A HYDROGEOLOGY REVIEW OF PRIVATE PROPERTY AT 7085 BATTLE CREEK ROAD SALEM, OREGON 97317

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YOUTH WITH A MISSION CAMPUS T.8S/R3W- SECTION 25 NW/4 NE/4 Tax Lots 083W25B 00100, 00300, 00400, 00500 00600, 00700, 00800, 01000 MARION COUNTY

Prepared by REHM GEOLOGICAL Salem, Oregon

For

Marion County Planning Department Salem, Oregon

June 21, 2018



The YWAM Hydrogeology Review 7085 Battle Creek Road SE Salem, OR 97317 T.8S/R3W- SECTION 25 NW/4 NE/4

Tax Lots 083W25B 00100, 00300, 00400, 00500 00600, 00700, 00800, 01000

EXECUTIVE SUMMARY

A Christian evangelical outreach training organization, Youth With A Mission, International seeks to increase residential use of its campus in the rural Salem Hills, south of Salem, Oregon. The campus population is mobile, with groups of students and some additional staff coming to the campus for months of classroom training and local church involvement and then going around the world for international outreach missions. The campus was a children's home before a 1978 purchase by YWAM. Water wells that provide water for the present use by the campus have been in operation since 1964. The children's home had few rural neighbors, as did YWAM for several years until development of Fir Tree Drive and then Deer Lake Court. The area may seem to be a competitive place for water, except for the existence of fortuitous and separate sources of groundwater. Geologic cross-sections show a large rock fold in a lower unit, the Marine Shale that separates the groundwater source areas. The major source of water for the YWAM campus is the split crest of the Battle Creek Anticline. Abundantly dependable water comes from a confined sandstone source that supplies shallow wells. A lifted Basalt aquifer lies above the valley on the west side of Battle Creek. It supplies the second YWAM water well and a vineyard irrigation well. A vertically-separated and very deep source supplies water to residents of residential areas near Deer Lake Court. It is in this setting that Youth With A Mission seeks more well water for expanding its outreach program.

John M. Rehm Consulting Hydrogeologist Rehm Geological Salem, Oregon Wednesday, June 21, 2018



A HYDROGEOLOGY REVIEW OF PRIVATE PROPERTY FOR YOUTH WITH A MISSION

7085 Battle Creek Road SE SALEM, OREGON 97317 **T.8S/R3W- SECTION 25 NW/4 NE/4**

Tax Lots 083W25B 00100, 00300, 00400, 00500 00600, 00700, 00800, 01000. Marion County

By REHM GEOLOGICAL, Salem, Oregon June 21, 2018

INTRODUCTION

. 80. SO. P This is a hydrogeology review for subdivision of private property in the Salem Hills, approximately five miles south of Salem, Oregon. The site is located south of the intersection of Battle Creek Road and Kuebler Boulevard where Battle Creek Road joins the open valley of Battle Creek. The aquifers that supply water for residential and irrigation use are basalt and shale bedrock. Since this is a rural area, the Marion County Planning Department requires a hydrogeology review, based on a rural zoning ordinance. The ordinance has been in effect for twenty years to prevent excessive residential development and to preserve groundwater supplies. The subject property is located at 7085 Battle Creek Road SE and is shown on Marion County Tax Map 083W25 in a collection of eight tax lots. The total parcel area is 681.42 acres. The campus owners and board of trustees plan to increase the temporary student population size from 130 to 450 students and to increase the proportionate use of the two water supply wells, accordingly. The population increases will be raised in steps, with living in double-wide temporary dorm buildings over a ten year period.

GEOGRAPHY

The Youth With A Mission campus is located in the Salem Hills in the center of the Willamette Basin between Salem and Turner, Oregon (Figure 1). The site is on the east side of the Salem Hills, near Battle Creek Road. The YWAM campus is

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in the valley of Battle Creek after it joins Battle Creek Road and is divided by the creek. The area to the west is a tall ridge that is wooded with fir trees. The valley floor has a grove of oak trees and recreation fields. Tree cover begins again at Battle Creek Road and extends upward along gently sloping countryside into the Fir Tree Lane and Deer Lake Court residential areas.

Photographs from an automobile reconnaissance on May 24, 2018 show the physical features of the property and its surroundings (Figure 2). The inspection route is partially marked by arrows along the roadways of Figure 1. The day was clear and warm and visibility was excellent. Photograph No. 1 shows the shape of the valley of Battle Creek from the center of the open land on the east side of the YWAM campus. Photograph No. 2 shows the main YWAM well (right) and the center of the campus beyond the bridge over Battle Creek. A ledge of hard basalt is so hard that Battle Creek Road has to turn over and around it. Photograph No. 3 shows a sample of the chipped rock from the roadside. Three-quarter inch diameter blast holes were noticed in the east wall of the turn over the basalt outcropping. Photograph No. 4 shows a small well house in the northern neighborhood of Deer Lake Court.

Other observations during the May 24th field trip are that the route of Battle Creek Road turns around higher parts of rocky (basalt) ridges and then straightens out as it joins the open land on the east side of the creek valley between Valley Ridge Farm and the YWAM Campus. A general reconnaissance of the area revealed that the southern part of the hill on the east side of Battle Creek Road is raised the way that the higher south end of the Salem Hills rises above the Santiam River valley. This topographic similarity is because both hills are structurally lifted in the same tectonic manner.

WATER USE HISTORY

A review of located drilling logs indicates water use history (Table 1). The logs are collected in Appendix I. The first two wells were drilled in the area in 1959. One was a domestic well. The other was the first water well for a children's home, composed of small buildings and a pony stable. The Baby Louise Children's home would later become the YWAM campus. The second water supply well was

drilled for the children's home in 1964, up on the hill, across Battle Creek from the first well. A half- dozen domestic wells were drilled in the area. All the wells were shallow, averaging 150 feet deep and most were completed by a cable tool method. This method provided detailed information, but was slow. In 1974, the arrival of the air rotary drilling made it possible to have a deeper well in a few days of work. This kind of drilling provided the deep water wells for the houses along Fir Tree Road. It probably made housing on Deer Lake Court possible. The sixteen wells in that area produced more water than other water wells, averaging 10 or 15 gallons per minute versus 3 to 6 gallons per minute. After development of Deer Lake Court ended in 1986, new wells and homes filled in wooded lots. The last large scale development was a vineyard on the side of the weathered basalt hill, facing Interstate 5.

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GENERAL GEOLOGY

The local landscape and other uplands surrounding the Willamette Valley are largely covered by Columbia River Basalt with patches of Marine Shale poking up through it (Thayer, 1934). There are touches of Willamette Silt, from the Recent Missoula Floods below the high water elevation of 400 feet. The first rock is Basalt of the Columbia River Basalt Formation. It is composed of six layers in the Salem Hills (NGS, 1997). Where the layers are 150 to 200 feet thick, water from the basalt is reliable for domestic use. Below the Basalt, is the Oligocene-aged fossiliferous Marine Shale. The Marine Shale was once the Pacific Ocean shoreline with extensive muddy bays and thin barrier beaches (Orr, Orr and Baldwin, 1992). In contrast to the Basalt, this formation is fairly stingy with groundwater, except in random places. Clams, sea snails, cockle shells and razor clams can be found among several small rock outcroppings and appear in water wells around Salem.

The land surface of the Salem Hills rises from an elevation of 200 feet in downtown Salem to 1000 feet above mean sea level at Prospect Hill on the southwest end. This sequence dips toward the northeast (Foxworthy, 1970). In more recent work, Rick Kienle noticed that the rock attitudes vary. Rock layering is flat, inclined or folded and broken with faults (NGS, 1997).

THE SPECIFIC GEOLOGY OF THE BATTLE CREEK VALLEY AREA

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The Marion County Commission approved a manual to be used by licensed geologists, engineers or planners to evaluate if local aquifers can support additional development (Marion County Planning Division, 1998, revised 2005).

The elements of this method in applying Keinle's Sensitive Groundwater Overlay Method (NGS, 1997) are geological literature review, located water wells on a topographic map base, geological cross-sections, a review of groundwater water supply problems and a calculated water budget. The literature search and related efforts such as an area reconnaissance are described above this section.

Research is done with U.S. Geological Survey topographic map coverage, available from Cooke's Stationary Store in Salem, Oregon. Marion County documents assist in pinpointing water wells. These resources include on-line tax lot maps (Appendix II) and owner address information (Appendix III). Many water wells can be spotted from on-line Google Aerial photography that is updated often. Some well locations were observed during the site reconnaissance. Water well locations on the topographic map (Figure 1) indicate that there are two main water-bearing formations, the basalt (east side of Battle Creek) and the Marine Shale (east side of Battle Creek). Basalt wells are single spots on the west side of the Creek. Wells in Deer Lake Court are completed in the Marine Shale as indicated by the well spot being circled.

Geologic cross-sections show a fold; a peaked fold, called an anticline (Figure 3) and faults (Figure 4). The anticline is apparent on both figures. Figure 3 shows a massive sandstone unit in the Marine Shale. The top of the sandstone is 220 feet below the surface alongside Deer Lake Court in Well No. 15 and is sixty feet below the surface near Battle Creek. There are two causes; the rise of the top of the anticline and the drop in surface elevation between upper Deer Lake Court and the bottom of the valley.

WELL DEEPENINGS, WELL REPLACEMENTS AND OTHER CONDITIONS

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 Table 1 gives summary information of water well performances and well changes. A large group of deepened wells and deeper replacement wells can be an indication of a dropping water level and water-supply problems. The table should be used in combination with the location map (Figure 1). Geologic cross-sections show from where the well water is coming (termed, water-bearing zones). Drilling records (well logs), catalogued by number, corresponding to the map are in Appendix I.

There were four water well deepenings and one well abandonment. The first three water wells are located at Fir Tree Lane and the east side of Battle Creek Road. Well No. 3 was drilled deeper in 1987 and Well No. 5 was deepened in 1989. Well No. 19, about 600 feet southeast of Well No. 5 and nearer Battle Creek Road was deepened in 1982.

Well No 3, at the bottom of Fir Tree Drive, was deepened from 170 to 515 feet. Water discharges in the original well and the deepening were small, with the water-bearing zone being shifted from the shale unit of the Marine Shale Formation into the massive sandstone unit. The top of the massive sandstone is at 170 feet below the surface in that well and the water-bearing zone is between 476 to 491 feet. The driller gained a longer water column to provide security of maintaining the well yield.

Well No. 5, about 500 feet southeast of Well No. 3, was deepened to 475 feet from 310 feet. The original well produced four gallons per minute, and the second drilled identified the specific water bearing zone at a one foot thick interval in a larger five foot thick "rough spot in bore". He perforated his newly installed liner from 350 feet to 475 feet in "blue sandstone". As in Well No. 3, the driller of Well No. 5 gained a longer water column in the deepening to provide 20 gallons per minute and maintain the water well yield.

Well No. 19, near the east side of Battle Creek Road and 1000 feet south of Fir Tree Drive, was deepened from 133 feet to 338 feet in 1982. This was a shale well that was deepened for a new owner.

Well No. 57, on the hill on the other side of Battle Creek and on the north side of Delaney Road, was deepened from 145 feet to 205 feet. This was a basalt well that was deepened for a new homeowner in 1998.

The original well log is Well No. 63 that was drilled by Harlan Miller in 1966. It was filled in by Sippel Well Drilling in May of 2014. Reports of the well abandonment are clearly recorded with OWRD (Well Nos. 63a and 63b). This uncased well was abandoned to seal off a potential vertical drain way from the basalt into the shale and to protect the shallower Basalt well. Sippel Well Drilling found 50 gallons per minute from the basalt in Well No. 35 in the same year on the same property. Local residents were very impressed with the high discharge of the well.

Well No. 16 was drilled for Ray Pierpoint before the 1982 partitioning and development of the Deer Lake Court modern subdivision. The well location was specifically noted on the log by Duffield Brothers drilling and by the coordinates, can be located in the back of 3411 Deer Lake Court. The coordinates are imprecise. It was drilled in 1950 to an original unrecorded depth of 90 feet and may have been completed into the thin and weathered Basalt cover that has been only useful for domestic water in very few places. Upon going dry in 1967, the well was deepened by Duffield Brothers into claystone.

There are small three to five acre pockets of wells that were drilled and no water was found. The dry well clusters are due to geological conditions there the massive sandstone is too tight to deliver water. The dry wells were drilled at the beginning of development of the lower (south) and upper (north) ends of Deer Lake Court.

In 2015, Rehm Geological was called to measure late summer water levels by the Rural Battle Creek Road Association (RBCRA), the homeowners association that manages road repair and environmental issues among residents on the east side of Battle Creek Road and along Delaney Road, east of Battle Creek. A bad drought was in effect and the RBCRA was concerned about planned water use by Mandava Family Vineyards, east of the residential areas. Water level measurements were taken, the paperwork checked by RBCRA and forwarded to the Oregon Water Resources Department for review and posting in their interactive monitoring well network. Water levels were measured in wells at eighty homes around the RBCRA area between August and October of that year. Some of the water levels were deeper in the northern part of Deer Lake Court and OWRD installed an experimental automatic, internet- accessible recording device in Well No. 43. The agency recorded resting and pumping water levels and followed the water level changes with their computers for a few months.

The water level in Well No. 43 was very deep, being recorded at and below the deep static level on Figure 3. The wells along Fir Tree Drive and Deer Lake Court

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have been in use since 1983. Upper Fir Tree Drive has the advantage of wells producing from basalt which stores and yields water three times better than the Marine Shale (NGS, 1997). The water wells on lower Fir Tree Drive and Deer Lake Court have water wells that draw only from the Marine Shale except in two or three cases. Water levels dropped five or ten feet per year as evidenced by initial static water levels in Well Nos. 15, 43 and 45 on Figure 3.

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The winter and summer of 2015 was a time of very low precipitation and lack of snowpack in 2015. Hoodoo Ski Area was open that year for only part of the regular winter recreation season. As a result of the lack of annual precipitation and the very hot summer, local water levels in the RCRA area were drawn down more deeply and several areas of water level decline occurred on Fir Tree Drive, Deer Lake Court and on the north side of Delaney Road. By April of 2016, a wet winter caused a significant rebounding in local well water levels.

WATER BUDGET

The water budget is Table 2 and the study area covers 681.42 acres, per the Water Use Inventory (Figure 5). The proportions of geologic formation coverage in the study area are measured with a compensating polar planimeter on Figure 1 and calculations on Table 2a. There are 293 acres of Marine Shale, 387 acres of Basalt and 1 acre of Alluvium. The alluvium is assigned the same recharge number with the basalt and its coverage is rolled into the total Basalt area. Mean annual precipitation is 48 inches (Woodward and Gannett, 1998). Annual recharge for the Marine Shale is 10 percent, owing to the Marion County deepening threshold not being exceeded (Marion County Planning, 1999, 2005). Basalt recharge is 22% of annual precipitation for a rural residential area.

The water use inventory indicates that there are 86 tax lots in the area. Domestic use of 525 gallons per day is assigned to each of these lots, however YWAM has been among the higher capacity water users since 1959, when the campus was a children's home. The campus also distributes piped water to four homes on the east side of Battle Creek. YWAM's water use has been metered and recorded for many years. The representative metering period is 2012 to 2017 that spans the 2015 drought year. YWAM used 19.35 acre feet of water in 2012. In 2015 to 2017 its development department traced and fixed water leakage from pipes and aboveground utilities. 2016 useage was measured at 8.67 Acre Feet, but we recall from memory that that was a year of much precipitation, therefore a median value of 14.01 well be used. Permitted water use for drip irrigation of the Winemakers

LLC vineyard is 1.0 Acre Foot of water per acre per year. The water budget uses that rate, although the metered and annually reported rate is closer to one half of an acre foot per year.

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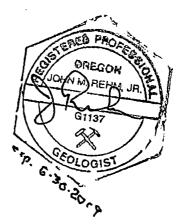
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The YWAM plan is to increase resident use from 130 students to 461 residents. Water use will increase by 342%. Presently the water system is operating the main well in three one hour cycles at 100 gallons per minute to pump water up to a water tank on the ridge above the campus buildings on the west side of Battle Creek. The well is rested for two hours. The main well, Well No. 54, runs year round and the second well, Well No. 55, joins the water supply system in the summer. Use of Well No. 54 will be incrementally increased as the resident population grows in the campus area. A new water supply well is being considered to contribute to the campus water supply. The STOP value of a water budget in a Marion County Hydrogeology Review is 10 per cent of remaining water in a water budget. The water budget passes with 43.4 % of available annual groundwater recharge remaining per year.

CONCLUSIONS

The findings of this report indicate that there is enough information to obtain a clear picture of the hydrogeologic setting and available groundwater supply. The area is now well developed enough around the YWAM campus that a clear picture is presentable from available drilling and monitoring information. The area opposite of the campus has been developed for more than 35 years and smaller parcels are being filled in with new homes. Competition from a highly articulate homeowners organization is determined, but there are three physical aspects of the local geology that are advantageous for YWAM to complete its plans and to share the groundwater resources with its neighbors. First, the Battle Creek valley is cut into a fractured structure, an anticline, where abundant groundwater to the campus and to present neighbors from shallow wells. This water is restricted to a fairway under the valley. This restriction in white sandstone is parallel to the anticline crest. Second, residents on Deer Lake Court have been getting their water from a very deep zone of a massive sandstone layer for more than thirty years. A longterm water level decline in the deep sandstone is in the process of being cured with monitoring and supervision by the Oregon Water Resources Department. Third, the basalt aquifer on the west side of Battle Creek is hydraulically separated from the valley and from homes on the east side of the valley, because it appears to have been lifted or tilted away from the valley floor. Hence, interference between the Winemakers LLC irrigation well and the main YWAM well is not possible, they are in different aquifers. Water well deepenings are not significant in number. A water budget shows that there is enough annual recharge to the natural hydraulic system for YWAM to go ahead carefully with present development plans and share the groundwater system with its neighbors.

