252		
Perforations: Yes No. 22.			
SIZE of perforations in. by in.	8" to 6" Telescoping K Packer 223	- 225	
perforations from ft. to ft.	DEOFINA		
perforations from ft. to ft.	K F U F V	-	
perforations from ft. to ft.		ļ	-
Screens: Yes No D	AHO TE MAN	-	-
UPU Johnson	HOO'T 9 ISON		
Model No	The second secon	-	-
Diam. 6 Slot size 20 from 239 ft. to 255 ft.	DEPARIMENT OF ECULUG		-
Diam. Slot size from ft. to ft. 412 Monterey	SOUTHWEST REGIONAL OFFIC	-	-
Cravel nacked: var re No Size of gravel: gand			-
Gravel placed from 225 nt. to 255 nt.	and the same of th	-	
Surface seal: Yes No To what depth? ft.		+	-
Did any strata contain unusable water? Yes . No []		+	+
Depth of strata		+	-
Method of sealing strata off			+
			+
(7) PUMP: Manufacturer's Name		1	+
		+	1
(8) WATER LEVELS: Land-surface elevation above mean sea level		 	
Static level 167°9° rt. below top of well Date 7-24-80		1	
Artesian pressure		1	
Artesian water is controlled by (Cap, valve, etc.)			1
Drawdown is amount water level is	Work started July 21 19 80 Completed	July 2	24 108
(9) WELL IESTS. lowered below static level Hansen			40
What is possible to the same of the same o	WELL DRILLER'S STATEMENT:		
Yield: (gal./min. with)/2	This wall was drilled under my jurisdiction	and thi	s report
" " " " " " " " " " " " " " " " " " "	true to the best of my knowledge and belief.		
Recovery data (time taken as zero when pump turned off) (water level	Wannam Berilliam Co. Inc.		
measured from wen top to water		(Type or	print)
Time Water Level Time Water Level Time Water Level			
O min	Address 6711 NE. 58th Ave, Vancouv	er, was	ningu
5 min 170 30 mins. 167'9	365 Gary Nustad		_
10 min 167'4"	Gory Ne	atac	K. Francisco
Date of test	[Signed] (Well Oriller)		KMA
Bailer test gal/min, with ft. drawdown after hr Artesian flow g.p.m. Date	The table to the table to the table to the table to the table table to the table tab	ly 31	19.
Temperature of water			
	223-02HA-NS-ED-*377NT		

wall = 2

| Y/e||#2 Well Report I.D. #270759

(,
	DEPARTMENT OF CONSTITUTE	
	DEPARTMENT OF CONSERVAND DEVELOPMENT	
WELL LOG	DOPARTMENT WASHINGT	ni/
Date August Record by Wate	AND DEVE CONSERV	
/ 10%	A LE LOPME NO	ATTON
Paust	Av. A.	`_'
record by Wat	r Supt 19 54 No. App	11.3272
Source drill	r Sun+	1720362
	P	7-2-A
Record by Wate Source driller Location: State of WAS County Clark	ecord	1: 1 - 1
County Clark		1-1
County C7	HINGTON	
A		
TES	and the second designation of the second sec	7/2
The second second	The state of the s	
SW	- Indiana	1 -1 -
SW NE N sec 3. Drilling Co B. L. F Address Ot Method of Drilling Owner TOWN	Management .	1
Drilling C. D. 8ec. 3	475	
Co. B. I.	N., R. 7 R	1 1 1
Address	Lice Kilk Diagr	8m aga
Math	hell	am of Section
O Pelli	Wash	
Owner Town of	trade	
Add Of I	A C	
Address	hello, Wash a Center, Wash.	The second second
Land surface, datum	center, Wash.	19.
datum.	The state of the s	4
	ft above	
MATION	Delow	Co.

Te (Transact	MAL	
below laterial water to the termination	THICKN	
material water-bearing terminology if feasible. The proceedings of the process of	literally (feet)	DEPTH
material water-bearing terminology below land-surface datum unless other if feasible. Following log of	Iterally but parapheans (feet)	Days (feet)
material water blies's terminology below land-surface datum unless other if feasible. Following log of materials.	Iterally but parapheans as necessary, in this shiftested, Cone in the indicated, Cone if reported that all that all the shiftested, Cone is supported to the shift all the	Profit
material water-bearing, so state an if feasible. Following log of materials. Clay	Iterally but paraphease as necessary, in dist all casings, partorate with strains, partorate.	Discontinue (Trans)
material water-bearing, so state an if feasible. Following log of materials. CLAY CLAY	TRICENSES (feet) Iterally but puraphrane as necessary. In drawing indicated, Correlate with agratignes, just all claims, perforations, screens, sta	David (feet)
material water-bearing, so state an if feasible. Following log of materials, Clay & Sand Quick Sand Quick Clay & Sand	THICKNESS (feet) iterally but puraphrane as necessary, in decord static level if reported. Oire de dist all casings, perforations, screens, etc.	Days (feet)
	Tricenant (feet) literally but paraphrane as necessary, in d record static level if reported. Give de sits all casings, perforations, scresse, ste.	Days (feet)
		Days (feet)
		Durys (feet) Parenthempth in feet phie columns
Quick sand &		97
Quick sand & st	little water 11	68 97 108
Quick sand & st	little water 11	68 97 108 197
Quick sand & so	little water 11	68 97 108 197
Quick sand & so Quick sand & so Quick sand Heavy sand Sand & some gra-	little water 11 Ome gravel 89	68 97 108 197
Quick sand & so Quick sand & so Quick sand Heavy sand Sand & some gra-	little water 11 Ome gravel 89	68 97 108 197 204
Quick sand & so Quick sand & so Quick sand Heavy sand Sand & some gra Coarse sand & some	little water 11 Ome gravel 89 Vel & water 8	68 97 108 197
Quick sand & some grand & some	little water 11 Ome gravel 89 Vel & water 7	68 97 108 197 204
Coarse sand & we coarse gray	little water 11 Ome gravel 89 Vel & water 7 ater	68 97 108 197 204
Coarse sand & we coarse gravel & Sand	little water 11 Ume gravel 89 Vel & water 7 Ster 4 2 Water 11	68 97 108 197 204
Coarse sand & we coarse gravel & Sand	little water 11 Ume gravel 89 Vel & water 7 Ster 4 2 Water 11	68 97 108 197 204 212 220 27
Coarse sand & we coarse gravel & sand	little water 11 Ume gravel 89 Vel & water 7 ater iter 4 2 water 11 2	68 97 108 197 204 212 220 27
Coarse sand & we coarse gravel & sand	little water 11 Ome gravel 89 Vel & water 7 Ster 4 Water 11 Water 89	68 97 108 197 201 212 220 213 214 215 215
Coarse sand & we coarse gravel & Blue lava ash Log is	little water 11 Ome gravel 89 Vel & water 7 Ster 11 Water 11 Water 8 2	68 97 108 197 201 212 220 213 214 215 215
Coarse sand & we coarse gravel & Blue lava ash Log is	little water 11 Ome gravel 89 Vel & water 7 Ster 11 Water 11 Water 8 2	68 97 108 197 201 212 220 213 214 215 215
Coarse sand & we coarse gravel & Blue lava ash Log is	little water 11 Ome gravel 89 Vel & water 7 Ster 11 Water 11 Water 8 2	68 97 108 197 204 220 220 221 31 42 50
Coarse sand & we coarse gravel & Blue lava ash Log is	little water 11 Ome gravel 89 Vel & water 7 Ster 11 Water 11 Water 8 2	68 97 108 197 204 220 220 221 31 42 50
Coarse sand & we coarse gravel & Blue lava ash Log is	little water 11 Ome gravel 89 Vel & water 7 Ster 11 Water 11 Water 8 2	68 97 108 197 204 220 220 221 31 42 50
Coarse sand & we coarse gravel & Blue lava ash Log is	little water 11 Ome gravel 89 Vel & water 7 Ster 11 Water 11 Water 8 2	68 97 108 197 204 220 220 221 31 42 50
Coarse sand & we coarse gravel & Blue lava ash Log is	little water 11 Ome gravel 89 Vel & water 7 Ster 11 Water 11 Water 8 2	68 97 108 197 204 220 220 221 31 42 50
Coarse sand & we coarse gravel & sand	little water 11 Ome gravel 89 Vel & water 7 Ster 11 Water 11 Water 8 2	68 97 108 197 204 220 220 221 31 42 50