John Rehm Consulting Geologist REHM GEOLOGICAL 5088 Summerfield Drive SE Salem, Oregon 97306



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FIGURES

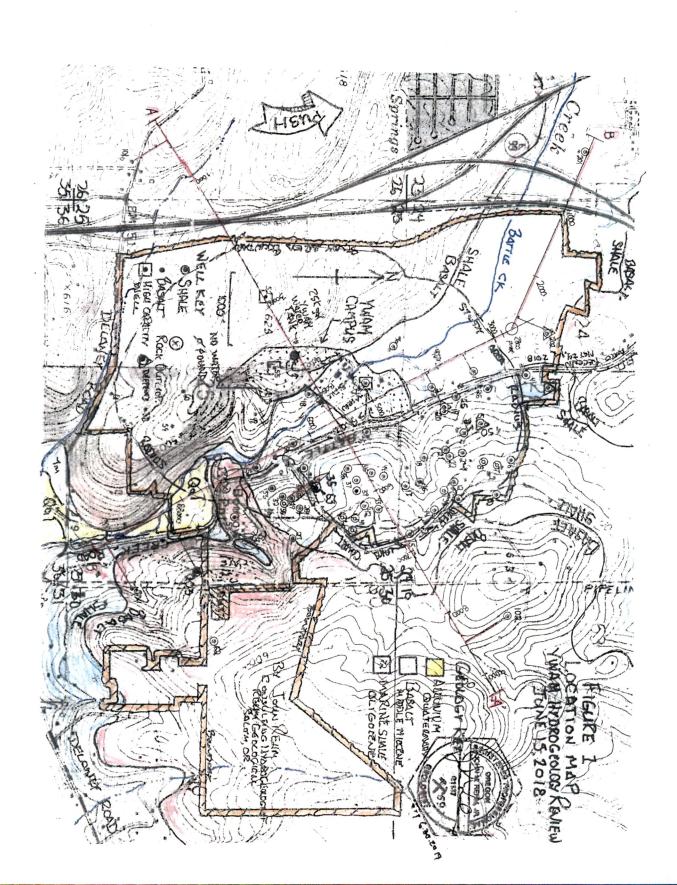


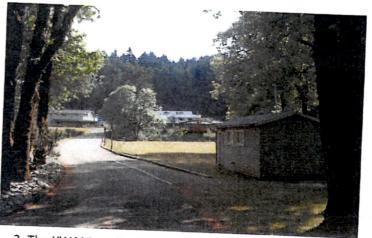
FIGURE 2 Site Photographs (May 24, 2018) , YWAM Hydrogeology Review



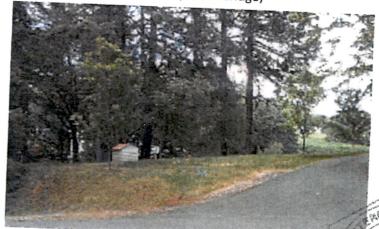
1. Looking south in the valley of Battle Creek from the YWAM well house in the field



3. A Piece of very hard Basalt from a roadside rock ledge on Battle Creek Road near the old quarry.

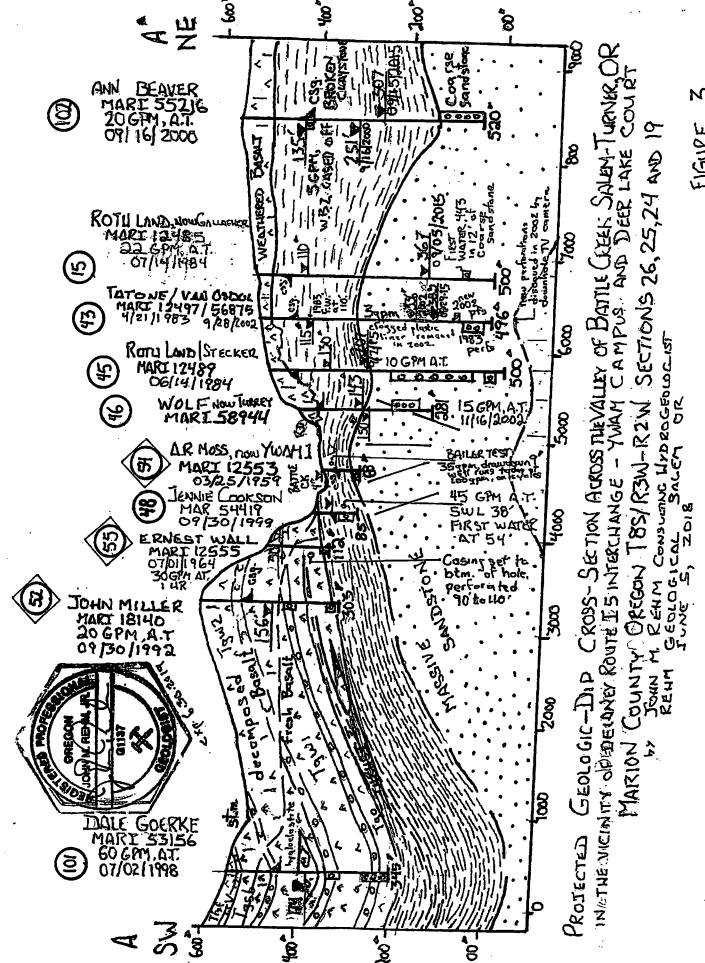


2. The YWAM well, drilled 1959 (right) and the main YWAM campus area (across bridge)



4. A deep water well in Dear Lake Court





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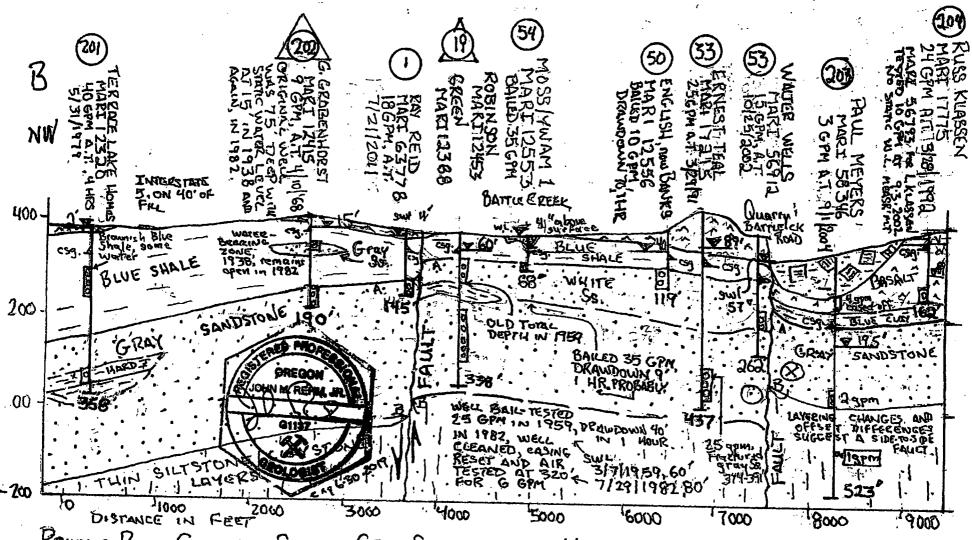
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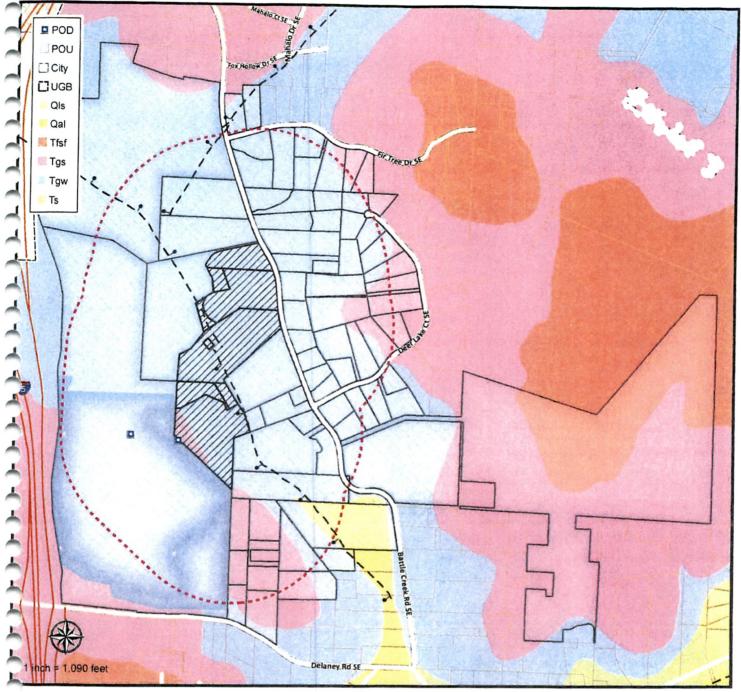
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POINT-TO-POINT GEOLOGIC STRIKE CROSS-SECTION DOWN THE VALLEY OF BATTLE CREEK SALEM-TURNER OR IN THE VICINITY OF INTERSTATE 5 -YOUTH WITH A MISSION COMPUS-DEER LAKE COURT-DELANEY ROOD MARION COUNTY, OREGON TOS/3W, SECTIONS 23, 24 AND 25 by JOHN M. REHM CONSULTING HYDROGEOLOGIST REHM GEOLOGICAL SALEM, OR JUNE 5, 2018



Water Use Inventory

FIGURE 5

Parcel Characteristics

Owner Name: Youth With A Mission

Situs Address: 0

Zoning:

SGO Class: SGO-5

Parcel Count (existing, new, proposed): 9, 0, 9

Map Number(s): 083W25B00100 083W25B00300

083W25B00400 083W25B00500

083W25B00600 083W25B00700

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oposed density is: 7.92 acres per lot.

Groundwater Budget for Proposed Change

Number of Parcels Analyzed: 86

Total Acreage of Parcels: 681.42 acres Average 6% Recharge Rate: 188.46 acre-ft

Total Existing Exempt Use: 50.57 acre-ft
Total Proposed New Use: 0.00 acre-ft

Total Permitted GW Use: 570.00 acre-ft
Total Proposed Water Use: 620.57 acre-ft

Percentage of Recharge Used: 329.29



Marion County Planning Division 515 Silverton Rd NE, Salem, OR 503-588-5038

Prepared: 11/17/2017 water rights data (11/14)

Terr. Maps made available to the public by Marson County are not legally recorded maps not surveys and are not intended to be used as such. Nor should they be used br navigational, tracking or any other purpose requency executing measurement of distance or direction or precision in the depiction of geographic features. The data provided heriton may be

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Table 1: Located Weter Wells in the Vicinity of the VWAM Study Area in Twp, 85 / Ring. 2-3W, Marion County, Oregon, Rehm Greated Weter Wells in the Vicinity of the VWAM Study Area in Twp, 85 / Ring. 2-3W, Marion County, Oregon, Rehm Greated June 24, 2048	7. LANDED	- C-Revise	1,713,7110	***** ********	SVASPICE	15/15 ATM				MANAGORIA	d. In The State of	EAST THE THE	PERSONAL PROPERTY.				为STOPPING STO	X1662.77	CHANG.	SilbW.
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43	12497		Steve Tatone	JD Monders	3375 Deer Lake Ct. SE	43	25A - 2200	512	SYSTEMATICS STOP	P. ((\$114))92)				Well Burn	EXTRE O	松色的他	100	新发展	
	56875	25aab	Ken Vanosdol	Ron Robinson	3375 Deer Lake Ct. SE	43	25A - 2200	512	ANGELIZA	Shale	<u>58</u>	4/21/1983	496	Tm	1115	397	8	AT	
	12461		Roth Land Dvip	JD Monders	3399 Deer Lake CL SE	45	25A - 2403	493	Atteration	Shale	Ss Ss	9/28/2002	432	Tm	336	176	3	AT	
	12489	25aba	Roth Land Dylp	JD Monders	3395 Deer Lake Ct. SE	46	25A - 2404	495		Shale	88	5/18/1988	535	Tm	140	353	8	AT	
	56944		Clarence Wolf	Eugene Mack	7056 Battlecreek Rd. SE	48	25A - 2600	425		Shale	Ss	6/14/1984	500	Tm	130	365	10	AT	1_
47	58163		David Stewart	Eugene Mack	7184 Battlecreek Rd. SE	49	25A - 2700	395		Shale Shale	Ss Ss	11/8/2002 6/16/2004	261	Tm	143	282	15	AT	1_
48	54419	25abc		Floyd Sippel	7087 Battlecreek Rd. SE	52	25A - 3000	390		Shale	Sh	9/20/1999	232	Tm	85	310	5	AT	<u> </u>
49	12546	25acc	Dan Joynt	RF Sneed	7099 Battlecreek Rd. SE	53	25A - 3200	412		Baseit			85	Tm	38	352	45	AT	1_
50	12556	25aca	Jean English	RF Sneed	7255 Battlecreek Rd. SE	54	25A - 3300	392	Baller test	Shale	Tgw1 Ss	7/15/1974 5/21/1960	161	Bst	124	288	21	AT	L.
51	12512	25acb	Roy Krutsch	G.Richardson	7355 Bettlecreek Rd. SE	58	25A - 3700	352		Shale 8	Sh	11/24/1980	119	Ţm	40	352	10	70	0.1
52	18140		John Miller	Floyd Sippel	1410 Lakeside Ct. Yakima	73	258 - 1300	623		Basait	Tgo	9/30/1892	57 303	Tm	4	348	30	5	6.0
	56912	25adc	Walt Wells	Eugene Mack	7474 Battlecreek Rd. SE	61	25A - 4000	378		Shale	Ss	10/25/2002	262	Tm	158	467	20	AT	╄
54	12553	25baa	A.R.Moss	Marion West	6955 Battlecreek Rd. SE	64	258 - 400	378		Shale	- 35 - 86	3/25/1959	60	Tm Tm	57	321	15	AT	1.
	12555	25bda	Eamest Wall	G.Richardson	7089 Bettlecreek Rd. SE	69	25B - 1000	4B1		Basalt	Sh	7/1/1964	112	Tm	5 30	373	35	9	3.6
58	58254	25baa	Douglas Sprout	Dallas Beler	6935 Battlecreek Rd. SE	72	25B - 1100	382		Shale	Ss	8/8/2004	480	Tim		451		AT	.
57	12554	25dcc	Don Sommer	William Long	7784 Shady Way SE	78	25D - 2700	478		Basalt	Tgw2	11/12/0977	145	Bet	81 60	301	10	AT	-
57a	52999		Mark Hunt	Rodney Erler	7794 Shady Way SE	78	25D - 2700	478	Deepening	Basalt	Tgw1	4/14/1998	205	Bet	60	418 418	30	AT	4
58	58034		Randall Boese	Casey Jones	7744 Shady Way SE	79	25D - 2800	488	- Dodgering	Baselt	Tgw2	4/30/2004	112	Bat	- 60	428	35 70	AT	├ ─
59	12507			G.Richardson	7634 Shady Way SE	81	25D - 3000	535	Pump test	Basatt	SB	10/23/1980	122	Tm	26	509	20	AT	١
	12548		Dan Joynt	RF Sneed	7635 Shady Way SE	83	25D - 3200	532		Basalt	Tgw2	7/15/1974	161	Bst	124	408		79	0.2
	58888	25dbb	Ken Souders	Eugene Mack	7635 Shady Way SE	83	25D - 3200	532	Attention/Pump T.	Basalt	Tgw2	1/8/2005	161	Bst	95	437	21 7	45	١.,
	12549			Marion West	3001 Delaney Road SE	85	25D- 3400	428		Basett	Tgw2	3/15/1974	133	Bst	35	393	18	AT	0.1
	81021		Cerl Schmidt	Eugene Mack	3702 Bergman Pl. SE	88	30-400	521		Shalo	Ss	10/1/2007	355	Tm	320	201	40	AT	╂
	12534		E. Kitchen	Herlan Miller	3205 Deer Lake Ct. SE	38	25A - 1600	455		Shale	Sh	6/4/1966	200	Tm	76	379	3	AT	
33a	65214	25adb	Josh Boyd	Floyd Stppe!	3205 Deer Leke Ct. SE	38	25A - 1600	455	Abandonment	Basalt	Ss	5/5/2014	120	Bst	203	252	NT	AT	+
													1	— <u> </u>	- 200	- 242	- NI	<u> ^1</u>	╫
						Wells	outside the YW	M Study A	rea for Geologic Cr	oss-Section	ns		!			L			ــــــــــــــــــــــــــــــــــــــ
	53158		Dale Goerke	Eugene Mack	2348 Delaney Rd. S		Outside	540		Besett	Tgo	7/8/1998	345	Bst	174		60	AT	_
	55216		Ann Beaver	Dallas Beler	3400 Deer Lake Creek SE			570	Coarse SS at 432	Shale	Ss	9/18/2000	520	Tm	251		20	AT	 —
	12320		Телтасе Lk MPk		5355 River Rd. N.		of	387		Shale		5/31/1979	358	Tm	2		40	AT	
	12415			RF Sneed	180 Liberty St. SE			413	deepen 1938 well	Shale	Ss	4/10/1968	190	Tm	15		1 70	AT	┼~
	58348		Paul Meyers	Eugene Mack	3450 Bergman Pt.		Study	410		Shale	Sh2	9/7/2004	523	Tm	195		3	AT-	┢
	17775			Floyd Sippel	3401 Mudpuppy Lane			395		Basalt	Tgw1	3/28/1992	162	Bst	89		24	AT	1
04a	58793	30ccb	Lloyd Klassen	Rodney Erler	3401 Mudpuppy Lene		Area	395	Alteration	Basatt	Tgw1	9/3/2002	162	Bst	NR		10	AT	├
																	 " 	_ 	
			Column Notes:																╄
\dashv				1 Well numbers	with a following letter ("a") ha	rve been o	deepenad ("b") h	ave been d	eepened, again.								_		
					Sometimes, only repair work	has been	done to a well a	nd it has no	t despaned, see Con	iment secti	on								\vdash
				2 Addresses ar	e current addresses from the l	Marion Co	unty Tax Assess	or's Office	On-line Property Rec	ords				-					+
				S Project Percel	ere numbered on the Tex Lot	Conflicati	on List (Appendi	x III) In the	order that they appea	ron the Ce	rt List within t	the 1/4 mile stud	y area.						+
				واللاق المستوح وا	DON: ADDREVIADONS ARE FOR DE	alogic for	mations Aliv. •	Ountamen	i Gravoi Terroco ec G	larial Kara	n Det Doe	of Ten Illaha P	omatio	(Tertigry M	erine sedi	mentary ro	ck.)		
				to shown care	ICNA CERINO! DE CRICHISIMO MULL	OUI KIROWII	no now ier e wai	IC WHIRP IOU	Al has been drown de	um Phoneo	Denvelous		T						+
				EDDIEVISIES T	Drawdn') by constant test pur y is order of vertical order from	iping. Alr	tests where the	produced w	reli water is blown out	by air thro	ugh the								

C. 20:30.

TABLE 2:	1	1	1		1	1	ı	1	1	1		7
Water Budget f	or the YWA	M Hyd	rogeo	log	Review. June	21, 2018 T8S	/R3W - S	ecti	οπ 2	5 NE/4 Marion Co	ounty Oregon	
		T	Τ,	Τ		1	1	T	Ť	The Tribule Co	duty Oregon	
Planimeter Cale	culations	—	1					+-	1	W	ater Budget	
with Keuffel &	Esser Co. 424	2 1/2 (omoe	nsai	ting Polar Planim	eter, Serial# 15	04	┼─	170	TAL RECHARG		
				Т		1	T	+		BASALT + SHA		459.6
Total Acres	per WUL, N	ov 17, 2	2017)	П	681,42		<u> </u>	┰	w	TER USE (AF/ye		7.75.
		Γ	T					1		cempt Use:	Total Lots	8
Total Lo	ts before Re	port	Τ		86		1		1		YWAM Lots	
Total Lo	ts After Rep	ort			86				1		SubTotal lots	7
										les	YWAM served	1 4
-	Rationale: (Commu	nity W	/ater	Supply well to it	ncrease dischar	ge					74
	to serve 2t	o 3 fold	plann	red i	ncrease in campu	ıs student popu	lation.			Dom. Water Used	@ 0.588	43.51
	There will	be no s	ubdivi	idin	g or partioning.			Π	Ī			
								Г	Pe	rmitted Use:		
Measured Are					Map YWAM, J				1	Winemakers LLC		70.00
					into Hydrogeolo			T-	1	Pmt G-17738	Acres	30.00
					Oregon, June 201					Pmt G-17739	Acres	100.00
	(Average of				ement trials per p	piece inside are	a)	·		Total		100.00
	<u></u>				eet, Table 2a)					Pmt'd AF/yr @1	AF/Ac	
Are		Planin		₹dg.		Acres						
Shale (Upper			<u>.58</u> 5		25.4	173.08				AM Community W		
Shale (Lower			.405		17.6	119.93			S	ix year record 2012	- 2017	Present
Basalt (Wes			.715		31.1	211.92				(2012)		(2016)
Basalt (SE			.565		24.6	167.63		_		High	Median	Low
Qal (downstream		_	.030		1.3	8.86		L	<u></u>	19.35	14.01	8.67
Line of	Totals	2	2,30		100.0	681.42				<u> </u>	<u> </u>	
	L	ļ	لــــا	Ĺ.,				<u> </u>	_ P	rojected Campus G		% increase
Total Shale Acr			3.01			<u> </u>		Ш	<u> </u>	Present	Projected	342
Total Basalt Ac			8.41			 			<u> </u>	135	461	<u> </u>
Total Alluvium	Acres:	in Ba	salt to	tal		ļ				alculation: %Increase		
			_			ļ				47.91	AF/yr rounded	50.00
,						 			_	otal Water Used	L	
Annual Recharg	e to Marine		لبا	لبا		4		Ш	<u> </u>	Domestic + Vineyard	+YWAM (proj'd)	193.51
Acres		293.	-	Acr	es	 			<u> </u>	L	<u> </u>	
Annual Rainfall		48	_			_			_	ercent of Recharge		56.6
Acre Feet/Ac (10		0.40		لبا						100 X (Used/Rech	arge)	
Total Acres x Ac.	rvAcre	117	.2	Acr	e Feet/Year	4		Щ	<u> </u>	Remaining %		43.4
						 			<u> </u>		l	
Annual Recharg	e to Basalt		احيا			4			<u> </u>	by Rehm Geological,	Salem, Oregon	
Acres		388.		Acn	<u>es</u>	 			<u> </u>	,	 · · · · · · · · · · · · · · · · · 	
Annual Rainfall	1000	48										
Acre Feet/Ac (2		0,88	_		. D 67	 			ļ			
Total Acres x Ac	. FVACTE	341	.لا	Acn	e Feet/Year					ļ		

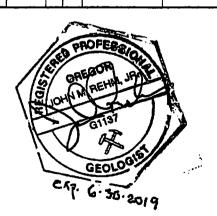
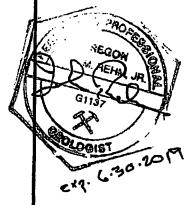


Table 2a Planimeter Measurement and Checked Area Calculations: YWAM by Rehm Geological Salem, Oregon (June 15, 2018)

<u>Area</u> Shale Upper Valley	<u>Trial 1</u> 0.59	<u>Trial 2</u> 0.58	<u>Sum</u> 1.17	<u>Average</u> 0.585	% Area 25.4	Acres 173.08	
Shale Lower Valley	0.40	0.41	0.81	0.405	17.6	119.93	
Basalt West Piece	0.71	0.72	1.43	0.715	31.1	211.92	
Basalt SE Piece	0.55	0.58	1.13	0.565	24.6	167.63	
Qal dwnstrm of Basalt	0.03	0.03	0.06	0.030	1.3	8.86	
		Total Area (Constant	2.300	100.0	681.42	
		Total Acres	(WUI)	681.42			
Total Shale Acres	Upper 173.08		Lower 119.93	:	Sum 293.01		Total % 43.0
Total Basalt Acres	West 211.92	S	SouthEast 167.63		379.55		55.7
Total Qal Acres	Lwr Valley 8.86			_	8.86	_	1.3
	•	Check row:		Total Acres	681.42		100.0 %



APPENDICES

APPENDIX I WELL LOGS

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MARI 63778

STATE OF OREGON WATER SUPPLY WELL REPORT (as required by ORS 537.765 & OAR 690-205-0210)

07-25-2011

Page 1 of 1 WELL LABEL # L 106657

	START CARD# 205829	
(1) LAND OWNER Owner Well I.D. 106657	(9) LOCATION OF WELL (legal description)	
First Name RAYMOND Last Name REID		/W W
Company REID, JANICE	Sec 24 SW 1/4 of the SE 1/4 Tax Lot 700	, ,, ,,,
Address 6845 BATTLE CREEK RD SE	Tax Map Number Lot	
City SALEM State OR Zip 97317		or DD
(2) TYPE OF WORK New Well Deepening Conversion		or DD
Alteration (repair/recondition)Abandonment	Street address of well	
(3) DRILL METHOD Rotary Air Rotary Mud Cable Auger Cable Mud	6845 BATTLE CREEK RD SE	
Reverse Rotary Other	(10) STATIC WATER LEVEL Date SWL(psi) + SWL((ft)
(4) PROPOSED USE Domestic Irrigation Community	Existing Well / Predeepening	
Industrial/ Commercial Livestock Dewatering	Completed Well 07-21-2011 11	
Thermal Injection Other	Flowing Artesian? Dry Hole?	
(5) BORE HOLE CONSTRUCTION Special Standard Attach copy)	WATER BEARING ZONES Depth water was first found 11	
Depth of Completed Well 145.00 ft.	THE PERSON NAMED IN COLUMN 1	
BORE HOLE SEAL sacks/	07-20-2011 11 26 5 4 07-20-2011 60 65 6 11	
Dia From To Material From To Amt lbs	07-20-2011 88 108 5	
10 0 46 Rentonite Chips 0 36 21 S	07-20-2011 108 130 7	
6.25 46 145		
 	(11) WELL LOG Ground Elevation	_
How was seal placed: Method A B C D E		•
Other POURED & PROBED	Material From To CLAY BR SOFT 0 8	
Backfill placed from 36 ft. to 46 ft. Material BENTONITE	CLAY GRAY SOFT STICKY 8 11	\dashv
Filter pack from ft. to ft. Material Size	CLAY RUSTY BR SOFT STICKY	
Explosives used: Yes Type Amount	CLAYSTONE GRAY M-HARD SEAMY 16 27	
	CLAYSTONE GRAY & BR 27 30	_
(6) CASING/LINER Casing Liner Dia + From To Gauge Sti Plate Wid Thrd	CLAYSTONE LIGHT BLUE HARD 30 39 CLAYSTONE GRAY W/HARD LAYERS 30 50	
	EII TOTONIE OD AV MICHELLE	
	SILTSTONE GRAY WISHELLS 50 64 SILTSTONE GRAY M-HARD 64 71	\dashv
8 45 8 5 145 160 8 8 F	SILTSTONE PURPLE & GRAY HARD 71 80	7
D AL D BAH HI	SILTSTONE BR. & GRAY W/SHELLS 80 84	
	SILTSTONE GRAY 84 108	
Shoe Inside Outside Other Location of shoe(s)	CLAYSTONE LIGHT BLUE HARD 108 112 SANDSTONE GRAY FINE HARD 113 120	
Temp casing Yes Dia 10 From 0 To 4	CANDOTONE OR AV COURT TO MED	\dashv
(7) PERFORATIONS/SCREENS	SANDSTONE GRAY W/HARD STREAKS 130 145	-
Perforations Method ELECTRIC SAW		
Screens Type Material		\Box
Peri/S Casing/Screen Scm/slot Slot # of Tele/	Date Started 07-20-2011 Completed 07-21-2011	
Perf Liner 114 144 125 7 50	(unbonded) Water Well Constructor Certification	
	I certify that the work I performed on the construction, deepening, alterati	on, or
	abandonment of this well is in compliance with Oregon water supply	well
╸╏┈╏┈╡╸┈╬┈┈╏╸┈╏╸┈ ┃╏	construction standards. Materials used and information reported above are t the best of my knowledge and belief.	true to
(2) WEI I TECTS. Minimum Audit - 4	-	
(8) WELL TESTS: Minimum testing time is 1 hour	License Number Date	
Pump Bailer Air Flowing Artesian	Electronically Filed Signed	
Yield gal/min Drawdown Drill stem/Pump depth Duration (hr)		-
18 145 1	(bonded) Water Well Constructor Certification	
	I accept responsibility for the construction, deepening, alteration, or abandowork performed on this well during the construction dates reported above. Al	
Temperature 5.4 °F Lab analysis Yes By	performed during this time is in compliance with Oregon water supply	
Water quality concerns? Yes (describe below)	construction standards. This report is true to the best of my knowledge and be	
From To Description Amount Units	License Number 1394 Date 07-25-2011	
 	Electronically Filed	_
<u> </u>	Simal MICENTER ALONG OF SILD	

Contact Info (optional) MACK DRILLING COMPANY

STATE OF OREGON EXEMPT USE WELL MAP

(as required by ORS 537.545 & OAR 690.190) This map is supplemental to the WATER SUPPLY WELL REPORT

Oregon Water Resources Department

725 Summer St NE, Salem, OR 97301 (503)986-0900



LOCATION OF WELL

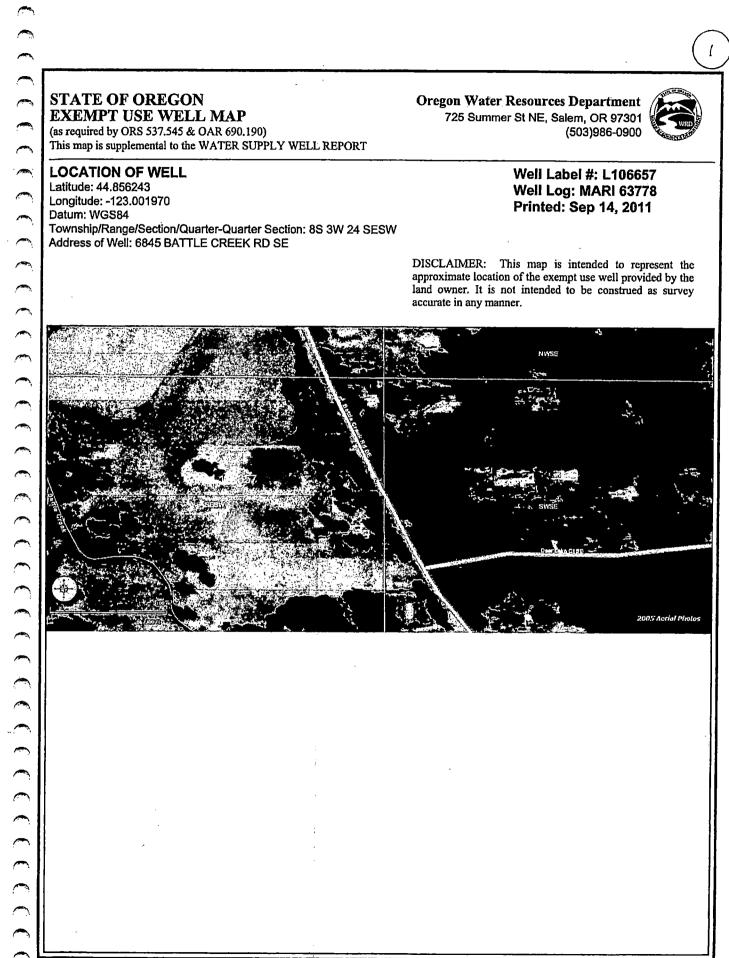
Latitude: 44.856243 Longitude: -123.001970 Datum: WGS84

Township/Range/Section/Quarter-Quarter Section: 8S 3W 24 SESW

Address of Well: 6845 BATTLE CREEK RD SE

Well Label #: L106657 Well Log: MARI 63778 Printed: Sep 14, 2011

DISCLAIMER: This map is intended to represent the approximate location of the exempt use well provided by the land owner. It is not intended to be construed as survey accurate in any manner.



WATER WELL REPORT STATE OF OREGON



RECEIVED

AUG 28 1981 State Well No. 85/30-24d

WATER RESOURCES SEPTermit No. SALEM, OREGON

(1) OWNER:	(10) LOCATION OF WELL:	•	
Name ZOE ZEITLER	County MARION Driller's well r	number	
Address 6916 BATTLE GREEK ROSE 97301		R. 3W	W.M.
City SALEM State OR C	Tex Let # Let Bilk	Subdivision	
(2) TYPE OF WORK (check):	Address at well location: 6915 BATTLE C	Reek RD	<u> 5.E.</u> _
New Well 💢 Despening 🗆 Reconditioning 🗅 Abandon 🗅	(11) WATER LEVEL: Completed we	.11	
If abandonment, describe material and procedure in Item 12.			, .
(3) TYPE OF WELL: (4) PROPOSED USE (check):		nd surface. Date &	
Rotary Air X Driven Domestic X Industrial D Municipal D	Artesian pressurelbs. per	equare inith. Date	
Rotary Music C Dec C Infrastrian C Test Well C Other C Cohie C Royal C Thermal Withdrawal C Reinfordion C .	(12) WELLLOG: Diameter of well below o	900mg 6"	
On a state of the	Depth drilled /3/ ft. Depth of or		3/ A.
CASING INSTALLED: Steel M Plastic D Thresided D Welded M	Formation: Describe color, texture, grain size and struct thickness and nature of each strutum and equifer pensal for each change of formation. Report each change in pr and indicate principal water-bearing strate.	rated, with at least	eme entry
Diam from ft to	<u></u>		<u> </u>
LINER INSTALLED:	MATERIAL	From To	SWL
Diam from 4 - R to 131 tt Games 160 # PSL	TOPSOK	0 1	
(6) PERFORATIONS: LINCE Vers No	CLAY YELLOW STICKY	1 12	
Type of perforator used SKIL SAW	CLAY BLUE STICKY	12 15	
Size of perforations 4 in by 10" in.	CLAY STONE GRAY FIRM	15 53	
	SALIASTONE GRAY HARD	52 81	<u> 44</u>
perforations from	CLAYSTONE GRAY FIRM	8186	44
perforations from	SAMOSTONE GRAY HARD	86 131	44
.,			 .
Manufacturer's Name Type			·
Diam. Slot Size Set from ft. to	1 6. P. H @ 5-2'	- - 	 ·
Diara. Stot Size Set from ft. to ft.	& CAM & SUI	- - 	
Description to amount water level is lawred	2 6 P.M. C. 164'		
(8) WELL TESTS: below static level			
Was a pump test made? Wes D No II yes, by whom? K-XSNEED			
gal/min. with ft. drawdown after hrs.			
Air test /0,60 gal/min. with drill stem at /36 ft / hrs.			
Bailer test gal/min. with ft. drawdown after hra.	· -· ·		
Artesian flow g.p.m.			
Depth extenden flow encountered	Work started 9 25 - 19 8/ Completes	a 8-26	1981
(9) CONSTRUCTION: Special standards: Yes D No X	Date well drilling machine moved off of well	8-26	19.8/
Well seal—Material used	Drilling Machine Operator's Certifications	•	
Well scaled from land surface to	This well was constructed under my direct so	rpervision. Mate	rials used
Diameter of well have to bettem at seal .C.L/in.	and information reported above are true-to my be		
Diameter of well bore below seelin.	(Dell'in Marking Openson)	Date	19 19 J.:
Number of sacks of coment used in well seal	Drilling Machine Operator's License No	<i>f</i>	······································
How was convent ground placed THROUGH CONDUCTOR PIPE BY CEMENT PUMP	Water Well Contractor's Certification:		·
Juliani de de la company de la	This well was drilled under my jurisdiction	and this report	is true to
Was pump installed?	the best of my knowledge and ballef.		
Was a drive shoe used? Yes Xi No Plugs X.O. Size: location	Name Sweed Well DRILLING	Type Clype C	······································
Did any strata contain unusable water? Tes X No	Address 4750 ELIZHBETH N	SHLER	ORe
Type of Water? depth of strate			
Method of scaling strate off	[Signed]	2	
Was well gravel packed? UYes XNo Size of gravel:	Contractor's License No	8-26	, 198
Gravel placed from	<u> </u>		

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the

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WATER RESOURCES DEPARTMENT, SALEM, CHEGON 97510 . within 50 days from the date of well completion