. Well #2

VEL CO	700.	continued				7	HICK	NESS 4)	DEPT (fee	H.		
CORRS-			MATERIAL				~ (44					*
	** **			Dep	th forwa	rd						
						-					1	
77 1940 2	PUMP	TEST	-011						_		-	
	Dim.	2521	ft.			- 1			-		-	
	HH:	65	It.				-		-		-	
	Tie]	d: 20	o g.p	- III 4 	· Pe	er	Les	3 [2007	,	-	
	Typ	3 6. 3.	DA	200 €	-p-E	100	13,	agho	118	2	_	
	TVD	e & 3	DA ize of	moto	3 44	125 286		16.1			_	÷
	T	Abe c	8" di	am.	stee	1 f	ro	m U	FO		-	
	CAS	ING:								2	50	
	Cas	ing. v	as per	riora	ted	el	la	yer				
,	ft.	in	he con	arse hott e	E C		-		+			
-	- No	-sere	322 011				+	۲.				
-	-											
									1			
		-			1 4 1		-		-			20
			1 5 5 5				-					
_						1, i.,	-		-			Description of the second
-		Salar I	<u> </u>		7 1 1	-		1	-	!		
-												
12.17				7 1,0				<u></u>		12 3	-	
-	1		1.1			· ·	· 6.15.	-		-	12	-
1 -					2 M	-		1		1		1
-			1 1					1			`	
1						1.23		1.				— a.
-										-1		-
·							-	-		+		
								+		+		-
1.								1				
1.1			4 3M. 400	9					(1

Data and/or the Information on this Well

Ecology does NOT Warranty the

he Department of

WATER WELL REPORT STATE OF WASHINGTON

Application NoSZ-2625

Permit No. . . . (2) LOCATION OF WELL: County Clark __ NW & SE & Sec. 34 T 5 N. R 1E W.M. Bearing and distance from section or subdivision corner (10) WELL LOG: (3) PROPOSED USE: Domestic | Industrial | Municipal | Irrigation [] Test Well [] Other Formation: Describe by color, character, size of material and structure, and show thickness of aguifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation. 0 MATERIAL FROM Bored | Road Bed Cable [Driven [] Deepened 9 Clay brown w/gravel Rotary [-Jetted [Reconditioned [] 91 Clay gray w/gravel (5) DIMENSIONS: Diameter of well8 inches. 18 Clay yellow-brown Drilled 281 st. Depth of completed weil 257 st. 29 Clay vellow Sandy-clay yellow w/some gravel 29 37 (6) CONSTRUCTION DETAILS: 37 42 Sandy-clay gray blue Casing installed: 8 "Diam from +2' ft. to 223 ft. Sandy-clay yellow-blue 93 93 1:13 Sandy yellow dirty " Diam. from ft. to ft, Welded K 113 120 Sand Yellow brown 120 141 Sandy-clay tan Perforations: Yes [] No 🛭 147 141 Sandy-clay sparse gravel Type of perforator used SIZE of perforations in. by in. 147 185 Sand slight clay binder perforations from ft. to ft. 205 Sand yellow-gray fine med perforations from ______ ft. to _____ ft. Sandy-clay yellow-brown w/streaks perforations from ______ft. to ______ft. 205 220 of sand Figure K-Packer from 219'9" to 220' Screens: Yes O No D Johnson Sand vellow streaks w/clay binder 220 242 242 243 Sand & gravel Type Telescoping Model NoStainless 243 249 Sand yellow Diam. Slot size from ft. to ft. Sand gravel, boulders 249 251 Diam. Slot size from ft, to ft. Rock, broken w/round rock 251 256 * Sizes listed at end of well log
Gravel packed: Yes (N No | Size of gravel: 1/8