AUG 28 1950 M	121. (12449)	
First Conv with the	ILL REPORT State Well No. OREGON State Permit N	8/3w-24L1
(1) OWNER: Name George Graben Horst		mount water level is static level
Address 1655 91R ST SPLEN ORG	Yield: gal/min. with ft. 6	rawdown after hrs.
(2) LOCATION OF WELL 2200 HN., 1400 H Ead fr. Sw	BRY HOLE	
County Mariah Owner's number, it any		rawdown after hrs.
4 4 Section 24 T. S R S 3.W.W.M.	Artesian flow g.p.m. Date Temperature of water . 55 Was a chemical and	
Bearing and distance from section or subdivision corner Approximately 1250 feet Southerly from the most		6"
Westerly S.W. corner of the D.L.C. of F. L.	(12) WELL LOG: Diameter of Depth drilled . 176 at. Depth of comp	45-46
Reymond, being Claim No.52 in Township 8 South, Dage 3 West of W.M. in Marion County, Oregon.	Formation: Describe by color, character, size of show thickness of aquifers and the kind and na strainm penetrated, with at least one entry for	
	MATERIAL	ABON 20
(3) TYPE OF WORK (check):	DUE HOLE	88' 38'
New Well Despuning Reconditioning Abandon If abandonment, describe material and procedure in Item 11.	ORIGINAL DEPTHE)	
	BLUR SHALE	35 81
PROPOSED USE (check): (5) TYPE OF WELL:	WHITE SANDSTENE	8/ 87
Domestic A Industrial Municipal Rotary Driven Cable A Jetted Industrial Other Dug Borted Other Dug Borted Other Dug Dug Cable Other Dug Cable Other Ot	BLUE SHALE	87 77
Irrigation Test Well Other Dug Bored	WHITE SANDSTONE	97 79
(6) CASING INSTALLED: Threaded Welded	WHITE SAHDSTONE	115 117
ft. Gage	BLUE SHALE	117 165
"Diam fromft. toft. Gage	WHITE SANDSTONE	165 166
	BLUE SHALE	166 170
(7) PERFORATIONS: Perforated? Yes No Type of perforator used		
SIZE of perforations in. by in.		
perforations from ft. to ft.	B A BAO B 1/C/S	
perforations from ft. to ft. (2 6. PM, C 163' 10	0 166
perforations from ft. to ft.	•	
perforations fromft. toft.		
(A) Company		
(8) SCREENS: Well screen installed	•	- - -
Type Model No		
Disc Slot size Sct from ft. to ft.		
Slot size Slot from ft, jo ft.	Work started 8-/2 19 6.0 Complete	ted 8-15 1968
(9) CONSTRUCTION:	(13) PUMP:	
Was well gravel packed? ☐ Yes M No Size of gravel:	Manufacturer's Name	
Was a surface seal provided? M Yes No. To what depth?	Type:	H.P
Moterial used in seal—CPMELAT CAPPED	Well Driller's Statement:	•
Did any strata contain unusable water! 🛘 Yes 🛣 No	This well was drilled under my jurisdi	ction and this report is
Type of water? Depth of strate	true to the best of my knowledge and belie	L '
Mothod of sealing strate off	NAME S.A.SHEED + SO.	(Type or print)
Static lavel 7.5 rt. below land surrece Date 7.5	Address 2505 BROOKS	ST. SALOW O
Artesian pressure Ibs. per square inch Date	Driller's well number	
Log Accepted by: Henry Khalimhant	[Signed] " (Well Defler)	red,
[Signed] Date _August_22, 19_60.	License No. 6 Date	8-15 1960

STATE OF OREGON

WATER WELL REPORT

D	E C I		V	E	
M	AUG	G	198	? 7	Ш

Antesian pressure Date D	(as required by ORS 537	.765) WATER	RESOURCES I	DEPT. 1\	/-	-380	y		
Section Sect	(1) OWNER: GREG	HUNNICUTT Weil ASI	llem, oregon	(9) LOCATION	OF WELL by	gal des	cript	ion:	
Section Sect	Address 3045	Fir tree Drive S.	E.	Tranship 8 Sou	th Ners Rence 3 V	Vest	ndimo.	12 m	wk.
Table Colored Colore	City Sales	n State Oregon	Z p	Section 24	Ko b, maga K		4	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	******
New Well MD Depth Recombition Absorbine Ab	(2) TYPE OF WORK	ζ:						ivision	
Class Content Color Co	· · ·		Abandon						
Content Cont				<u>3045 Fir 1</u>	ree Drive S.I	3. Sa	lem.	<u>Ore</u>	gon
GA PROPOSED USE:	* *			(10) STATIC W	ATER LEVEL			-	
Attention pressure which. Date Attention pressure which was the tended which Date Attention pressure which was the tended which will be a pressure which. Date Attention pressure which was not an information of the which was not an information and pressure which was not an information which was not an information and pressure which was not an information and pressure which was not an information and information and pressure which was not an information and pressure which was not an information and inform	Fi					,	Doto	7-28-	-87
Documents Community Industrial Information Other O									
Thermal Dispersion Other Wes No Construction suproved Wes No Construction Wes No			ation						
BORE HOLE CONSTRUCTION: Depth of Completed Well 515 ft				[• • • • • • • • • • • • • • • • • • •			T4		
Depth of Completed Well 215 Prop To Motorful From To SMAL Prop Prop To Prop To SMAL Prop To SMAL Prop To SMAL Prop To SMAL Prop Prop To Prop To SMAL Prop To SMAL Prop Prop To Prop To Prop To Prop To Prop		NSTRUCTION:		Depth at which water was	first found	4/0	reet		
Replace Repl	al Construction approval	Yes No Depth of Compl	eted Well 515 ft.	From	To	Estimat	od Flow	Rate	
BIOLE Prem To Subdivided Prem To Pre			_ `	476 Feet	491 Feet	3 GE	M		95'
Diameter From To make or pounds	Explosives used LI XX 7								
Comparison of chose of Date Dat									
Well Depended Surface Seal Not Disturbed	Diameter From 10	material From 10	same or pounds			<u></u>			
Well Despended Surface Seal Not Disturbed. Material From To SWL				(12) WELL LO	G: Ground elevati	ion			
How was seal placed: Method A B C D E	Well Deepended	Surface Seal Not	Disturbed.		Material		From	To	SWL
Clight Gray Sandstone 295 312 476									
Clight Gray Sandstone 295 312 476	How was seei placed: Method	DA DB DC DD	□ B	Gray Sandsto	one]	70	295	
Case Stood from A. to A. Material Grave Stood from A. to A. Stood grave Multi-Colored Sandstone Sil 476 491 95	D Other								
Gray Sandstone 491 506	Backfill placed fromft_	to ft. Material				3			
Diameter From To Gauge Steel Plastic Welded Threaded Casing	Gravel placed fromft.	to ft. Size of gravel		Multi-Colore	ed Sandstones				951
Casing			•						
Liner:	Diameter , From ,			Gray Claysto	one'	5	506	515	LI.
Liner:	Casing:			<u> </u>					
Final location of choc(s)				<u> </u>					\vdash
Final location of choc(s) PERFORATIONS/SCREENS: Perforations Method Screens Type Material Slot Telephyse Slot Slot Telephyse Slot Slot Telephyse Slot Telephyse Slot Slot Telephyse									\vdash
PERFORATIONS/SCREENS:									
Final location of above(e) PERFORATIONS/SCREENS: Perforations	Liner:			 					
Perforations Method		. اسا اسا است.	u u _						
Perforations Method				 	·		-		-
Screens Type Material		•		 	· · · · · · · · · · · · · · · · · · ·			 	\vdash
Slot dize Number Diameter dize Casing Liner									
To size Number Diameter size Casing Liner		- -	al	-					
(8) WELL TESTS: Minimum testing time is 1 hour New York Properties Test Test	Erom To size N	Tele/pipe lumber, Diameter . size	Casing Liner						
(8) WELL TESTS: Minimum testing time is I hour Now in the construction of the const									
Cartify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction attended. Cartify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction attended. Cartify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction attended. Cartify that the work I performed on the construction attended in the construction attended in the construction attended. Cartify that the work I performed on the construction attended in the construction attended in the construction attended. Cartify that the work I performed on the construction attended in the construction attended. Cartify that the work I performed on the construction attended in the construction attended. Cartify that the work I performed on the construction attended in the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended in the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended. Cartify that the work I performed on the construction attended. Cartify the the work I performed on the construction attended. Cartify									
Date started 7-7-28-87 Completed 7-29-87									
(8) WELL TESTS: Minimum testing time is 1 hour XXXPump				L		<u></u>		<u> </u>	
(8) WELL TESTS: Minimum testing time is 1 hour XXXpump				Date started7	<u>-7-28-87</u> com	pleted	<u>/-29-</u>	-87	
Construction Construction Colored Colo				(unbonded) Water \	Vell Constructor Ce	rtification	n:		
Time Baffer	(8) WELL TESTS: 1	dinimum testing time is	I hour	I certify that the	work I performed o	n the cons	tructio		
Time	XXXPump	ar . □ Wit	Artesian						
Signed Signed Signed Date Date	Yield gal/min Drawdo	wn Drill stemat	Time			•		•	
Signed Date			1 hr.	l				mber	
Construction Certification: Temperature of water Depth Artesian Flow Found I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above, all work performed during the construction dates reported above, all work performed during the construction dates reported above, all work performed during the construction dates reported above, all work performed during the construction dates reported above, all work performed during the construction dates reported above, all work performed during the construction dates reported above, all construction standards. This report is true to the best of my knowledge and belief. MONDERS DRILLEING, INC. WWC Number 1325 Depth of strate:	6 3001			Signed		Dat	<u> </u>		
Temperature of water Depth Artesian Flow Found I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above, all work performed churing this time is 'in compliance with Oregon well work performed churing this time is 'in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief. MONDERS DRILLING, INC. WWC Number 1325_Depth of street:	7 700		-T_464 MAN 107	(bonded) Water We	l Constructor Certi	fication:			
Was a water analysis done?	Tomosature of rest-	Thenth Assertan War	w Franci	I accept respons	bility for the constru	ction, alter	ation,	or aban	donment
Did any strata contain water not sniteble for intended use? Too little				work performed on the	is well during the con- ing this time to in	struction d	LECTORS TO TOTAL OPT	sported a ith Ores	nove. all
□ Salty □ Moddy □ Odor □ Colored □ Other belief. MONDERS DRILITING, INC. WWC Number 1325 Date July 30, 1987			lao little			to the bes	t of m	y knowl	edge and
Depta district			· · · · · · · · · · · · · · · · · · ·			C. ww	VC Nur	mber 1	<u>325 _ </u>
	· · · · · · · · · · · · · · · · · · ·					Dat	Ju	ly 30	, 1987
WHITE COPIES - WATER RESOURCES DEPARTMENT YELLOW COPY - CONSTRUCTOR PINK COPY - CUSTOMER 980931 10/98		SOURCES DEPARTMENT	YRLLOW C	<u> Luzuma,</u>	PENK COE	Y-CUSTO	MER		36701 276036

This well water by Care the contractor's Caretification: This well was drilled under my jurisdiction and this report is frue to the best of my innwiseds and belled. Attuce to the best of my innwiseds and belled. Attuce of the best of my innwiseds and belled. Attuce of the best of my innwised inn	eria qua alto Tama po edal e lo podien e lo mana esa e lo mana e lo ma
al froges and this start but the best of my knowledge and belief. This world best of my knowledge and belief. Name A. Comparation The contains are expectation The contains are expectation The contraction of the best of gravel: [Signed] Yes (We will contracted)	ords ony efroi Type of wate Io bodield
at froger and this fact my tack and the perform and the fact of the best of the best of the best of the start	eria yna bic Muw bo egyl
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This willed under my lurisdiction and this report is true to the best of my knowledge and belief. The post of the bose used of the best o	South a sew
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Through Those States	TOW WAS CE
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Their OS- for start (benyle) [benyle]	
well bore to bottom of seal m hest knowledge and beyet.	
m of suri sug sycola befriegen melaminolal bas besu slatisfied.	
Aberlal used CENNEUT Drilling Machine Operator's Certification:	Mell seal—M
IBDCHON:	SNOO (6)
The same of the sa	emperadura
	Wolt make
	rest relies
sal ante at drawdown after his SALEM OREGON	400, 2000
MVIER RESOURCES DEPT	
	<i>a</i>
	q: S
test made? M Yes 11 No 12 yes, by whom? SIEED	. 4.0000 ¥ 55000 P
DESERS: Drawdown is smount water level is	8) AKET
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76 10	abe ——
	tenutactures'
	A) SCREI
15 CE STAW SUSSINAR	
CE Z/ MON DATE DUES HUTT	
Z/ C ANOUS AND ANY TO THE WAY WAY TO THE WOOD STREET AND THE WOOD	
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Perforated T Yes & Mo.	S) PERRY
m from at the control of cash strains and aquifer from thickness and nature of each strains and aquifer pencinated with at least one entry for each change of formalion. Report each change in	" Dia
m from At to Gage Pormetton: Describe color, texture, gruin alse and structure of materials	
m from 19, ft to 28 ft Cago ft Depth drilled 19, ft Depth of completed well 19, ft	PIG - 7
G INSTALLED: Threaded Welded W. (12) WELL LOG: Diameter of Well below coulng	e) Čvein
1 point of	alds 🗖
- P) -	TAXE (C
AL TO MINISTER CONTROL OF THE PARTY OF THE P	
24 describe material and procedure in Rem 12 (11) WATER LEVEL: Completed well.	
Decoraing Decoration Recordification	Mell M
OF WORK (check):	
Bearing and distance from scotton or subdivision conner	
WA LERE DE 26. H SM M Section 2 N I R S B 3 W AW	
WES GIVKINGON DEINGE, well number	_
B: (10) POCYLION OF WELL:	I) OMME
in 30 days from the date (IDo not write above this line)	
OHEGON STS10 TO OTHER THE STS OF STS	78
DESCORDES DEPARTMENTAL OF STATE OF OREGON . STATE OF OREGON .	
at and first copy of this report WELL REPORT O () 2 () 2 () 2 () 2 () 2 () 2 () 2 ()	The origina
WATER WELL CONTRACTOR	OT-EDITOR

(4)

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the state of oregon of the original and first copy of this report are to be filed with the state of oregon or			
of this report are to be	L REPORT LE CE IVER 2 SUN 24		
filed with the	OREGON State Well No.		
of well completion. (Do not write ab	ove this many FR RESOURCES DEFT.		
\	(10) LOCATION OF WELL:		
(1) OWNER:			
Name Ran Judson	County Marier Driller's well number		
Address Pt 2 Box 19902	14 % Section 24 T. 85 R. 3W W.M.		
Newberg, One 97132	Bearing and distance from section or subdivision corner		
(2) TYPE OF WORK (check):			
New Well ☐ Deepening ☐ Reconditioning ☐ Abandon ☐	# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed well.		
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found 1t.		
Rotary Driven Domestic Industrial Municipal Cable Jetted	Static level 7.5 it. below land surface. Date 9-4-76		
Cable Jetted Irrigation Test Well Other	Artesian pressure Ibs. per square inch. Date		
CACRAC MICHAELED.	pil .		
(5) CASING INSTALLED: Threaded Welded Welded Diam. from	(12) WELL LOG: Diameter of well below casing		
"Diam from tt to ft Gage	Depth drilled 310 ft. Depth of completed well 310 ft.		
Diam. fromft. toft. Gage	Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated,		
DIBILL HOLE	with at least one entry for each change of formation. Report each change in		
(6) PERFORATIONS: Perforated? Yes No.	position of Static Water Level and indicate principal water-bearing strata.		
Type of perforator used	MATERIAL From To SWL		
Size of perforations in, by in.	Top soil		
perforations from ft. to ft.	Brown clay		
perforations fromft. toft.	11 State ClayStar 15 12		
perforations from ft. to ft.	Blue Claystone 12 20		
(7) SCREENS: Well screen installed? Yes No	White Sand Stone 28 30		
Manufacturer's Name	Blue Shale 30 25		
Type Model No.	Grey Sand Stone 75 102		
Diam. Slot size Set from ft. to ft.	11 Shale 100 140		
Dlam Slot size Set from ft. to ft.	11 Sand Store 140 623		
(0) YEAR T MURCING. Drawdown is amount water level is	White 11 11 Gaguisen 223 285		
(8) WELL TESTS: Drawdown is amount water level is lowered below static level	a-ney 11 1) 283 310 75		
Was a pump test made? Yes St No If yes, by whom?			
ld: gal./min. with ft. drawdown after hrs.			
n			
у и и			
gal./min. with 35 ft. drawdown after hrs.			
tesian flow g.p.m.			
Temperature of water Depth artesian flow encountered ft.	Work started 9- 1 19 76 Completed 9-4 1976		
(9) CONSTRUCTION:	Date well drilling machine moved off of well 9.5 1976		
LounguT	Drilling Machine Operator's Certification:		
Well sealed from land surface toft.	This well was constructed under my direct supervision. Materials used and information reported above are true to my		
Diameter of well bore to bottom of seal 10 in.	best knowledge and belief.		
Diameter of well bore below seal in.	[Signed] David Robbin Country Date 9.15, 1976		
Number of sacks of cement used in well seal	Orillies Machine Operator's Drilling Machine Operator's License No		
Number of sacks of bentonite used in well seal sacks	Diffing Machine Operators Process		
Brand name of bentonite	Water Well Contractor's Certification:		
Number of pounds of bentonite per 100 gallons	This well was drilled under my jurisdiction and this report is		
of water	true to the best of my knowledge and belief.		
Did any strata contain unusable water? Yes 15 No	Name (Person, firm or comparation) (Type or print)		
Type of water? depth of strata	Address 3875 GHHAN RU. SE		
Method of sealing strata off	romas Muchael Maldrup		
Was well gravel packed? ☐ Yes 🕱 No Size of gravel:	[Signed]		
Gravel placed from ft. to ft.	1 COntractor's Littlewise 14th Authorized Little Annual State Contractor's Littlewise 14th Authorized Little Contractor's		
	HISTORY IN AUKLINENHARLY		