Gravel placed from 33'6" ft to 90 ft 256 268 Clay blue-gray 279 268 Shale rock med 279 281 Rock blue med Surface seal: Yes 2 No To what depth? 33'6" n Did any strata contain unusable water? Yes Screens: Dia. 8 Slot size 10 from 220'3" to 225'6" Type of water?..... Depth of strata Dia. 8 Slot size 12 from 225'6" to 246'6" Method of sealing strata off Dia: 8 Slot size 14 from 246'6" to 257 (7) PUMP: Manufacturer's Name Type: HP.... Pea-gravel placed from 257' to 281' (8) WATER LEVELS: Land-surface elevation above mean sea level. Static level 171 ft. below top of well pate 11-5-84 Casing was cut & separated at 257 Artesian pressurelbs. per square inch Date..... Artesian water is controlled by (Cap, valve, etc.) Drawdown is amount water level is. lowered below static level Work started 10-24 19 84 Completed 11-5 19 84 (9) WELL TESTS: Was a pump test made? Yes No | If yes, by whom? Driller. WELL DRILLER'S STATEMENT: Yield: 75 gal./min. with 85 ft. drawdown after 1 hrs. ... This well was drilled under my jurisdiction and this report is ** true to the best of my knowledge and belief. Tested with air-rotary at 2561 Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level) NAME Dale McGhee & Sons Well Drilling, Inc.
(Person, firm, or corporation) (Type or print) Time Water Level | Time Water Level | Time Water Level 6 8 32 Address 3032 Allen St., Kelso, WA 98626 Bailer test flow I be m. Date made? Yes I License No. 0298 Date 11-13- , 19 84 Was commical analysis made? Yes | No X Temperature of water.....

(USE ADDITIONAL SHEETS IF NECESSARY)

DECOMMISSIONING
T.D#1717174

RECEIVED

WellKeport	1.1).#1717177	JAN 1	100.
WATER WELL REPORT	CURRENT	WA State D of Ecology	1 2016
Original & 1st copy - Ecology, 2nd copy - owner, 3rd copy - driller	Notice of Intent No. AE34869	LCOlogy	Siment
State of Wardington Construction/Decommission ("x" in circle)	Unique Ecology Well ID Tag No. N/A		(ONRO)
Construction	Water Right Permit No. N/A		
☑ Decommission ORIGINAL INSTALLATION			
Notice of Intent Number	Property Owner Name TOWN OF LACENTER	A 111 V 11 11 11 11 11 11 11 11 11 11 11	
PROPOSED USE: Domestic Industrial Municipal DeWater Irrigation Test Well Other	Well Street Address NE NORTH FORK AVE		
TYPE OF WORK: Owner's number of well (if more than one)	City LACENTER County CLAR		
□ New well □ Reconditioned Method: □ Dug □ Bored □ Driven □ Deepened □ Cable □ Rotary □ Jetted	Location NW1/4-1/4 SE1/4 Sec 34 Twn 5 (s, t, r Still REQUIRED)	N R 1E	EWM ⊠ Or
DIMENSIONS: Diameter of well 6 inches, drilled ft. Depth of completed well ft.	The second secon		wwm 🗆
CONSTRUCTION DETAILS	Lat/Long Lat Deg Lat I	M-10	
Casing Welded 6" Diam. fromft. toft.			
Installed: Liner installed PVC 4" Diam. from ft. to ft. Threaded "Diam. From ft. to ft.	Long Deg Long	, Min/Sec	4
Perforations: Yes No	Tax Parcel No. (Required)258910000		
Type of perforator used	CONSTRUCTION OR DECOMM	ISSION PROCESS	DI
SIZE of perfsin. by in. and no. of perfsfromft. toft.	Formation: Describe by color, character, size of man	terial and structure, a	nd the kind and
Screens: Yes No K-Pac Location	nature of the material in each stratum penetrated, wi of information. (USE ADDITIONAL SHEETS IF)	ith at least one entry	for each change
Manufacturer's Name		- Control of the Cont	
Type Model No	*SAND SCREEN WAS LEFT IN PLACE	FROM 255	TO 221
Diam. Slot size from ft. to ft.	REMOVED 8" CASING AND FILLED	233	221
The state of the s	W/118 BAGS OF 3/4" BENTONITE		Maria
Gravel/Filter packed: Yes No Size of gravel/sand Materials placed fromft. toft.	CETCO AS CASING WAS BEING		
Surface Seal: Yes No To what depth?ft.	REMOVED, FILL TO SURFACE WITH	221	0
Material used in seal	BENTONITE		
Did any strata contain unusable water?	A CONTRACTOR OF THE CONTRACTOR		
Type of water? Depth of strata			•
Method of sealing strata off			
PUMP: Manufacturer's Name			
Type: H.P.			
WATER LEVELS: Land-surface elevation above mean sea levelft.			
Static levelft. below top of wellft. Date lbs. per square inch lbs. pe		STATE LANGE COMMISSION OF THE PARTY OF THE P	
Artesian water is controlled by (cap, valve, etc.)			
(oa), vare, ce.,			
WELL TESTS: Drawdown is amount water level is lowered below static level			
Was a pump test made? Yes No If yes, by whom?			
Vield:gal./min, withft. drawdown afterhrs.	minutes and a second se		
Yield:gal./min, withft, drawdown afterhrs. Yield:gal./min, withft, drawdown afterhrs.	A STATE OF THE STA		
Recovery data (time taken as zero when pump turned off) (water level measured from			
well top to water level)			
Time Water Level Time Water Level Time Water Level			
Date of test	The second of th		
Bailer testgal/min. withft. drawdown afterhrs.			
Airtestgal/min. with stem set atft. forhrs.	TO STATE OF THE PARTY OF THE PA		
Artesian flow			
Temperature of water Was a chemical analysis made?			

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true

to my best knowledge	and benet.	
Drilling Company	REDINGER INC.	
Address	P.O. BOX 100	
City, State, Zip	YACOLT	, WA, 98675
Contractor's	DINT#000k/W/ De	12/10/2016

Completed Date 12/2/2015

Driller Engineer Trainee Name (Print) Reazo Redinger III Driller/Engineer/Trainee Signature Driller or trainee License No. 1294 IF TRAINEE: Driller's License No: Driller's Signature:

Start Date 12/2/2015

IF TRAINEE: Driller's License No.