AN RIVER 12	174 m/2 1/2	, <u>, , , , , , , , , , , , , , , , , , </u>
STATE OF OREGON WATER WELL REPORT	8 34250	d
(as required by ORS 537.765)	(START CARD) #	
(1) OWNER: Name Darwin Hagen SALEM OREGON	(9) LOCATION OF WELL by legal description: County Marion Letitude Longitude	
Address 655 Valley wood Drive	Township 85 Nor S, Range 3 W Ror W,	ww.
City Solem State OR Zip 97301e	Section 25 SE 4 NW 4	******
(2) TYPE OF WORK:	Tax Lot Lot Block Subdivision	<u> </u>
New Weil X Deepen Recondition Abandon	Street Address of Well (or nearest address) 3868 Battle Creek RD, Salem, OR	
(3) DRILL METHOD Rotary Air Rotary Mud Cable	(10) STATIC WATER LEVEL:	===
☐ Ölber	95 ft. below land surface Date 3-11	-89
(4) PROPOSED USE:	Artesian pressure Bb. per square inch. Date	
Domestic	(11) WATER BEARING ZONES:	
(5) BORE HOLE CONSTRUCTION:	Depth at which water was first found 4-20 ft.	
Special Construction approval Yes No Depth of Completed Well 475ft.	From To Estimated Flow Rate	SWL
Yes No	280 281 4 cpm	
TALE ANAL		
Diameter From To Material From To sucks or pounds		
Ø 6 0 475 Bore	(12) WELL LOG: Ground elevation	
	Material From To	SWL
How was seal placed: Method	Rough spot in bore 280 285	
wastenpased minor of the order	Blue sandstone 305 475	
Backfill placed fromR. toR. Material		-
Gravel placed fromft. toft. Size of gravel		-
(6) CASING/LINER:		
Diameter From To Gauge Steel Plastic Welded Threaded		
4, 100 - 100		
Liner 4" 160 PSI 128 475 D D D		
Final location of shoe(s)		
(7) PERFORATIONS/SCREENS:		\dashv
2 Perforations Method Cirill		
Screens Type Material		
Slot Tele/pipe From To size Number Diameter size Casing Liner		
350 475 3x3 700 4" PVC 🗆 🗆		
	Date started 3-11-89 Completed 3-11-89	
	(unbonded) Water Well Constructor Certification:	
(8) WELL TESTS: Minimum testing time is 1 hour	I certify that the work I performed on the construction, alterat	ion, or
☐ Pump ☐ Beiler ☐ Air ☐ Artesian	abandonment of this well is in compliance with Oregon well const standards. Materials used and information reported above are true to r	ruction ny best
Yield gal/min Drawdown Drill stem at Time	knowledge and belief. WWC Number	
20 cpm 470 1 hr.	Signed Date	
	(bonded) Water Well Constructor Certification:	
Temperature of water 540 Depth Artesian Flow Found	I accept responsibility for the construction, alteration, or abando	nment
Was a water analysis done? Yes By whom	work performed on this well during the construction dates reported ab work performed during this time is in compliance with Orego	n well
Did any strate contain water not suitable for intended use? Too little Saity Muddy Odor Colored Other	construction standards. This report is true to the best of my knowled	lge and
Depth of strate:	Signed Service Date	
		00C 9/99

... (A)

61J-92969+dEI -	HERIS IL MEGESSVEX)	
17761 T	Contractor's License No.	Gravel placed from the back from
c/ -	Contraction (West Well Contraction)	Was well gravel packed? [] Yes Nio Bize of gravel:
200/12/1	[beng]	ho storie unique ho segi
145/162)	Address Resident	Did any atraits contain unusable water? Twee PAGO
A O (mund an elice)	Winner of the party of the part	A control in the many of the control is self.
7	THE CONTRACT AND TO 1880 STR. OI STREET	aleg 001/adf radio in the material radio in
at troger and this	moltoibalrut you reduit ballirbasaw New alor	Mumber of permits of bentunito per 200 gallons
	Water Well Contractor's Certification:	otherined to smear baseful
	Drilling Machine Operators' stronger on June 14 center of the control of the cont	Number of sacins of beniumite used in well seel. I seel seel.
بركمر	//	Dismeter of well born below its lies from the well asset from the bolton the beautiful asset from the bolton t
10 et 17-01	cast Imowledge and belief. [Signed]	Diameter of well hore to bottom of east a resumment
Vill or suri sub s	Materials used the property and property and	At of scatture heard most belees flew
ct supervision.	Drilling Machine Operator's Certification: Order of the Well was constructed under my direction of the construction of the co	231/1054 - 1/2/04/31D hear lanstalf-loss Hew
		(9) CONSIBRICITION:
SC 81 - 2/	Hew to the beyon entirent gaining they check	persture of water Depth artestan flow encountered
50 ft 9/4	besteldung of -C/- besteld strow	Artestan flow Sp.m.
		Toward with Soft drawdown adar. here
		2/1
·		Yield : sal/min with it dinwdown siler his.
		Wes a pump test meder [] Yes Will it yes, by whom?
		(8) MEIT LECIE: jonated pojon entjo jong
		A mont tal and the most talk made
		At
	Mande alando	Monthechner's Wenne
965	10 10 10 10 10 10 10 10 10 10 10 10 10 1	(7) SCREENS: Well serven translated I Yes Zeff
058	75 BY 19 19 19 19 19 19 19 19 19 19 19 19 19	
	3HP15/V/2	A d A mort smort smort special state of the state of the smort smort smort special state of the smort
975	757 4 18778 + NW.F.	
	105 and	At or at mortendam and an ambiguities to oak
0/-	O MARS & NAT + ORY	Type of perforator used
	mora Tabistam	PERFORATIONS: Performed? [] Yes 12-46.
offermed 11000 1100	with at least one entry for each change of formation. Be position of Static Woter Level and indicate principal w	
transport vormitt	Formation: Describe color, tertune, grain give and etru and show thickness and nature of each stratum and s	Diem from A to the Gago
	Depth drilled 300 ft. Depth of completed we	
	(IS) MEIT FOG: Dismeter of well polon co	CASING INSTALLED Threshold Welded
	OOI IMM (6)	
Date	Artesian pressure heb. per equare inch.	Ceble Jetted Dragation Test Well Other
6-11-6 2000	Statte level // 4. below land surface.	Rotary Democrite A memoral Democrite A memoral Description of the contract of
# 05/	Depth at which water was first found	(3) LASE OF WELL: (4) PROPOSED USE (check):
· •-•	(11) WATER LEVEL: Completed well.	It abandonment, describe material and procedure in Iban in
	1 1 6	Men Well & Deepening Becomplishering American
B10013	-1-4-1-17 NO. 14 - 1-7-1	(2) TYPE OF WORK (check):
	Bearing and distance from section or anddyston com-	WAND DAY A TO WAR SOMEON SOMEON
W.W.	E a 2.8 x P. C anotton M. M.	
Tront	Comma Dellor's well mimber	S. 2.3.3.3. 2.0.1.2.2. (I)
Poon	(10) LOCATION OF WELL:	- desiratio (ii)
	SALEM OREGON	of well completion.
10058 +01 x		STATE ENGINEER, BALEM, OREGON SEGO
THE WILL BE WI		
The extenses and time copy to be of this report are to be		
	. 011111111110110	/ HOTOARTHOO LINE RETAW OF SOLTON

Ä	
-	(7
NOTICE TO WATER WELL CONTEXATION The original and first coly of this report are to be filed with the	OREGON OCT 14 1974 Well No. 85 3W-24
STATE ENGINEER, SALEM, OREGON 25310 (Ficase type within 30 days from the date of well completion. (Do not write a	DIAIE ENGINEEMEPORMIT No.
(1) OWNER:	(10) LOCATION OF WELL:
Name CARENCE CRIME TO 3.6	County MANA Driller's well number 4 4 Section 24 T. 8 B. 3 W.M.
(2) TYPE OF WORK (check): New Well Deepening Reconsiditioning Abandon	Bearing and distance from spetton of subdigition perform
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed well.
(3) TYPE OF WELL: (4) PROPOSED USE (check): Retary Driven Domestic Industrial Diffusional D	Depth at which water was first found Static level 1. below land surface. Data
Dug Bored Irrigation Test Well Other	Artesian pressure lbs. per square inch. Date
CASING INSTALLED: Threaded Welded	(12) WELL LOG: Diameter of wall below casing
Diam from the to the Gago	Depth drilled 510 ft. Depth of completed well 510 ft.
* Diam trom tto ft. Gage	Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and squifar penetrated, with at least one entry for each change of formation. Report each change in
PERFORATIONS: Perforated? Yes & No.	position of Static Water Level and indicate principal water-bearing strata.
Type of perforations in by in.	MATERIAL From To SWIL
Size of perforations in. by in.	J. BROWN CLAY
perforations fromft. toft.	WHITE BUFF, GREEN 40 68
perforations fromft. toft.	Blun-122VI 68 510
(7) SCREENS: Well screen installed? Yes Who	SAND STORE FLAN
Manufacturer's Name	
Diam. Slot size Set from ft. to ft.	Will ABANDON TO
	AND WELL BACK
(8) WELL TESTS: Drawdown is amount water level is lowered below static level	FILLIAD WITH
Was a pump test made? ☐ Yes And H yes, by whom? Vield: gal/min. with ft. drawdown after hrs.	C/E/M/CV/
Yield: gal/min. with it. drawdown arear are.	
	·
galfactost O gal/min. with ft. drawdown after / hrs.	
Artesian flow g.p.m.	a sul al out
perature of water Depth artesian flow encountered	Work started 9-3-1974 Completed 9-6-74-19
(9) CONSTRUCTION:	Date well drilling machine moved diff of well
Well seal-Material used	Drilling Machine Operator's Certification: This well was constructed under my direct supervision. Materials used and information reported above are true to my
Dismeter of well bore to bottom of seal	best knowledge and belief.
Diameter of well bore below seal in. Number of sacks of coment used in well seal sacks	(Drilling Machine Operator)
Number of sacks of bentonite used in well seal sacks	
Number of pounds of bentantite per 100 gallons	Water Well Contractor's Certification: This well was drilled under my jurisdiction and this report is
of water	true to the hest of my knowledge and beller.
Did any simia contain unusable water? Yes Ato	Name The Common of the Common
Type of water? depth of strata	Address 7
Method of sealing strate off Was well gravel packed? Was well gravel packed? Was well gravel packed?	[Signed] (Woter Well Contractor)
Gravel placed from ft. to ft.	Contractor's License No. 32 Date 4 -/2 - 1924
(USB ADDITIONAL B	HHERTS IF NECESSABY) SPASSE-ÁS

HELE IL MECESSVEZ)	
Contractor's Licenses No. 533 Date AMA ZO 19 B	Wes well graved protect! Yes CNO Size of gravel:
[Signed] MAKARAK WALL Controlled	Method of sealing after a Six of Six of gravel:
MALLY (MI) (0 042 4/ 1/)	Type of water? Capita of strates
	Did any strate contain unusable water? Yes W No
TONOTIVE LIGHT XATTIVE	water income again [] Yes [] Yes Sines a class location at the class and control and the class of the class and control and class are class and class and class and class and class and class and cl
This well was drilled under my jurisdiction and this report is true to the best of any knowledge and belief.	Number of pennels of benfunite per 100 gallons
Water Well Contractor's Certification:	Strong or bostonia
Drilling Machine Operator's License No.	adons lisse flaw at bear insense to mions to reduciff mions lisse flaw at bear editorined to exists to reduciff
SS 61 (mismodo empresió significat).	Dismenter of well bote below seal
pear suromiedee and penel	nt Ol first in motiod of eriod liew to restorate
This well was constructed under my direct supervision. The part is an investigation reported shows are true to my	Does Ishacking How
Drilling Rechine Operator's Occiditeation:	(9) CONSTRUCTION:
Net - ? - C bestelemed Ret - / - T bestele strow Ret - ? - C lisw to the beyon enthean gailthe lisw etact	Appendicte of writer Depth extends; flow encountered ft.
Set -E-C bandaman Met "-1-7" haven tram	V feeten flow
	Alfer test A gal/mile with \$54 ft. drawdown after hrs.
	Tield: gal./min. with it drawdown silor.
	Wes a pump test made? Yes No H yes, by whom?
	(8) WELL TESTS: Drawdown is empound water level is
	A constant of A
Grey Sand Stone 340 400	Type Model No.
White sandstand the Ser of	Memniscimen, Monse Alei Euceus instrusequa II Ace Al Mo
OSE UEI PING PARO - OFFICE	
50 01 (1305) - a1045 2015	A cot A most smallendred
720 Clay (10 65)	# od # mort sunitarities
1 0 Hos out	nt vertorators and protections and an experimental protection of the contraction of the c
AWE OT MOTE AMERICAN	Sheet of the control
with it lesst one entry for each change of formation. Report each church in your capital position of binds.	
Formeticm: Decembes color, texture, grain and structure to testible; best structure of each structure of each structure and squitter penetrative	* Diam from a di A mont and a diam to the contract of the cont
22 OO11 How beteinging at all ool to Allied At OO11 hellish digett	OSE WEST TO OF THE OWN WESTER - 3
(15) WELL LOG: Dismeter of well below casing	CASING INSTALLED: Targeded Wolded IS
Arteslan presente med. Date per equere med.	Rotery & Driven Domestie W Dedustrial Municipal
Starts level — A. C.	
Double at which water was first found	(3) TYPE OF WELL. (4) PROPOSED USE (check):
Re- Est I all Marie (11)	New Well # Despending Reconditionaling Abandon
	(S) LKLE OK MORK (cpeck):
Residue and distance from seeding or subdivision corner	12 90 92 1 1 20 20 20 20 20 20 20 20 20 20 20 20 20
County FOR 1910 Differ's will minch of the W.W. W.E. R. P. T. 41.C nother W.W. W. M. W.	
(10) FOCVLION OF WELL.	(I) OMNEE:
SOURCES DEFT.	ot well completion.
State Permit No.	STATE ENGINEER, SALEM, OREGON SENIO Adding 10 deep from the defe
BECON State Well No.	THE MILE ING. AND SHEET OF OF
ELECTIVED	The original and first copy of the report are to be
	MOTICE TO WATER WILL CONTRACTOR

	NOTICE TO WATER WILL CONTRACTOR The original and first copy	
1	of this report are to be WAYER WELD	M
•	filed with the STATE OF	
	STATE ENGINEER, SALEM, OREGON SAID Within 30 days from the date	
	of well completion. (Do not write abo	WE HE LENGINEER
		- SALEM CREGON
	(1) OWNER;	(10) LOCATION OF WELL
	Name CLATIANUR STREEKERS	County Driller's well number
	Address RATTIR CTIME KROSE	14 14 Section 24 T. S. C. R. S. W.
	ALIZA GRE	Bearing and distance from motion on subdivision corner
	(2) TYPE OF WORK (check):	- WALL NO. 12-TITS-Block
	New Well 2 Deepening Reconditioning Abandon	
	If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed well.
	(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found -200
	Botary Driven D. Dementin Mandantal D Municipal D	Static level 24-9 ft. below land surface. Date 9-9
	Cable Jetted . Irrigation Test Well Other	Artesian pressure Ihs. per square inch. Date
	(5) CASING INSTALLED: Threaded Welded	(12) WELL LOG: Diameter of well below casing
•	ft_ toft_ Gage	Depth drilled 5000 it. Depth of completed well 2000
	ft. Gageft.	Formation: Describe color, texture, grain size and structure of materia
	Diam fromft. toft. Gage	and show thickness and nature of each stratum and aquifor penetrat with at least one entry for each change of formation. Report each change
•	(6) PERFORATIONS: Perforated? Yes No	position of Static Water Level and indicate principal under-bearing stre
	Type of perforator used	MATERIAL From To SWI
	Size of perforations in. by in.	780 +TAN-TOD 0 29
	perferations from ft. to ft.	Sail & Macamanus
	perforations from the form the first perforations from the first perforation from the fir	Zelle .
	perforations from	BLACK - BASALT 27 31
		BOULDAR
	(7) SCREENS: Well screen installed? Yes give	ISROUN -DICOMPOSIOSI 62
	Manufacturer's Name	BASA TO THE PARTY OF THE PARTY
	Type Model No State size Set from ft. to ft.	BARCK - DRYALT UN UT
	Diam. Stot size Set from ft. to ft.	+21/18/wh 64 78
		Chay STUNK
	(8) WELL TESTS: Drawdown is amount water level is lowered below static level	13/42-6KAY 08 300
	Was a pump test made? [] Yes No H yes, by whom?	Chay STONES +
	d: gal/min. with ft. drawdown after hrs.	SAND 11
	4:77	Wie by ABANDONRO
	Sufficient (1) gal/min, with (60) ft. drawdown after hrs.	15 MARIE HA
•		- UNITE COLUMNATION
(desian flow g.p.m.	Work started 9-6- 187 Completed 9-7- 19
	remperature of water Depth artesian flow encounteredfl	Water Black Barrier
	(9) CONSTRUCTION:	Date went drining amounts and a second
•	Well geal-Material used	Drilling Machine Operator's Certification:
	Well sealed from land surface to ft.	This well was constructed under my direct supervisi Materials used and information reported above are true to
	Diameter of well bore to bottom of seal in.	host knowledge and belief.
	Diameter of well bore below seal in.	[Signed] (Orthing Machine Operator) Date /0 /2, 19
	Number of sacks of cement used in well seal sacks	Drilling Machine Operator's License No.
	Number of sacks of bentonite used in well seal sacks	
	Brend name of bentonito	Water Well Contractor's Certifications
•	Number of pounds of bentonite per 100 gallons of water	This well was drilled under my jurisdiction and this reportrue to the body of my inhowledge and belief.
	of water	
	Did any strate contain unusable water? Yes 200	Name (Fernan form or comparators)
	Type of water? depth of strata	Address 25 Chief IN 1801 8
	Method of sealing strate off	100mmes Andrew To British
	The state of the s	[Signed] (Water Well Contractor)
	Was well gravel packed? Yes Pario Size of gravel:	(age am sement