Driller's Signature

Mcl # 2 Dz. Commissioning Well Report I. D.# 1313708

Yell # ¿	Dz. Commissioning	RED
	D#1313208	CEIVE
WATER WELL REPORT Original & 1st copy - Ecology, 2nd copy - owner, 3rd copy - driller	CURRENT Notice of Intent No. AE34870	WA State Department
ECOLOGY Construction/Decommission ("x" in circle)	Unique Ecology Well ID Tag No. N/A	cology is artmen
☐ Construction ☐ Decommission ORIGINAL INSTALLATION	Water Right Permit No. N/A	
Notice of Intent Number		
PROPOSED USE: Domestic Industrial Municipal DeWater Irrigation Test Well Other	Well Street Address NE NORTH FORK AVE	And the second of the second o
TYPE OF WORK: Owner's number of well (if more than one)	City LACENTER County CLARK	
New well	Location NW1/4-1/4 SE1/4 Sec 34 Twn 5N F (s, t, r Still REQUIRED)	CIE EWM MO Or WWM II
CONSTRUCTION DETAILS	Lat/Long Lat Deg Lat Mir	/Saa
Casing Welded 6" Diam. fromft. toft. Installed: Liner installed PYC 4" Diam. fromft. toft. Threaded Diam. Fromft. toft.	Lat/Long Lat Deg Lat Min Long Deg Long M Tax Parcel No. (Required)258913000	in/Sec
Perforations: Yes No Type of perforator used	<u> </u>	
SIZE of perfsin. by in. and no. of perfsfromft. toft. Screens: Yes No K-Pac Location	CONSTRUCTION OR DECOMMISSI Formation: Describe by color, character, size of material nature of the material in each stratum penetrated, with at of information. (USE ADDITIONAL SHEETS IF NEC	and structure, and the kind and least one entry for each change
Manufacturer's Name Model No	MATERIAL	FROM TO
Diam. Slot size from ft. to ft. Diam. Slot size from ft. to ft.	REMOVED 8" CASING FILLED W/126 BAGS OF 3/4"	
Fravel/Filter packed: ☐ Yes ☐ No Size of gravel/sand	CETCO BENTONITE AS CASING WAS BEING REMOVED.	252 0
Surface Seal: Yes No To what depth?ft.		
Material used in seal		
id any strata contain unusable water?		
Nethod of scaling strata off		
UMP: Manufacturer's Name		
ype:		
tatic levelft. below top of well Date		
rtesian pressure lbs. per square inch Date		
rtesian water is controlled by (cap, valve, etc.)		
VELL TESTS: Drawdown is amount water level is lowered below static level		
/as a pump test made? Yes No If yes, by whom?		
ield:gal/min, withft. drawdown afterhrs. ield:gal/min, withft. drawdown afterhrs.		
ield:gal/min. withft. drawdown afterhrs.		
ecovery data (time taken as zero when pump turned off) (water level measured from ell top to water level)		
ime Water Level Time Water Level Time Water Level		
ate of test		
ailer testgal./min. withft. drawdown afterhrs.		
rtestgal./min. with stem set atft, forhrs.		
tesian flowg.p.m. Date		
mperature of water Was a chemical analysis made?		
VELL CONSTRUCTION CERTIFICATION: 1 constructed and/or accept esponsibility for construction of this well, and its compliance with all Washington		Date 11/30/2015
onstruction standards. Materials used and the information reported above are t Driller Engineer Trainee Name (Print) Reazo Redinger III	rue to my best knowledge and belief. Drilling Company REDINGER INC.	X
Driller/Engineer/Trainee Signature	Address P.O. BOX 100	
Driller or traince License No. 1294	City State Zin YACOLT	WA 08675

Contractor's

Registration No. REDINI*088MW

Date 12/10/2015

Driller or trainee License No. 1294

IF TRAINEE: Driller's License No:

Driller's Signature:

Well Report I.D. #1313048

WellReport I.D.	& commission ing	JAN 1 1 2016 Vale Department
	41717148	CEN
Nellkeport (.1).	H1313070	IL TIVE
110/1/20	Wa	VAN 7. IL
	05.5	ta. 2000
WATER WELL REPORT	CURRENT	16 Do -018
Original & 1st copy - Ecology, 2nd copy - owner, 3rd copy - driller	Notice of Intent No. 1724971	10gy sparts
DEPARTMENT OF	Notice of Intent No. AE34871	(SWDent
State of Washington Construction/Decommission ("x" in circle)	Unique Ecology Well ID Tag No. N/A	100,
Construction	Water Right Permit No. N/A	
Decommission ORIGINAL INSTALLATION	Property Owner Name TOWN OF LACENTER	
Notice of Intent Number PROPOSED USE: Domestic Industrial Municipal		
DeWater Irrigation Test Well Other	Well Street Address NE NORTH FORK AVE	
TYPE OF WORK: Owner's number of well (if more than one)	City LACENTER County CLARK	
□ New well □ Reconditioned Method: □ Dug □ Bored □ Driven	Location Nw1/4-1/4 SE1/4 Sec 34 Twn 5N R 1E	EWM ⊠
☐ Deepened ☐ Cable ☐ Rotary ☐ Jetted	(s, t, r Still REQUIRED)	Or
DIMENSIONS: Diameter of well 6 inches, drilled ft. Depth of completed well ft		WWM 🗆
CONSTRUCTION DETAILS	Lat/Long Lat Deg Lat Min/Sec	
Casing Welded 6" Diam. from ft. to ft.		
Installed: Liner installed PVC 4" Diam. from ft. to ft. Threaded "Diam. From ft. to ft.	Long Deg Long Min/Sec Tax Parcel No. (Required)258968000	
Perforations:	Tax Parcel No. (Required)258968000	
Type of perforator used	CONSTRUCTION OR DECOMMISSION PRO	CEDURE
SIZE of perfsin. by in. and no. of perfsfromfl. tofl.	Formation: Describe by color, character, size of material and stru	icture, and the kind and
Screens: Yes No K-Pac Location	nature of the material in each stratum penetrated, with at least or of information. (USE ADDITIONAL SHEETS IF NECESSAR)	
Manufacturer's Name		
Type Model No		ROM TO 81 225
Diam. Slot size from ft. to ft.	REMOVED 8" CASING FILLED	**************************************
Consul/Billion marked: Cl Ver Cl Ve City Service	W/145 BAGS OF 3/4" CETCO	
Gravel/Filter packed: Yes No Size of gravel/sand Materials placed from ft. to ft.	BENTONITE AS THE CASING WAS	
Surface Seal: Yes No To what depth? ft.	BEING REMOVED. FILLED WITH	
Material used in seal	BENTONITE TO THE SURFACE 2	25 0
Did any strata contain unusable water?		
Type of water? Depth of strata		
Method of sealing strata off		
PUMP: Manufacturer's Name		
Type: H.P.		
WATER LEVELS: Land-surface elevation above mean sea levelft. Static levelft. below top of wellft.		
Artesian pressurelbs. per square inch Date	All the second of the second o	
Artesian water is controlled by (cap, valve, etc.)		
WELL TESTS: Drawdown is amount water level is lowered below static level		
Was a pump test made? Yes No If yes, by whom?		Harris Ha
Yield: gal/min. with ft. drawdown after hrs: Yield: gal/min. with ft. drawdown after hrs	N. C.	
Yield: gal/min, withft. drawdown afterhrs. Yield:gal/min, withft. drawdown afterhrs.		
Recovery data (time taken as zero when pump turned off) (water level measured from		
well top to water level) Time Water Level Time Water Level Time Water Level		
Time Water Level Time Water Level Time Water Level		
Date of test		
Bailer testgal./min. withft. drawdown afterhrs.		
Airtestgal./min. with stem set atft. forhrs.		
Artesian flowg.p.m. Date		
Temperature of water Was a chemical analysis made?		
The state of the s	September 1970 -	
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept	Start Date 12/2/2015 Completed Date	12/2/2015
responsibility for construction of this well, and its compliance with all Washington		
construction standards. Materials used and the information reported above are t Driller Engineer Trainee Name (Print) Reazo Redinger III	A STATE OF THE PARTY OF THE PAR	
Driller/Conjugat/Tenjuga Signatura	Drilling Company REDINGER INC.	

City, State, Zip

Registration No. REDINI*088MW

Contractor's

YACOLT

WA, 98675

Date 12/10/2015

APPENDIX C2

Well Reports

of

Wells Within ¼ Mile

of the

Project Site

Application	No.	

second Copy — Owner's Copy	WASHINGTON Permit No		
(1) OWNER: Name Barthold Sorge	Address Rt. 2, Box 11, La Center, WA		
(2) LOCATION OF WELL: County Clark		The second second	
Bearing and distance from section or subdivision corner			
(3) PROPOSED USE: Domestic I Industrial Municipal	(10) WELL LOG:		
Irrigation [Test Well . Other	Formation: Describe by color, character, size of material shape thickness of squifers and the kind and nature of t stratum penetrated, with at least one entry for each ch	and struc	ture, and
(4) TYPE OF WORK: Owner's number of well			The second second
(4) TIPE OF WORK: (if more than one)	MATERIAL	PROM	TO
Deepened	Top soil & clay, red	21	191
Reconditioned Rotary Jetted	Clay, red-brown Conclomerate	191	431
(5) DIMENSIONS: Diameter of well6_ inches.	Clav. white	431	461
Drilled 503 n. Depth of completed well 500 nt.	Clay brown & gravel	45	59 *
	Rock, blacks hard	591	65'
(6) CONSTRUCTION DETAILS:	Crevel comented	651	90'
Casing installed: 6 " Diam. from 0 n. to 172 n.	Clay, gray		110'
Threaded 42 PVC Diam from 168 a to 500 a	Clay, gray; sandy		1201
Welded D	Gravel, sand, oray: penented	1201	1421
Perforations: Yes E No	Gravel, camented	1421	1511
Type of perforator used Saw & drill	Charles and annual lanes	1511	171'
SIZE of perforations ** holes with 1/8" X 4 in 20	water-bearing 2 gpm		
and 3 rows perforations state sveryether 20 m	Rock, gray; medium-hard, water-	1711	285
рыниции from 192 n to 500 n	bearing 265!=285' 9 gom		
Screens: Yes No E	Rock, gray; madium-bard	2851	
Screens: Yes No E	Rock, gray; sesme of schale		390 F
Type Model No.	ROCK, gray; meditaminaru, matera	330.	202
Diam. Slot size from ft, to ft.			
Diam Slot size from ft. to ft.			
Gravel packed: Yes No M Size of gravel:			
Gravel placed from	DECEIVED		
Surface seal: Yes No D To what depth? 32 n.	KELLIALD		
Material used in seal Bentonits	· · · · · · · · · · · · · · · · · · ·		
Did any strata contain unusable water? Yes [] No E		-	
Type of water? Depth of strata Method of sealing strata off	4,2%	-	
	DEPARTMENT OF ECOLOGY		
(7) PUMP: Manufacturer's Name	SOUTHWEST REGIONAL DIFFICE		
туре:			
(8) WATER LEVELS: Land-surface elevation			
Static level 120 ft. below top of well Date 2/29/81			
Artesian pressure the per square inch Date			
Artesian water is controlled by (Cap, valve, etc.)			
		- /	
lowered below static level	Work started 7/8 19.81 Completed	1/29	1981
Was a pump test made? Yes No Will yes, by whom? Yield: gal./min. with ft. drawdown after hr	THE PERSON OF TAXABLE PROPERTY OF THE PROPERTY OF THE PERSON OF THE PERS		
Yield: gal./min. with n. drawdown arter in	This well was drilled under my jurisdiction	and this	report i
11 11 11 11	true to the best of my knowledge and belief.		,
Recovery data (time taken as zero when pump turned off) (water leve	a		
measured from well top to water level)	NAME Norris Drilling & Pump Co.,	Inc.	awisa ta
Time Water Level Time Water Level Time Water Level	11026 NE St. Bohns Hd.		-
	Address Vancouvar, WA 98665		
	- May ON A		
Date of test	[Signed] (Well Driller)	***************************************	
Batler test 20 gal/min. with 245 ft. drawdown after 1 hr		n lan	
Temperature of water Was a chemical analysis made? Yes [] No [License No. 0167 Date	9/18	, 1981