\$ 7281 '	45 47 67 e48(I	Contractor's License No. 3	HBA ANOTERION (1997)
	CI TIE	EGEN)	48 Well grevel pecked? [] Yes 18 No. Size of grevel:
	X 72 // 1	[paulis]	
1	WS \$857%.		the starts shing starts and
-3714	CH HI FIN	9 50 B S SSATPPY	sistia to dipph of states
-1 V	THE RESERVE OF THE PARTY OF THE	Memorine and management of the same of the	of any strain contain unusable water? [] Yes Ario
	-48WM		# and and a section of the section o
ar mod:	e sud bellet.	n about beliffs ship tiew aid! Shelwoons you to deel out or eart	Water The /100 gala.
interests			smiles out req ethnotmed to shared to redam
	tunit.	Water Well Contractor's Certifica	- attented to sense best
		THE RESIDENCE OF THE PARTY OF T	first flow of bear estimates to referre
		Soli s'atstate Operator's Lich	solves to seem
A7561 '	T/-01 0000 1000	mad bandsald spillings	at fess wolld exod flew to rethrain
•		peat knowledge and belief	and mell bore to bottom of seal for retermine
Van od	teported above are true	notramioini bas been sisiistelli	at contract from land and accepted from land and accepted from land and accepted from the land accepted from the
:uojsja		Driffing Machino Operator's Cert	DANGET A THANK DO Down tetreteM-fees its
			1111117
76 ST	- CE-D Hew to 1	do bevent enishem gailfirb liew etect	CONSTRUCTION:
577.6V-	Cart - A posotamore	NOST - NOW bottoda show	forestructure of water . Depth extension work melastra dique.
-2	1- 2 6 - 71		
	 		Healen Row
. —			and total drawdown at 22 like almiles 21 test
	 		2/6
	 		
			tes a pump exet made? [] Yes 4 ANO 14 yes, by whom?
			NETT LESLS: present personal water level is income with level is
	3/1/06	451	- Virol The Control of the Control o
	CHE SAC OLLA	TICHT KEEL	At
		VOZVIK)	At at At mont hold axis told axis
	505 200 11	111 - 11	ype Model 170.
	10 10 110	BLUK - CLAU	Smile Standesland
	17 28 A11	- ONA PHOLL	1) SCHEENS: Moll restons installeds [] Yes (No
	XE 91 6472	1616 BROUNT	-Supposition of the state of th
	1 3		A most enablement
	9/ 15 131/10/4	BIDINH - DROW	41 · mort smolt sm
	/V7:	74710 dal	At of At most exclusiving
. ——	60	Cart I Nonata	in ye of perforations
TAS	or mora	TANSATAM	
	<u> </u>		
		with at least can entry tor each chang an ban four Yoles Lead to motiting	PERFORATIONS: Pertorated 1 7cm 6 No.
		end show thickness and and and the	. Diem from fr to fr Geffe
;efe l mit e	n 20 oxudanda has eals alsig	Formstion: Describe color, texture, g	Diam from — A to — A dege
¥ 00	a of completed well	Depth drilled 270 ft. Depth	
	r of well below casing	40° 76°	The same of the sa
	·	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	CASING INSTALLED: Tarreded II Welded I
	. per equare inch. Date .	Artesian pressure lbs.	D rected D now test D nothertral D borost D zur
1-62-	alow land surface. Date of		Destinate C menanom of constant C bestief C alds
- 		Depth at which water was that tour	The state of the s
₩	• • •	· ·	3) LALE OR MEIT'S (4) PROPOSED USE (check):
	Alsw batalo	(II) WATER LEVEL: Com	t abandonment, describe material and procedure in Rem 18.
		• • • • • • • • • • • • • • • • • • • •	icw Well 💽 Despening 🗋 Reconditioning 🗋 Abandon 🔝
	D_APT	MOVON TIEN	
•		Menting and squared has salues	S) LAKE OF WORK (check):
-	r subdivision corner		180 M 21 185
TRYA	supplysion comer		
WA	WE = 2,8 =	A dottoos # #	3 9. 45 X 2 2 X 2 X 14 0 2 88 88 ND DA
TA'M	T. S. S. H. N. W. S. W.	A g notions # #	
TA'A	we well amober	County Made No. 18 Section 2.4	SUFFICE CANDINGS CANDERS
	T & T B A MARIA	County (MELLINO) OF WELL AND ACTUAL AND ACTU	SUFFICE CANDINGS CANDERS
70 L	E & S E Z K ECON GINEEB S	COMPANION OF WELL (10) LOCATION OF WELL SALEM, OF	ON WELL COMPANIENCE OF A PARTY AND A PARTY
	E & S E Z K ECON GINEEB S	COMPANION OF WELL (10) LOCATION OF WELL SALEM, OF	within 80 days from the daird Of well completion. (Do not write sho
	E & Z F Z K ECON SINEER S	or print)	STATE ENGINEER, GALER, CHECGGS 3710. II. Of well completion. I) OWNER, Of well completion.
	E & Z F Z K ECON SINEER S	or print) or print) or this line) SALEM, OI (10) LOCATION OF WELL SALEM, OI SALEM,	STATE ENGINEER, SALEM, OREGON STATE OF The Action the date of well completion. (Do not write the date of well completion.
	E & Z F Z K ECON SINEER S	OCHEGON OF WELL County And Inc. STATE EN CO. Drint) SALEN OF WELL County Market Inc. State Inc.	of this report ene to be filled with the filled with the state of the state and the state of the state of well completion. I) OWNER, white short well completion. II) OWNER, one with completion.
	E & Z F Z K ECON SINEER S	OCHEGON OF WELL County And Inc. STATE EN CO. Drint) SALEN OF WELL County Market Inc. State Inc.	STATE EMORNER, SALEM, ORRECOR STROF M. (Do not write about the dept of well completion. (Do not write about the dept of well completion. (Do not write about the dept of well completion.

DEGET	85/3W-25.
WATER WELL REPORTE AND LUTER TO THE	986
(as required by ORS 897.765)	JES DEPT.
(1) OWNER: Owner Well Number: ORNENT	LOCATION OF WELL by legal description:
Name ROTH LAND AND BUILDING DEVELOPMENT Address 4196 81st Street N.E.	Township 8 South Nors, Range 3 West Bar W. WM.
Address 4196 81st Street N.E. City Salem State Oregon Zp 97305	- 1 75 x x
(2) TYPE OF WORK:	Tox Lot Lot # 8 Block Subdivision Deer Lake
XX New Well Deepen Recondition Abandon	Street Address of Well (or propert address)
(3) DRILL METHOD:	Deerlake Estates Phase 11 Lot # 8
A Rotary Air Rotary Mud Cable Cother	(10) STATIC WATER LEVEL:
- A-M round un	118 R. below land surface. Date 5-8-86
	Artesian pressurelb. per square inch. Date
(4) PROPOSED USE:	(11) WELL LOG: Ground elevation
Domestic Community Industrial Irrigation	Material From To WB? SWL
TART TAT TO CONCURRENCE ON A	Soil 0 1
BORE HOLE CONSTRUCTION: 535 ft.	Dark Brown Clay 1 10
Special Standards date of approval	Tan Clay Sticky 10 23
HOLE SEAL Amount	Gray Clay Sticky 23 29
Diameter From To Material From To sacks or pounds	Gray Sandy Clay 29 41
10" 0'80' Cement 0 80. 24 Sacks	Tan Claystone With Tan Clay 41 58
6" 80 535	Grav Claystone 58 231
	Light Grav Sandstone 231 292 XX
How was seal placed? Method A B EC D D E	Gray Sandstone 292 470
Other	Light Gray Sandstone 470 502 XX
Beckfill placed from ft. to ft. Material	Gray Sandstone 502 512 518 518 518 518 518 518 518 518 518 518
Gravel placed from ft. to ft. Size of gravel	Gray Claystone 512 535 118
(6) CASING/LINER: Diameter From To Gauge Steel Plastic Welded Thresdod	
C_{-} 6" $[+1]$ 80 $[.25]$ \Box \Box \Box	
	Driller Reccomended
	Pump Be Set Between
4" 0 535 160 XX 20X	475' To 515'
Eigel location of shoo(s)	
PERFORATIONS/SCREENS:	
Ti Core	
Material Material	
Slot Tele/pipe	
To size Number Diameter size Casing Liner	
245 265 1/8 36 口 口	
475 515 1/8 72 III	
	Date started 5-6 Completed 5-8
	(unbonded) Water Well Constructor Certification:
(8) WELL TESTS: Minimum testing time is 1 hour Flowing	I constructed this well in compliance with Oregon well construction standards. Materials used and information reported above are true to my best.
Pump Beiler Alair Artesian	standards. Materials used and unformation reported above are true to my seed. knowledge and ballef.
Yield gal/min Pumping level Drill stem at Time	. Data
12 532 1 hr	Signato
	(bonded) Water Well Constructor Certification:
	I accept responsibility for construction of this well and its compliance with all Oregon water well standards. This report is true to the best of my
Temperature of water Depth Artesian Flow Found	knowledge and belief.
Was a water analysis done? Yes By whom	Signed D. Manders Date 5-8-86
Did any strata contain water not suitable for intended use? Too little Selty Muddy Odor Colored Other	
Depth of strate:	Company MONDERS DRILLING, INC fob No.
LAND ON COLUMN	9309C 1D/85

THE PROPERTY OF THE PROPERTY O

RECEIVED

STATE OF OREGON M WATER WELL REPORT (as required by OBS 537.781)

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JUL1 6 1984

VATER RESOURCES DEPT

la (for official use only)

(1) OWNER:	(10) LOCATION OF WELL by legal description:
Name ROTH LAND AND BUILDING DEVELOPMENT	County Marion 4 4 of Section: 25 of
Address 4196 81st Street N.E.	Township 8 South Range 3 West WM. (Rownship is North or South) (Range is East or West)
City Salem State Oregon	Tex Lot 3 60 Flot 10 Block Subdivision Phase 2
(2) TYPE OF WORK (check):	MAILING ADDRESS OF WELL (or percent address)
Now Well XX Deepening Accorditioning Abandon	Deerlake Estates
If abandonment, describe material and procedure in Item 12.	Battlecreek Rd. Salem, Ore.
(3) TYPE OF WELL: (4) PROPOSED USE (check):	(11) WATER LEVEL of COMPLETED WELL:
Robury Ale XX Driven Domestic XX Industrial Municipal	Depth at which water was first found 203 ft.
Rotary Mod Dug Irrigation Withdrawal Reinfection	Static level 128 ft. below land surface. Date 5-24-84
Other	Artesian pressure Ihs. per equare inch. Date
Barwel Piezametric Grounding Test	(12) WELL LOG: Diameter of well below easing 60 Depth drilled 465 ft. Depth of completed well 465 ft.
(5) CASING INSTALLED: Steel MX Plastic Threaded Welded XX	Depth drilled 465 ft. Depth of completed well 465 ft.
Threaded Welded XX	Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and equiler penetrated, with at least one entry for each change of
Diam from At to At Gauge	formation. Report each change in position of Static Water Level and indicate principal
	water-bearing strata.
LINER INSTALLED: Steel Plastic XX Threaded Welded	MATERIAL Prom To SWL
4 Diam from O R to 465 R Gauge 160 PST PVC	Soi1 0 1
(6) PERFORATIONS: Perforated? XX Yes \(\square\) No	Brown Clay 1 8 8 17
8120 of perforations 1/8 in. by 9 in.	
54 perforations from 385 ft. to 445 ft.	
perforations from ft. to ft.	
perforations from	Gray Claystone 35 68 Brown Claystone 68 71
	Gray Claystone 71 203
(7) SCREENS: Well screen installed? Yes RNo	Light Gray Sandstone 203 226
Manufacturer's Name	Grav Sandstone 226 305
Type Model No Both Size Size Size from ft. to ft.	Gray Course Sandstone 305 340
Diam Slot Size Set from A to A	Grav Sandatone 340 465 1281
Therefore is amount water level is lowered	
(8) WELL TESTS: below static level	
Was a pump test made? Yes	Driller Recommended Pump Be Set At 415'
gal/min, with ft. drawdown after hra.	Be Set At Ti
Air Test May Fluctuate	
Air test 18 gal/min. with drill stem at 1460 ft. 1 hrs. Beiler test gal/min. with ft. dmwdown after hrs.	
Heiler test gel/min. with ft. drawdown after hrs. Artesian flow g.p.m.	
Depth artesian flow encountered	
	Date work started 5-21 /completed 5-24
(9) CONSTRUCTION: Special standards: Yes No.	Date well drilling machine moved off of well 5-24 19 84
Well seel Material used Coment 50 ft.	(unbonded) Water Well Constructor Certification (if applicable):
Well sealed from land surface to	This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
Diameter of well bore below scalin.	
Amount of seeling material 16 seeles XX pounds □	[Signed]
How was cement grout placed? Air Grout Pump	(bonded) Water Well Constructor Certification:
	Bond Issued by:
No.	(minuter) MONDERS DRILLIANG INC.
Was pump installed? No Type HP Depth ft.	(type or print name of Water Well Constructor)
Wen a drive shoe used?	This well was drilled under my jurisdiction and this report is true to the
Type of Water? depth of strata	best of my knowledge and belief:
	(Signed) D. Monders
Method of sealing strata off Was well gravel packed? Yes KNo Size of gravel:	5_27_8/L
	(Dated)
Gravel placed fromR, toR. NOTICE TO WATER WELL CONSTRUCTOR	WATER RESOURCES DEPARTMENT, 8P*46886-690
The driginal and first copy of this report	SALEM, OREGON 97810
are to be filed with the	within 80 days from the date of well completion.

The original and first copy of this report are to be filed with the

within 50 days from the date of well completion. WATER RESOURCES DEPARTMENT, BALEM, OREGION 97810

stoger slai to ygoo tan han leadgito of T edt difw bolh ed or om NOTICE TO WATER WELL CONSTRUCTOR

STATE OF OREGON

RECEIVED

STATE OF OREGON N WATER WELL REPORT (as required by ORS 587.765)

JUL 1 6 1984 ER RESOURCES DEPT IN INK

24 D (for official use only)

STATE OF OREGON MY AND JULI 6 18		47.74	
STATE OF OREGON NO JUL 18 18 WATER WELL REPORT (ca required by ORS \$37.785) SALEM, ORE	es dept by Phint in Ink Gon	(for official	we only)
(1) OWNER:	(10) LOCATION OF WELL by leg	al descript	ion:
Name ROTH LAND AND BUILDING DEVELOPMENT		i of Section	25ar
Address 4196 81st Street N.E.	Township 8 South Range	3 West	
City Selem State Oregon	(Township is North or Bouth) Tex Let 36/2 Let 13 Block Bubdivision	Remain East or Phase 2	West)
	MAILING ADDRESS OF WELL (or nearest address)		•••
(2) TYPE OF WORK (check):	Deerlake Es	tates	
Now Well Deepening Care Reconditioning Abandon Care If abandon Abandon I If abandonment, describe material and procedure in Item 12.	Battlecreek		m. Ore.
	(11) WATER LEVEL of COMPLE	TED WEL	L:
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found		205 a.
Thomas	Static level 112 ft. belov	w land surface. D	ato 7-12-84
Rotory Mind Dog Irrigation Withdrawal Reinfection Other:		er equere inch. D	
Piccometric C Grounding C Test C			611
(5) CASING INSTALLED: Steel XX Plastic	- (12) WELL LOG: Diameter of well belt Depth drilled 500 ft. Depth	of completed we	
Threaded Welded XX	Kormation: Describe color, texture, orain size and structure	e of materials; a	dahow thickness
6 · Diam from +1 ft to 50 ft Games .250	and nature of each stratum and aquifer penetrated, with a formation, Report each change in position of Static W	t least one entry	for each change of
Diam. from ft. to ft. Gauge	formation. Report each change in position of Static W - water-bearing strata.	Over Transi ung 1	mean hingles
LINER INSTALLED: Steel Plastic X	MATERIAL	Press 7	ro 8WL
Threaded	Soil MATERIAL	0 1	
4 Diam. from 0 ft. to 500 ft. Gauge 160 PST PVC	Brown Clay	1 7	
(6) PERFORATIONS: Perforated? KYes 🗆 No	Tan Clay	7 19	
Size of perforations 1/8 in. by 9 in.	Decomposed Rook	19 2	
52 perforations from 220 t. to 480 f		21 2	
perforations from ft. to ft)5
ft. to ft		205 2	12
(7) SCREENS: Well screen installed? O Yes XX No	Gray Sandstone	242 37	20
Manufacturar's Name Well Street, Installed I Li 168 AM NO	Light Grav Sandstone		50
Type Model No.	Grav Sandatone	460 50	1121
Diam Slot Size Set from ft. to			
Diam Slot Size Set from ft. to			
Drawdown is amount water level is lowered	Driller Recommended Pump	- 	
	Be Set At 470	- -	
Was a pump test mada?	_ -	+	 ·
d: gal./min. with R. drawdown after hr	- 	+	 ·
Air Test May Fluctuate	-	 -	
Air test 8 gal/min. with drill stem at 407 ft. 1 hr	- ·	1 —	
Bailer test gal/min. with ft. drawdown after br		1 1	
Artesian flow g.p.m. Depth artesian flow encountered			
Operations of water Deput areasan now discount	Date work started 7-10 /compl	ated	7-12
(9) CONSTRUCTION: Special standards: Yes 🗆 No 📆	Date well drilling machine moved off of well		7-12 ₁₉ 84
Well seal Material used Coment	(unbonded) Water Well Constructor Certifi	ication (if ap	plicable):
) Well beened from their surface of	This well was constructed under my direct s	upervision. Ma	terials used and
Diameter of well bore to below sealin. Diameter of well bore below sealin. Amount of sealing material15sack VII pounds	information reported above are true to my best l	mowledge and	Deitel.
Diameter of well born below seal	[Signed]	Date	, 19
Amount of sealing material 15 sack 02 pounds How was cement grout placed? Air Grout Purap	(bonded) Water Well Constructor Certifica	tion:	
How was cement group patients	m David Tomad has		
•	(number)	Streety Company N	eme)
Was pump installed? NO Type HP Depth	On behalf of MONDERS DRITATING	Water Well Countr	isetor)
Was a drive shoe used? Yes KNo Pluga Size location			
Did any strata contain unusable water? Yes XX No .	This well was drilled under my jurisdiction best of my knowledge and belief:	and ran tabo	at to from m fine
Type of Water? depth of strata	- A Man da		
	(Signed)	ructor)	
Was well gravel packed? Yes XX No Size of gravel:	(Dated) 7-16-84		
Gravel placed from ft. to ft.			
WILKELD ANTER ACTORDING CONTINUES	Water resources department, Balem, oregon 97810		SP~46858-690
The original and first copy of this report are to be filed with the	· within 30 days from the date of well completion		

NOTICE TO WATER WELL CONSTRUCTOR The original and first copy of this report are to be filed with the

WATER WELL REPORTS
(as required by OES 587.765)

PARTICIONAL DESCRIPTION DE LA PARTICIONAL DELIGIONAL DE LA PARTICIONAL DELIGIONAL DELIGIONAL DELIGIONAL DE LA PARTICIONAL DELIGIONAL DELI