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

WellReport I.D.# 1864
WATER WELL REPORT

Application	No.	

hird Copy Driller's Copy BTATE OF	VARIATION POPULATION	- 4	100
1) OWNER: Name Dec Hammond	Address Rt 2 Boy 457 H. S. Ja C	stal	14,716
2) LOCATION OF WELL: COUNTY Clark	2 of slutplat 83,9 1, seco 4 T. 5	LN., R.	Ewm.
earing and distance from section or subdivision corner			
3) PROPOSED USE: Domestic & Industrial Municipal	(10) WELL LOG:		
Irrigation Test Well Other	Formation: Describe by color, character, size of materia show thickness of aquifers and the kind and nature of t stratum penetrated, with at least one entry for each c	he materi	al in each formation.
4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL	FROM	TO
New well . Method: Dug . Bored .	topsail	0	2
Deepened Cable Driven Reconditioned Reconditioned	yellow Clay	7	60
	sandy Brawa Coay	25	20
(5) DIMENSIONS: Diameter of well inches. Drilled O ft. Depth of completed well /20 ft.	alles arana Canan	80	20
	Thank rock -	100	et_
(6) CONSTRUCTION DETAILS:		-	
Casing installed: nim. from ft. to NO _ft.			
Threshold Denn. from		-	 .
Perforational Teleph No D			
to to		-	-
perforations from 2 to 2	· · · · · · · · · · · · · · · · · · ·	 	-
E perforations from			1
Serbenas Yes No.			
Menufacturer's Name		-	
Diam. Sict size from ft. to ft			+
Diam. Slot size from ft, to		-	-
Gravel packed: Yes No.20 Size of gravel:			
Gravel placed from ft. to			
Surface seal: Yes No Do To what depth? 20			-
Material used in seal Bennite		+	+
Did any strata contain unusable water? Yes No			1
Typs of water?			
(7) PUMP: Manufacturer's Name.		-	-
Type:			-
Land-surface elevation a de/) USI		1	
Static level 80 ft. below top of well Date	80.		
Artesian pressure			-
Artesian water is controlled by (Cap. valve, etc.)		-	+
(9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started Queen 19.8 2 Completed	aun	× 19.8
Was a pump test made? Yes No If yes, by whom?	Work Burted.		
Yield: gal./min. with ft. drawdown after h	WELL DRILLER'S STATEMENT:	4h	le venent i
11 4 11	This well was drilled under my jurisdiction true to the best of my knowledge and belief.	and th	ra report r
Recovery data (time taken as zero when pump turned off) (water let	-		
measured from well top to water level	NAMESCALLISACIONE	(Type or	print)
Time Water Level Time Water Level Time Water Level	Dto 0 1/ 3761-D & 0.	turi	1b 98
	Address Class Co	-1-1	~~T
	" Jake Acher	U	•
Date of test	rs. [Signed] (Well Driller)	************	
Artesian flowg.p.m. Date	() 08/2 Date ()	une	19.8
Temperature of water Was a chemical analysis made? Yes 🔲 No	Lacette Management		
Temperature of water			

Well Report 1.D.#4538 WATER WELL REPORT Application No.

STATE OF WASHINGTON

Perm	44	No	

		Address At 1 Box 496 Woo		
نب	(2) LOCATION OF WELL: County Clark	— ¼ sec.3 4 т.≤	N., R.	E.W.M.
port	Bearing and distance from section or subdivision corner			
eb	(3) PROPOSED USE: Domestic Industrial Municipal	(10) WELL LOG:		
ď	Irrigation Test Well Other	Formation: Describe by color, character, size of material show thickness of aquifers and the kind and nature of t	and struc	ture, and
e	(4) TYPE OF WORK: Owner's number of well	stratum penetrated, with at least one entry for each ch	ange of f	ormation.
3	New well Method: Dug Bored	MATERIAL	FROM	то
S	Deepened	Top Soil	-	2 2
ቱ	Reconditioned Rotary Jetted	comest genue	22	66
O	(5) DIMENSIONS: Diameter of well inches.	Deales interes as a second	1.6	79
	Drilled 360 ft. Depth of completed well 360 ft.	Reiltstore soft wellow	77	90
Information	AN CONSTRUCTION OF THE AVEC	Shale medicine	90	114
ati	(6) CONSTRUCTION DETAILS:	sard store	114	143
Ĕ	Casing installed: 6 Diam. from 77 tt. to 91 tt.	POCK blue SOFT	143	168
5	Threaded S "Diam. from E.4 ft. to 360 ft. Welded "Diam. from ft. to ft.	ROCK BLACK BARD	168	123
T L		AOCK Plue medium	13	365
9	Perforations: Yes 2 No 1	ROCK blue & geey median	905	JAP
ţ	Type of perforator used TRCh-Cul. SIZE of perforations in by in in.			
	60 perforations from 100 ft. to 360 ft.			
×	perforations from			
and/or	perforations from ft. to ft.			
	Screens: Yes Note			
ata	Manufacturer's Name		-	
	Diam. Slot size from ft, to ft.			
the	Diam. Slot size from ft. to ft.			
	Gravel packed: Yes No D Size of gravel;			
£	Gravel placed from			
Warranty	Surface seal: yes No To what depth/ #0 tt.		-	
a	Material used in seal Best Tax 172		 	
3	Did any strata contain unusable water? Yes [] No []	DECT		
	Type of water?	RECEIV	ED	
9			-	
	(7) PUMP: Manufacturer's Name	AUG 1 3 197	4	
oes			-	
ŏ	(8) WATER LEVELS: Land-surface elevation above mean sea level	DEPARTMENT OF E	DLOGY	
3	Static level 120 ft. below top of well Date 7-29-74 Artesian pressure 0 lbs. per square inch Date	TOTAL PROPERTY OF THE PROPERTY	OFFICE	
ŏ	Artesian water is controlled by (Cap, valve, etc.)			
Ecology				
	(9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started 7- 25 , 1974 Completed	142	9.1974
of o	Was a pump test made? Yes No If yes, by whom Paulee	WELL DRILLER'S STATEMENT:	0	
Ħ	Yield: 8.3 gal/min. with 240 ft. drawdown after 2 hrs.	This well was drilled under my jurisdiction	and this	report is
ē	Sir Potony tested AT 357 Feet	true to the best of my knowledge and belief.		
Ę	Recovery data (time taken as zero when pump turned off) (water level	01001	7	- 1/ :
Department	measured from well top to water level	NAME Delegation (Person, firm, or corporation)	(Type or	print)
d	Time Water Level Time Water Level Time Water Level			
ă		Address 3032 Allen 54	Dels	U.M.S
		Sa has had		
The	Date of test	[Signed] Jale M (Well Driller)		
	Bailer test gal /min, with ft. drawdown after hrs. Artesian flow g.p.m. Date	2901	5	. 7/
	Temperature of water	License No. 0296 Date 8-		, 19.77
		1		