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(15) 8=|3W-25 -

WATER RESOURCE	ES DEPT TO	(for official use only)
(1) OWNER:	(No) LOCATION OF WELL by legi	al description:
ROTH LAND AND BUILDING DEVELOPMENT	County Marion 4 4	of Section 25 of
Address 4196 81st Street N.E.	Thomship 8 South Range	West www.
State Oregon	(Township is North or South)	(Empris Best or West)
A STATE OF THE STA	Tex Lot Lot Block Bubdivision _	Phene 2
(2) TYPE OF WORK (check):	MAILING ADDRESS OF WELL (or correct address) Deerlake Estate	
New Well Deepening Reconditioning Abandon	Battlecreek Rd.	
f shandenment, describe material and procedure in Item 12.		
(3) TYPE OF WELL: (4) PROPOSED USE (check):	(11) WATER LEVEL of COMPLE	
Rotary Air XX Driven . Domestic XX Industrial D Municipal D	Depth at which water was first found	443 s.
Rotary Muni Dug		v land surface. Date 7-14-84
Other:	Artesian pressure	er square inch. Data
	(12) WELL LOG: Diameter of well bek	
(5) CASING INSTALLED: Steel XX Plantic Interested Wedded XX		of completed well 500 ft.
	Formation: Describe color, tenture, grain size audistructur and nature of each stratum and aquifer penetrated, with a	t least one entry for each change of
VEIL IIVA special to by special and the second	formation. Report each change in position of Static W.	ater Level and indicate principal
Diem. from R. to R. Gango	water-bearing strate.	
LINER INSTALLED: Steel Pleatic XX	MATERIAL	From To SWL
4 Diam from O A to 500 A Gauge 160 PSI PVC	Soil	0 1
	Brown Clay	1 6
(6) PERFORATIONS: Perforated? Try on In.	Ten Clay	6 13
sate or parameters of the same	Red Clay	13 27
48 perforations from 440 ft to 480 ft.	White Clay	27 32
	Gray Clay	32 58
perforations from R. to R.	Gray Claystone	58 220
(7) SCREENS: Well scroen installed? I Yes Style	Light Gray Sandstone	220 261
Manufacturer's Name	Gray Sandstone	261 315
Nodel No.	Gray Claystone	315 334
Diam Slot Size Set from ft. to ft.		334 443
Diam Stot Size Set from ft. to ft.		443 455 455 500 1101
(8) WELL TESTS: Drawdown is amount water level is lowered below static level	Gray Sandstone	455 500 1101
•		
Was a pump test made? Yes XX No If yes, by whom?	Driller Recommended Pump	
j. gal/min. with ft. drawdown after hra	Be Set At 460	-
Air Test May Fluctuate		
Air test 22 gal/min. with drill stem at 496 ft. 1 hra	• •	
Dallit was		
Arterian flow gp.m. Though parterian flow encountered		
This that as wast	Date work started 7-12 /compl	rted 714
(9) CONSTRUCTION: Special standards: Yes □ No 🙀	Date well drilling machine moved off of well	7-17 19 84
Well seel Material usedComent		cation (if applicable):
Well sealed from land surface to ff	This will was constructed under my diseas m	fara ham aletratell miniman
Spiritules of man true to norman or som	INTOLMSTRID LEBOLISCH STOAS STA HIND ON WIT DESCRIP	
Arramat of profine material	T [Signed]	Dato, i9
	```` <del>``````````````</del>	
How was cament grout placed? ATP GPOUT PRING	(honded) Water Well Constructor Certifica	ror:
		Strety Company Namei
The Third the Table 1	On behalf of MONDERS DRILLING	INC
The purp measure: E tra Equity Trags State State State	(2) be at bring nature of	Water West (Administrate)
Tild entretre contain unusable water? Li Yes XXI No	The well was drilled under my jurisdiction	व्यां के काम के नेजवून वर्मन के प्राप्त
Type of Wetz:" depth of state	itest of my knowledge and belief:	
AND THE RESERVE OF SEC.	(Signed) D. Monda	<u>د</u>
Was well grevel packed?   Yes XX No Size of gravel:	7_17_86. (Water Well Constr	eccesi
Gravel placed from ft. to ft.	(Dated)	
NAME OF THE PROPERTY OF THE PR	The second secon	ancate ca.
***************************************	· · · · · · · · · · · · · · · · · · ·	

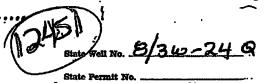
- rate arragment and sinuscopy of this report one to be filed with the

JALKM, OREGON 97210 within 50 days from the date of well co NOTICE TO WATER WELL CONTRACTOR DE CEIVE MINISTER WELL REPORT

ALLE MEDICAL PROPERTY OF THE PROPERTY OF THE PARTY OF THE

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state engineer, sales, obegon safe . TE ENGINEER of print)
within 30 days from the date
of well completion.



			<u>·</u>
(1) OWNER:	(11) LOCATION OF WELL:		
Name RAY E. PIERPOINT	County MARION Driller's well no	ımber	
Address RT & Box 86 SALEM OREGON	SW & SE . & Section 24 T.S S		W.M.
	Bearing and distance from section or subdivision		
(2) TYPE OF WORK (check):	1200' W and 600' N SE Co	r Sec.	24
New Well Deepening & Reconditioning ( Abandon (	Rt. 4. Box 86 Battle Cre	ek Rd.	
If abandonment, describe material and procedure in Item 12.	Salem. Ore.		
(3) TYPE OF WELL: (4) PROPOSED USE (check):	(12) WELL LOG: Diameter of well		6
Rotary   Driven   Domestic K Industrial   Municipal	Depth drilled 53 ft. Depth of compi		ī '
Dug   Bored   Irrigation   Test Well   Other			
CASING INSTALLED: Threaded   Welded	Formation: Describe color, texture, grain size and show thickness and nature of each stratu	m and equif	er penetrated.
CASING INSTALLED: Threaded   Welded   CT1GING   Only   ft. to   ft. Gage	with at least one entry for each change of form in position of Static Water Level as drilling pro	ation. Repor	t each change
" Diam. from ft. to ft. Gage	MATERIAL.		To SWL
ft. to ft. Gago			
THE DESCRIPTION ASSESSMENT OF THE PROPERTY OF	Original Well (1949-50) Clavetone-hard	90 17	90
PERFORATIONS: Perforated!   Yes M No.	Claystone sandy streaks	132 1	
Type of partorator used	Claystone_soft	138 14	
Size of perforations in. by in.	ATCABUNITAMENT P	120 14	
perforations from ft. to ft.	Well used constantly	<del></del>	<del></del>
perforations from ft. to ft.	from 1950 to Aug. 18.67	<del> </del>	
ft. toft.	Went completely dry.		
perferetions from ft. to ft.	Helic Completela di-Ar		
perforations from ft. to ft.	Aquifer-sandy claystone		
	132/138		
(7) SCREENS: Well screen installed?   Yes  No			
Manufacturer's Name			
Type Model No			
Diam. Slot size Set from th. to the first size size size size size size size size			
Diam Slot size Set from ft. to ft.			
(8) WATER LEVEL: Completed well.			
Static level 78 ft. below land surface Date 8/24/67			
dian pressure . Ibs. per square inch Date			
(9) WELL TESTS: Drawdown is amount water level is toward below static level			<del></del> -
Was a pump test made!   Yes No If yes, by whom!	Total 9/07/67 10 5	- P/2h/	67
Field: gal./min, with ft. drawdown after hrs.		m 8/24/	
	Date well drilling machine moved off of well 8	/24/67	19
	Drilling Machine Operator's Certification:		•
Bailer test 10 gal/min. with 50 ft. drawdown after 1 hrs.	This well was constructed under my di	rect superv	sion. Mate-
Artesian flow g.p.m. Date	rials used and information reported above knowledge and belief.		
Temperature of water Was a chemical analysis made! [] Yes 18 No	[Signed] Through Dudgeld	mm 8/25	/67 10
	[Signed] Levery Duffield	TOTAL CALIFORNIA	Markey director
(10) CONSTRUCTION: Original only	Drilling Machine Operator's License No	46	
Well scal—Material used			<del></del>
Depth of seal	Water Well Contractor's Certification:	lation and 4	kin tanan is
Diameter of well bore to bottom of sealm,	This well was drilled under my jurisdi true to the best of my knowledge and belie	eron and t L	us report 18
Were any loose strain semented off! I Yes KNo Depth	NAME DUEFIELD BROS		
Was a drive shoe used? I Yes I No Original only	(Pesson, firm er corporation)	(Type or	print)
Did any strata contain unusable water? [] Yes 20 No	Address 4123 BLUFF AVE S E.	SALEM	ORE.
Type of water? depth of strata	11/11	<i></i>	
Method of scaling strata off	[Signed] Theward Number	ld	
Was well gravel packed? [] Yes [] No Size of gravel;	(Water W/61 Contrac	tar)	,
Gravel placed fromft_ toft.	Contractor's License No. 15 Date 🔺	ug 25	
Quee Additional se	<del></del>		

#### #{ ( 6 State of Oregon Water well report

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# \$5/3w/a4 dd

23094 (as required by ORS 587.765) (START CARD) #_ (9) LOCATION OF WELL by legal description: (1) OWNER: Well Numb KEN STONEMAN County Marion Lattinds Longitude . Address 1986 Fir Street South Township 8 South Nors, Ronge 3 West Section 24 SE SE __BorW, WM. Salem City State Oregon Zip 97302 (2) TYPE OF WORK: Tax Lot 3614 Block Subdivision Two _ Tot Street Address of Well (or nearest address) Lot 11, Phase Tw Deer Lake Estates, 3400 Blk. Deerlake Ct. Deepen ... Recondition Abandon (8) DRILL METHOD KK Rotery Air Rotary Mud ☐ Ceble (10) STATIC WATER LEVEL: Other 132 __ ft. below land surface. (4) PROPOSED USE: Artesian pressure_ . Ib. per square inch Data Community | Industrial ☐ Irrigation (11) WATER BEARING ZONES: ☐ Injection ☐ Other 202 Feet Depth at which water was first found (5) BORE HOLE CONSTRUCTION: Depth of Completed Well 502 Special Construction approval Yes No Yes No XX Estimated Flow Rate SWL 202 Ft 499 Ft 14 GPM 132 Туро HOLR RRAY. Amount Dismeter From To Material From meks or pounds Cement 59' (12) WELL LOG: Ground elevation Material Тъ SWI. From Soi1 ō Brown Clay 3 1 Other . Red Clay 3 26 Backfill placed from __ ft. to Æ Material Tan Clay Sticky 26 41 Gravel placed from £ to Æ Size of gravel Gray Clay Sandy 41 49 (6) CASING/LINER: Gray Claystone 49 202 Diameter 6" To Gauge Steel Plastic 59' .250 N Welded Threaded Coarse Gray Sandstone 202 244 XX Gray Sandy Claystone 244 267 267 321 Gray Sandstone Gray Sandy Claystone 321 352 Gray Sandstone 352 431 411 502 PVC XX XX Light Gray Sandstone 431 491 160 PSI Gray Sandy Claystone 491 | 499 Final location of shoe(s) . 132 Gray Clay Soft 499 502 (7) PERFORATIONS/SCREENS: Electric Saw Driller Recommended Pump Be XX Perforations Method . Screens Set Between 44 FRE To 460 Ft Туре Tele/pipe From 360 T₀ 460' eire Cash 5½ Inch 150 | 1/8 x XX <del>WATER REGOURCES DE</del> 1041 TAY AREGON 10-20-90 Date started. (unbonded) Water Well Constructor Certification: (8) WELL TESTS: Minimum testing time is 1 hour I cartify that the work I performed on the construction, elteration, or abandonment of this well is in compliance with Oregon well construction Flowing Astroian XXX ☐ Pump ☐ Bailer standards. Materials used and information reported above are true to my best Yield gal/min knowledge and belief. Drawdown Drill stem at Time WWC Number 500 Ft. 1 hr. Signed Air Test GPM May Fluctuate. (bonded) Water Well Constructor Certification: Temperature of water 50° I accept responsibility for the construction, alteration, or abandonment Depth Artesian Flow Found . work performed on this well during the construction dates reported above. all work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and Yes Bywhom Was a water analysis done? Did any strata contain water not suitable for intended use? 

Too little belief. MONDERS DRILLING, INC. WWC Number 1325
Signed 1. D. WOLL Date 10-21-90 □ Salty □ Muddy □ Odor □ Colored □ Other. Date 10-21-90 Depth of strate:

SECOND COPY - CONSTRUCTOR

THIRD COPY - CUSTOMER

#### WATER WELL REPORT STATE OF OREGON

OF CONTRACTOR OF THE STATE OF THE PROPERTY OF THE STATE O

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SEP 3 0 1980

WATER RESOURCES DEPT SALEM, OREGON

85/3 W-24/d W)

(1) OWNER:	(10) LOCATION OF WELL:
Nome Jack Evans Jr. & Della M. Evans	County Marion Driller's well number
Address 6946 Bettle Creek Road S.	K S.E. K Section 24 T. SS R 3W W.M.
City Salem 97302 State Oregon	Tax Lot # Lot Hlk Subdivision
(2) TYPE OF WORK (check):	Address at well location: 694 & BATTLE CREEK EDS
<u> </u>	SALENORA, 97302
New Well 2 Deepening  Reconditioning  Abandon	(11) WATER LEVEL: Completed well.
If abandonment, describe material and procedure in Item 12.	Depth at which water was first found 78' ft.
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Static level 7/ ft. below land surface. Date 9.26-8-0
Air Driven Domestic Handustrial D Municipal D	Artesian pressure lbs. per square inch. Date
Robert Mini   Dug   Irrigation   Tast Well   Other   Cable   Bored   Thermal: Withdrawal   Reinjection	(12) WELL LOG: Diameter of well below casing
	Dopth drilled 27/ ft. Depth of completed well 27/ ft.
(5) CASING INSTALLED: Steel X Plastic D Threaded D Welded X	Formation: Describe color, texture, grain size and structure of materials; and show
Diam from 1 t ft to 27 ft Gauge 7	thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level
Diam from ft. to ft. Gauge	and indicate principal water-bearing strata.
LINER INSTALLED:	MATERIAL From To SWL
•	
Diam from ft. to ft. Gauge	Topsoil 0 3
(6) PERFORATIONS: Perforated? □ Yes 🐧 No	Clay yellow color 3 12
Type of perforator used  Size of perforations in. by in.	Basalt weathered 12 18
	Claystone firm gray 18 78
perforations from	Sandstone hard 78 92 7/
perforations from	Claystone Med. hard gray 92 138
perforations fromft_toft	Sandstone light gray hard   138   160
(7) SCREENS: Well screen installed? [] Yes No	Claystone gray firm 160 251
Manufacturer's Name	Sandstone light gray hard 251 264 7/
Type	Claystone gray firm 264 271
Diam. Slot Size Set from ft. to ft.	
Diam. Slot Size Set from ft. to ft. t	
WELL TESTS: below static level	<del></del>
Was a pump test made? XYes No If yes, by whom? RASNEEP	APPROXIMATELY 5% QUIK JELL ADDER
Yield: 5 gal/min with 200 ft. drawdown after / lus.	TO CEHENT GROUT,
"	
Airtest gal/min. with drill stem at 270 ft. / hrs.	
test gal/min with ft. drawdown after hrs.	
Artesian flow g.p.m.	
Temperature of water 50 Depth artesian flow encounteredft.	Work started 9-24 19 80 Completed 9-26 19 80
(9) CONSTRUCTION: Special standards: Yes D No 2	Date well drilling machine moved off of well 9-26 19 80
(9) CONSTRUCTION: Special standards: Yes D No & Well seal—Material used	Drilling Machine Operator's Certification:
Well scaled from land surface to 26	This well was constructed under my direct supervision. Materials used
Diameter of well bore to bottom of sealin.	and information reported above are true to my best knowledge and belief.  [Signed] 17. SNEED Date 226, 1980
Diameter of well bore below seal	(Drilling Mechine Operator)
Number of sacks of cement used in well seal	Drilling Machine Operator's License No
PLACED FROM 0' 70 25 - COMENT	Water Well Contractor's Certification:
PUMPED BY CEMENT PUMP	This well was drilled under my jurisdiction and this report is true to
Was pump installed? NO Type HP Depth ft.	the best of my knowledge and belief.
Was advive shoe used?  Yes ANo Pluga No Size: location	Name SNEE William or composition (Type or print)
Did any strata contain unusable water?   Yes  No	Address 4750 ELIZABETH. N. SALON CRA
Type of Water? depth of strata	100- 1 Succes
Method of sealing strata off	[Signed] (Water Well Contractor)
Was well gravel packed? [] Yes [] No Size of gravel:	Contractor's License No. 6 Date 9. 26, 1980
Gunnal who and from the to the fit to	

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT, SALEM, OREGON 97310

No. Cel Date Of the Color	Tabasa I
6 No. 64 1956 3-10 , 1957	[Signed] Alth Matheman and Mar. 1919]
America IV	rog vecepted 17: 6 [Signe
asymma liew s'	Amara I
andmin flow of	aloff forth common off
02745 18 541048 702C =	(10) WATER LEVELS: Static level C
J. H. SHEED 4 SONS	(10) WINE LEVEL 6.
SNOS + DOOKS'H'S	MAN STATE HORSE + (1881) to start griften to horsely
o the pest of my knowledge and bellet.	Type of waters Depth of strata
मेक्क्रान्स् श्रम्भाग	West such providing a set of the providing the section as set of the section of t
d Submergable RP. 1	:squf 7,1, n of n. mort bereig teverib
sommer, & Marme Berkley.	
PUMP:	
P.C. et 7 - E barbigmood C et 2 - E barrate	North Riot size See from At 10 Act
2, 2 6 / -6	from fit and f
. •	- Paper - Paper - Paper No.
	Manuschurer's Mans
	(8) SCHEENS: Mell cereen installed   Acc   Ano
	The state of the s
	perforestons from at t. or ft at t.
	- of 32 most similarities
* * *****	At of At most encidencing
C P W & 130.	all all year forms of all a sample and a sam
211 2 4 2 3	Type of periorator used
31/ 0 14/12	(7) PERFORATIONS: Perforeshing   Ves   Who
	- distance of it are more medical
	ninn. mon _ m to _ m dege
	(6) CASING INSTALLED: Threaded   Wedden
EET 6 21/HO TANGLEGA	Domestic A industrial of thems of the party