File Original and First Copy with the Division of Water Management Second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT

WellReport I.D.# 7	fol	
ODE '	Application	Ma

Second Copy — Owner's Copy Third Copy — Driller's Copy STATE OF W	ASHINGTON Permit No.		
(1) OWNER: Name Salishan Vinyard			
(2) LOCATION OF WELL: County Clark			
Searing and distance from section or subdivision corner	(10) WELL LOG:		
(3) PROPOSED USE: Domestic Manuficipal Industrial Domestic Manuficipal Interpretation Manuficipal Domestic Manufic		l and stage	
	Formation: Describe by color, character, size of materia show thickness of aquifers and the kind and nature of t stratum penetrated, with at least one entry for each ci	he materic	d in each ormation.
(4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL	FROM	то
New well 🗶 Method: Dug 🗌 Bored 📋 Despensed 🗍 Cable 🗍 Driven 🗒	Topsoil	Q	1.
Reconditioned Rotary Jetted	Brown clay	1'	13'
(5) DIMENSIONS: Diameter of well 6 inches.	Red & brown clay	13'	21'
Drilled 294 ft. Depth of completed well 294 ft.	Brown clay with scattered gravel	21'	36'
(6) CONSTRUCTION DETAILS:	Brown clay & gravel	361	531
Casing installed: 6 "Diam from 0 n to 294 n	White clay & gravel	- 531	6.51
Threaded Diam, from ft. to ft.	Camented brown sand	651	1450
Welded Diam. from ft. to ft.	White clay & gravel	1451	1521
	Brown sandy clay & gravel	1521	1950
Perforations: Yes 🗆 No 🏗	Cemented fine yellow sand	1950	270.
Type of perforator used in. by in.	Brown mlay with scattered	270	290
perforations from	gravel Water bearing sand & gravel	2000	201.0
perforations from	Percet Destring Sam & Statel	290 •	2941
perforations from ft. to ft.,			
Screens: Yes No I			
Manufacturer's Name			
Type Model No			
Diam. Slot size from ft. to ft.			
Diam. Slot size			
Gravel packed: Yes No D Size of gravel:			
Gravel placed from ft. to ft.			
Surface seal: Yes I No To what depth? 20 rt.	,		
Material used in seal Bentonite			
Did any strata contain unusable water? Yes 🗆 . No 💢			
Type of water?			
method of sealing strate on			
(7) PUMP: Manufacturer's Name			
Туре:			
(8) WATER LEVELS: Land-surface elevation		1	
Static level 178 ft below top of well Date 11/9/72			
Artesian pressure			
Ariesian water is controlled by(Cap, valve, etc.)			
		1	
lowered below static level	Work started 10/27 19 72 Completed 1	1/9	19.7.2
Was a pump test made? Yes No If yes, by whom? Yield: gal./min. with ft. drawdown after hrs.	WELL DRILLER'S STATEMENT:		
17 11 H 11	This well was drilled under my jurisdiction	and this	report is
12 42 11 43	true to the best of my knowledge and belief.		
Recovery data (time taken as zero when pump turned off) (water level			
measured from well top to water level) Time Water Level Time Water Level Time Water Level		O. I	NCrint)
	Address 2009 NE 117th St., Vanc	ouver	. Wn.
	= = = = = = = = = = = = = = = = = = = =		
That of test	(Simel Takell on The	11	
Date of test Bailer test 35 gal/min with 96 ft. drawdown after 4 hrs.	[Signed] (Well Dripler)		
Artesian flowg.p.m. Date	License No. 223 02 8129 Date No.	v. 17	19 72
Temperature of water Was a chemical analysis made? Yes [] No [5]	License No	. at . 78 ada . f	, 18f

① · 特别类018

WellReport I.D.#7178 WELL REPORT

Start Card	No.	0	ğ	<u></u>	/	4	_
------------	-----	---	---	---------	---	---	---

	Original and First Copy with writeent of Ecology WATER WE	LL REPORT Start Card No.	80	46
Seco	ad Came Dunaria Came	WASHINGTON		
	A 4/2 ===	Water Right Permit No		
(1)	OWNER: Name Con Hint	Address / G - y & A - G - G		
(2)	LOCATION OF WELL: County Cofark	SWNEN SOC34TU	5N, R	2_w.m.
(2a)	11776			
(3)	PROPOSED USE: Someatic Industrial Municipal	(10) WELL LOG or ABANDONMENT PROCEDU		
443	TYPE OF WORK: Owner's number of well	Formation: Describe by color, character, size of material ar thickness of aquifers and the kind and nature of the material in e- with at least one entry for each change of information.		
(4)	futions man one)	MATERIAL	FROM	то
	Abandoned	Top Soil	0	4
(5)	DIMENSIONS: Diameter of wellinches.	Goodel	4	18
,	Drilled 100 feet. Depth of completed well 92 ft.	11000	101	30
(6)	CONSTRUCTION DETAILS:	Hand Grey Basalt	18	33
	Casing Installed:	Washed Gravel	35	45
8	Welded	white clay Stone	45	68
	Perforations: Yes No	- 6 - 1	(1)	~ >
	Type of perforator used SC in. by in. by in.	Corey Stowe Clay	68	83
	150 perforations from 32 ft. to 92 ft.	Black Sandstone	33	91
	perforations from	B/U & C(C)	9/	100
	perforations from	BILL		700
	Manufacturer's Name			
	Type Model No			
	Diam. Slot size from ft. to ft.			
	Diam. Slot size from ft. to ft.			
	Gravel packed: Yes No Size of gravel			
	Gravel placed fromft. toft.			
	Surface seal: Yes No To what depth? 3 9 tt.			
	Material used in seal D Did any strate contain unusable water? Yes No		-	
	Type of water?Depth of strata			
	Method of sealing strata off			
(7)	PUMP: Manufacturer's Name			
	Type:H.P			-
(8)	WATER LEVELS: Land-surface elevation above mean sea level			
	Static level 38 n. below top of well Date/ - / 6 - 93			
	Artesian pressure			
_	(Gep, valve, etc.))	Work started /- 26. 93, 19. Completed /-	26,-	
(9)	WELL TESTS: Drawdown is amount water level is lowered below static level Was a pump test reade? Yes No If yes, by whom?			
	Yield:gat./min. with ft. drawdown after hre.	WELL CONSTRUCTOR CERTIFICATION:		4 46-1
	N 0 0 0	I constructed and/or accept responsibility for cons and its compliance with all Washington well con	atruction	standards.
		Materials used and the information reported above knowledge and belief.	are true	lo my best
	Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)	Allowing to the Bones.		
	Time Water Level Time Water Level Time Water Level	NAMES (PERSON, FIRM, OR CORPORATION)	CATYPE (OR PRINT)
		Address Coldendole w	-	
	Date of test	O ond la Ol	10	~ 2
	Bailer test gal./min. with ft. drawdown after fre.	(Signed) A. License (WELL DRILLER)	No.Z	
	Airtest / o gal./min, with stem set at / oo ft. for 3 hrs.	Registration No. 1/1/2 S. D. O. S. S. C. Date /- Z. C.		
	Artesian flow	HUGE ADDITIONAL CHEETS IF NECES	CADW	_,

WellReport I.D.# 9061

Depa	and Conv. — Owner's Conv.	Start Card No. 55390 LL REPORT UNIQUE WELL I.D. # AAI 759 Water Right Permit No.			
(1)		dness P.O. Box 629, LaCenter Wa., 98629	. 1		
(2)	LOCATION OF WELL: County_ Clark	SW 1/4 NE 1/4 Sec 34 T. 5	N.R	1 w.w	
(2a)	STREET ADDRESS OF WELL (or nearest address) North Fork Rd.,		. 37		
(3)	PROPOSED USE: XX Domestic Industrial Municipal Industrial Municipal DeWater Test Well Other	(10) WELL LOG or ABANDONMENT PROCEDURE D Formation: Describe by color, character, size of material and structure, and and the kind and nature of the material in each stratum penetrated, with a	show thickne	ess of anuder	
(4)	TYPE OF WORK: Owner's number of well (If more than one)	change of information.		T	
	Abandoned □ New well XX Method: Dug □ Bored □	MATERIAL TO 11.1	FROM	TO	
	Deepened	Top soil & cobbles	0	2	
(E)		Clay cobbles gravel & sand	2	17	
(5)	DIMENSIONS: Diameter of well 6 inches.	Cobbles loose gravel & sand	17	33	
	Drilled 343 feet. Depth of completed well 343 ft.	Brown clay	33	47	
(6)	CONSTRUCTION DETAILS:	Brown sand w/clay	47	75	
ν-,	Casing installed: 6 : Diam from +31 ft to 1371811 ft	Brown clay	75	97	
	Welded XX / 11 TXTC 1 Disaster 22 4 4 2/2	Gritty clay	97	105	
	Liner installed TY Threaded Diam. from ft. to ft.	Multi colored shale with some rock	105	115	
		Blue shale with rock pieces	115	180	
	Perforations: Yes No XX Type of perforator used	Soft shale with clay	180	195	
	SIZE of perforations in. by in.	Grey & blue shale	195	235	
	perforations from ft. to ft.	Brown shale	235	270	
	perforations fromft. toft.	Blue brown & grey shale	270	320	
	perforations fromft. toft.	Soft shale some clay	320	330	
	Screens: Yes XX No	Hard grey shale XXXX	330_	340	
	Manufacturer's Name	Grey rock	340	-343	
	Type Slotted Model No				
	Diam. 4" Slot size .035 from 323 ft. to 343 ft.			-	
	Diam. Slot sizefromft. toft.			<u> </u>	
	Gravel packed: Yes XX No Size of gravel Colorado 6x9	b 20			
	Gravel placed from 310 ft. to 343 nt.	SU 90			
	Surface seal: Yes XX No To what depth? 18	Hardness 1 = 0			
	Surface seal: Yes XX No To what depth? 18 t. Material used in seal Bentonite & hole plug	Iron .3 = 40 O			
	Did any strate contain unusable water? Yes No XX	PH 8.5 = 10 (T)			
	Type of water? Depth of strata				
	Method of sealing strata off	9.2 70 177			
		- 3			
(7)	PUMP: Manutacturer's Name	. 2			
(8)	WATER LEVELS: Land-surface elevation			+	
(0)	Static level 120 above mean sea level ft. below top of well Date 9-19-94				
	Artesian pressure (bs. per square inch Date				
	Artesian water is controlled by				
	(Cap, valve, etc.)	Work Started 9-16-94 19. Completed 9-1	9-94	, 19	
(9)	WELL TESTS: Drawdown is amount water level is lowered below static level	WELL CONSTSUCTOR OF STITION TO			
	Was a pump test made? Yes No XX If yes, by whom?	WELL CONSTRUCTOR CERTIFICATION:			
	Yield:gal./min. withft. drawdown afterhrs.	I constructed and/or accept responsibility for construction			
	11 9 11 11	compliance with all Washington well construction standards the information reported above are true to my best knowledge			
	п п Д п я	Honoro Deilling Co. Too			
	Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)	NAME Hansen Drilling Co., Inc.	PRINT)		

hrs.

NAME	Hansen Drilling Co., Inc.
Address _	6711 NE 58 Ave., Vancouver, WA 98661
(Signed)	License No. 1921

(USE ADDITIONAL SHEETS IF NECESSARY)

Temperature of water _

Artesian flow

gal./min. with stem set at

g.p.m.

Was a chemical analysis made? Yes X

Date

Water Level