FEL PO STINUL LONGTED PAIS	
161 hl 321HM 31102501	
LOI CB 20200 NHAY 27#	abandoninent, describe material and procedure in Rem II.
	Mow Well W Despening   Becombitioning   Milw Well
Ç 7710Sa	
OT MOST AMERICAN :	
a penetrated, with at least one entry for each change of formation.	minus
tion: Describe by color, character, size of material and cructure, and historiess of aguiters and the letnd and natury of the material in each a penetrated, with at tent one salry for each change of formation.	the S.E. cor of Sec. 24 T8S, R3W of the W.M. Marton Caunty, Oregon, Show I
drilled A the Depth of completed well a the	508 ft. N.89049 W and 120.0 ft. N. O 255. from Depth
WELL LOC. Dismeter of well 62/12 mails	(SI) bas 320, ON . H II. 012 bas W 380 984 333. 2121
mature of waters & Was a charactel analysis made? [] Yes KNo	ST TTO AA 1200.000 polytering to morrose most appropriate from Services.
Wolf and 8 work as well as	TOTAL TO TROUBLE TO
and \ . with awobward it O 12, allow mim/les C 50 test	COMITA TAT ST TOT! CAMERA BURNINGS IX STA-
	(2) LOCATION OF WELL.
66 250	u i
	Address Route 4, SALEM, Oregon,
puring test marks? [] Yes [] World West by Whom?	Mess DON 16081 WGO W
MEIT LEGIE: Drawdown is smount water level to	(II) OMNEH:
of there sale	
NOE	STATE BY OREGON SALES OF CALLED OF CORP. STATE WELL R. STATE WILLIAM STATE WELL R. STA
ELORY State Well No. 6/3W-24 Q	Elle Original and STATE ENGINEENWATER WELL R
(1)	MARS T 1959 1959 19
IST! (CCS)	I S I S I S I S I S I S I S I S I S I S

#### WATER WELL REPORT STATE OF OREGON

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W 73.08 RECEIVED AUG 6 1982

State Well No. \$8,310-24

State Permit No.

WATER RESOURCES DEPT. SALEM, OREGON

(1) OWNER:	(10) LOCATION OF WELL:	•
Name Randy Green	County Marian Driller's well	number
Address 6906 Battle Creek Road	SW HSE HSection 24 T.8 S	R. 3 W WM.
City South Selem State Oregon	Text Lot #1k	Subdivision
(2) TYPE OF WORK (check):	Address at well location:	
Now Well □ Despering E Reconditioning □ Abandon □	423	<del></del>
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed w	ell.
(3) TYPE OF WELL (4) PROPOSED USE (check):	Depth at which water was first found Static level 80 ft. below it	and surface Date 7-29-80
Rotary Atr D Driven C Domestic D Industrial . Municipal C		and surface, Date 7-29-50 trequere inch. Date
Rotary Mod C. Dog Cl Irrigation C Test Well C Other		
	(12) WELL LOG: Diameter of well below.  Denth drilled 338 ft. Denth of	000
(5) CASING INSTALLED: Steel  Plestic  Welded	Depth drilled 330 ft. Depth of Formation: Describe color, texture, grain size and stru	
Threaded D. Welded C	thickness and nature of each stratum and equifer pene	trated, with at least one entry
Dien from	for each change of formation. Report each change in p and indicate principal water-bearing strate.	position of Static Water Level
LINER INSTALLED:	MATERIAL	
	MALDRIAL	Prom To SWL
Diam. from	Deepened this well	<del></del>
(6) PERFORATIONS: Perforated?   Yes & No	- Societies (Sept.	<del></del>
Type of perforations in. by in.	Pulled casing and reamed t	00.
perferations from		
parotations from	36' to IO Reinstalled 6	cesing
		-
	to code. Drilled from 133	to 338'
(7) SCREENS: Well screen installed?		700 70
Type	Hard clay stone (grey)	133 160
Diam. Slot Size Set from	Rock (hard)	160 170
Diam. Set fromft. toft.		
(8) WELL TESTS: Drawdown is amount water level is lowered	Send Stone (blue grey)	170 276
Depart Server (CARE)		
Was a pump test made? D Yes No If yes, by whom?	Sand stone (green grey)	276 338
gal/min with A drawdown after hrs.		<b></b> , .
Air test . 6 gel/min. with drill stem at 320 ft. 2hm.		
Beller test gal/min. with ft. drawdown after hrs.		
Artesian flow g.p.m.		<del></del>
rerature of water • Depth artesian flow encountered ft.	Work started 7 - 27 19 82 Complete	zł 7 - 29 1982
(9) CONSTRUCTION: Special standards: Yes \(\sigma\) No \(\inft\)	Date wall drilling machine moved off of well	7 - 29 19 82
Well seal Material used Cament grout	Drilling Machine Operator's Certifications	
Well sealed from land surface to	This well was constructed under my direct s	opervision. Materials used
Diameter of well bare to bottom of sealin.	and information reported above are type to my b	est knowledge and belief.
Diameter of well hore below seal	[Signed] (Orining Machine Operator)	Date 8-3, 19 82
Number of sacks of coment used in well seal	Drilling Machine Operator's License No	
How was cament grout placed?	Water Well Contractor's Certification:	
*	This well was drilled under my jurisdiction	and this report is true to
Was pump installed?	the best of my knowledge and belief.	<u>-</u>
Was a drive shoe used? O Yes No Pluge Size: location ft.	Name George Robinson Drillin	(Type or print)
Did any strate contain unusable water?   Xes   Xes	Address 1037 Crescent Drive	W. Salem
Type of Water? depth of strata	Bismed Heart Hohan	$\Rightarrow$
impation or searned sectors on	(Water Well Contract	#) · · · · · · · · · · · · · · · · · · ·
Was well gravel packed? □ Yes & No Sme of gravel:	Contractor's License No Date 8 -	<u>3</u> 82
TOTAL MARKET SERVING ASSESSMENT OF SALES AND ASSESSMEN	L	

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT, SALEM, GREGON 97910 within 90 days from the date of well completion

8P*19658-690

#### WATER WELL REPORT STATE OF OREGON

representational and representational and representations and



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SEP 151982 -- State Well No. AS
WATTER SESOURCES DEPEnto Permit No. ....
SALEM, OREGON

(1) OWNER:	(10) LOCATION OF WELL:
Name . Randy Green	County Marion Driller's well number
Address 6906I Battle Creek Road	K KSection 24 T. 8 S R. 3 W WM
City Salem State Ore.	Tax Lot # Lot Rik Subdivision
(2) TYPE OF WORK (check):	Address at well location:
Now Well ( Deepening   Reconditioning   Abandon	
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed well.
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found T/10 ft.  Static level 36 ft. below land surface. Date 8-12
Rotary Atr CX Driven C Domestic CX industrial C Municipal C	Artesian pressure Ibs. per square inch. Date
Botony Mand   Dug   Irrigation   Test Well   Other   .   .	(12) WELLLOG: Dismeter of well below easing .6
(5) CASING INSTALLED: Steel Plastic 5	Depth drilled 457 ft. Depth of completed well 457 ft.
(5) CASING INSTALLED: Steel 17 Plastic 5 Threaded 11 — Welfed 18	Formation: Describe color, texture, grain size and structure of materials; and show
Diam from _ t R to 57- R Gauge 166#-pre	thickness and nature of each stratum and equifer penstrated, with at least one entry for each change of formation. Report each change in position of Static Water Level
6" Diem from 04 I ft to I9 ft Gauge -250	and indicate principal water-bearing strate.
LINER INSTALLED:	MATERIAL From To SWL
14 Diam from 4 ft to 457 ft Gauge 160# P.V.C.	soil 0 I
	cley (orange) 1 13
(6) PERFORATIONS: Perforated? (LYes   No	hard sand stone (gray) I3 32
Type of perforation used Saw in Line: Size of perforations I/8 in by 6* in.	cley stone (gray) 32 47
	lime stone (hard) 47 55
	clay stone (dk. gray) 55 70
	gend stone (grey) 70 82
perforations from	clay stone (dk. gray) 82 I25
(7) SCREENS: Wall agreen installed?   Yes I No .	fine state (hard)   I25   I28
Manufacturer's Name	sand stone (lt. gray)   128   232
Type Model No	sand stone (green gray) 232 268
Diam. Slot Size Set from ft. to ft.	gand stone (1t. grav)   288 953
Diam. Slot Size Set from ft. to ft.	sand stone (green gray) 353 363
(8) WELL TESTS: Drawdown is amount water level is lowered below static level	gand stone (gray) 363 457
Wes a pump test made? □ Yes □ No If yes, by whom?	
eld: gal./min. with ft. drawdown after hrs.	
"	
Air test 20 gal/min. with drill stem at 440 ft. 2 hrs.	
Bailer test gal/min. with ft. drawdown after hrs.	
tesian flow g.p.m.	
Depth artesian flow encountered ft.	Work started 8/2 1982 Completed 8/T2 1982
(9) CONSTRUCTION: Special standards: Yes D No E	Date well drilling machine moved off of well 8/2 19 82
(9) CONSTRUCTION: Special standard: Yes   No E Well seal—Material used	Drilling Machine Operator's Certification:
Well sealed from land surface to	This well was constructed under my direct supervision. Materials used
Diameter of well bore to bottom of seal	and information reported above are true to my best knowledge and belief.
Dismeter of well bore below sealin.	[Signed] #20   Date 8/20, 19.82
Number of sacks of coment used in well seal	Drilling Machine Operator's License No
How was coment great placed?Pumped	Dining machine Operator 8 Lacends No
	Water Well Contractor's Certifications
	This well was drilled under my jurisdiction and this report is true to
Was pump installed?TypeHPft_	the best of my knowledge and belief.
Was a drive above used? □ Yes □ Yes □ Pings	Name GEORGE ROBLISON DRILLING (Aye or print)
Did any strata contain unusable water?	Address
Type of Water? depth of streta	Somed Henge Roberto
Distriction of Mesturia Section of	(Water Well Contractor)
Was well gravel packed? Cl Yes 57 No Size of gravel:	Contractor's License No

Casine:

Liner:

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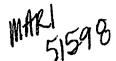
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STATE OF OREGON WATER WELL REPORT (as required by OES 537.765)



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(as required by	OES 537.765)		<u> </u>	<i>-</i>		(START CARD) #		40283	3	<del></del>
(1) OWNER:		Well	Number	3017	(9) LOCATION C	F WKIJ. by leas	decr	intian		
	L L. GRE	en				1) Latitude				
Address 3137 B			S.E.			N or S. Kange				
	OR 973			Zip	Section 25	NW_	<u> </u>		B W. 1	V. W (VI.
(2) TYPE OF W						Lot Block				
New Well		Recondition		bendon						
(3) DRILL MET		_ Reconstition	LJ A	oangon	3137 Ro	ell (or nearest address) ttlecreek Hol	1 6	- P		
		<b>—</b>					TAM 3	a Ra		
K Rotery Air	i Kotary Mud	L Cable			(10) STATIC WAT					
Other					n. b					9/92
(4) PROPOSED		_	_		Artesian pressure	lh. per sq	usre inch	L Dat	<u> </u>	
Domestic 🔲 (					(11) WATER BEA	RING ZONES:				
		Other			•					
(5) BORE HOLE	CONSTRI	ICTION:		_	Depth at which water w	es first found 4	65			
Special Construction appro	wai∐ Yes 🗓	No Depth	of Comple	ted Well_580_ ft.	<u> </u>	<del></del>				
Explosives used 1	(es KLINo T	уре	Am	ount	From	To		ated Flor	w Rate	SWL
HOLE		SEAL		Assount	465	465	5			203
Diameter From To				sacks or pounds						$oldsymbol{\sqcup}$
10 0 57		&5%   O	57	10+bentoni	ė					
6 0 580	<u> </u>						l			
			<u> </u>		(12) WELL LOG:					
		l		<u></u>		Ground elevat	ion			
How was seal placed: I	Method   A	□в ⊠с	: 🗆 Þ	□ E						
Other						Material		From	To	SWL
Backfill placed from_	ft. to	ft. Mate	rial		TDriveway			0	2	
Gravel pisced from		ft. Size	र्ज हात्रपटी	780	MIX Topsoil			2	4	
(6) CASING/LIN					Brown Clay		-	4	22	
• •		Gauge   Steel	Photic V	Velded Threaded	Brown Shale			22	44	
Casing: 6"		250			Gray Shale			44	201	
-					Gray Sandston	10		201	312	
				<u> </u>	Gray Shale			312	324	$\Box$
	1		<u> </u>		Gray Sandston			324	465	
	<del></del>		ö	5 5	Fracture			465	465	
Liner:	<del></del>		7	H H	Gray Sandston	+A		465	589	
		7'			Stay Canus Co.				70.5	
Final location of shoc(s) (7) PERFORATION	/			<u></u>				_		
· · _										
Perforations	Method		3.6-4	·· ·· ·	<del></del>		F 232	3	<b>—</b> —	
L. Screens	Type	<u></u>			<del> </del>	- Circles to Conti	- No.		<del> </del>	
	Set dae Number		le/plpe size (	Caston Liber	<del> </del>	****	4555			
	I Administra				<del> </del>	MAR 27	<del>1997</del>			
	<del></del>				<u> </u>		OFC F	EOT	<del> </del>	
<del></del>					<del> </del>	WATER RESOUR	LES U	EF 1		<del>  </del>
		<del> </del>				SALEM, OR	ELSLIN		<del>                                     </del>	<b></b>
						<del></del>		-		$\vdash$
										$\vdash$
(8) WELL TESTS	: Minimun	testing tim	e is 1 b	er Ter		00			140 101	
	_	_		_ Flowing	Date started 8/17/		pleted _		/19/92	==
☐ Punsp □	] Bailer	X Air	L	_ Artesian	(unbonded) Water Wei	l Constructor Certificate in the constructor on the constructor on the constructor on the constructor on the constructor of the		an alex-	ntion a-	abandan.
Vield gel/min I	Drawdowa	Drill stem	æt	Time	ment of this well is in co	maliance with Oregon t	rell const	niction si	andanis.	Materials
		······		<del></del>	used and information re					
5		580_		I hr.			•		-	
					Mal	10 1500		•	lumber 3/19/9	
			<del></del>	<del></del>	Signed	v pro		DateC	7/ 17/ 7	*
	505				(bonded) Water Well C			_	_	_
Temperature of Water _	53°	Depth Artesia	a Flow Fo	boto		ty for the construction,				
Was a water analysis do				<del></del>	formed on this well during this time is in con					
Did any strata contain v				Too linte	is tout to the best of an	knowledge and belief.				
Salty Muddy	Llowfr □	Colored UC	Other	<del></del>	WILLTANE FIRE OF	LLLING CO. IN	iC.		Number 7	
Depth of strata:					Signed ///	Olseia.		Date	1/19/	12

Depth of strata: _ ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT

SECOND COPY - CONSTRUCTOR

THIRD COPY - CUSTOMER

9809C 10/91

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WATER WELL REPORT
(so required by 098 57.765)

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(START CARD) # 40281

Depth of street COPY - WATER RESOURCES DEPARTMENT SECO	oder CC	Temperature of Water 23 Depth Artesian Flow Round			2 1/2 580 1 hr.	Yield gal/min Drawdown Drill stem at Time	☐ Pomp ☐ Bailer (8) Air ☐ Artesim	(8) WELL TESTS: Minimum testing time is I hour			<b>6</b> 5.	Туре	(1) FEATURATION Method	incention of special		Liber				To Gauge Stort Plants Welded The	ľ	7 7		How was east placed: Method □ A □ B 【图 C □ D □ E		0 580	Diameter From To Material From To Seems or process 10   0   55 Cement &5%   0   55   11+bentonit	TVZS	Type Common Com	RUCITO		PROPOSED USE:	K Romy Air Romy Mnd Cable	I) Now Well   Deepen   Recondition   Abendon   3) DRULL METHOD:	ם ו	ty Salem Oregon 97301Sum Zb		N CHUNED.
SECOND COPY - CONSTRUCTOR THURD COPY - CUSTOMER 9809C EMPI	is the best of my knowledge and belief.  WILLIAMSTYK DRAILING CO. INC. WWC Number 753	I scope responsibility for the construction, separation, or transcomment work performed for this well during the construction dates reported above. All work performed	(bonded) Wister Well Constructor Certification:	Signed Mark D Second Date 8/19/92	und not minimum reported monte on the or my true monte of the order.	compliance with Oregon	(unboaded) Water Well Constructor Certification: I certify that the work I performed on the construction, alteration, or abandon-	Date earthol 8/7/92 Completed 8/7/92	SALEM, OREGON	WAR 9.7 (997			4	51	hard areas ####################################		Light Gray Sandstone 318 580	310	Light Gray Sandstone 198 310	wn Shele 18	15		Musical Control of Section 2		(12) WELL LOG: Ground disvation	Ī		465 465 2 1/2 203	lb Ratinated Flow Rate	Depth at which water was first found 465	(II) WATER BEARING ZONES:	pressure		Street Address of Well (or nearest address)		Township BS Nor S. Range TH E or W. WM. Sorther 25 XX NW u NR u	County Marion Lettrote Longitude	(9) I OCATION OF WELL by boat description:

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Depth of street:
ORIGINAL & FIRST COPY - WATER RESOURCES DEFARTMENT

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RECEIVED STATE OF OREGON SMART CARD#. 551.0 THO SI TOPA WATER WELL REPORT (as required by ORS 537.765) (9) LOCATION OF WELL by legal description: (1) OWNER: County Marion 1 OPSCON Longitude
Township 8 S Nors Renge 3 W
Section 24 S W & S E w Randall_& Connie Green 6906 Battle Cr. Rd. S.E. Bor W. WM. Ore. Salem Tex Lot 04202 Lot Tex Lot 04202 Lot ______Block _____Bubdivision ______Birrent Address of Well (or pagrest address) _____6838 _Battle_Cr. (2) TYPE OF WORK: Abandon Deepen Recordition New Well Rd. Salem Ore. (3) DRILL METHOD (10) STATIC WATER LEVEL: Cable Rotory Air Rotary Mud 78 1 1011 R. below land sutritice. Dátá 12-16-88 ___ lb. per square inch. Date .. (4) PROPOSED USE: Artesian pressure ____ (11) WATER BEARING ZONES: Domestic D Community Industrial . Irrigation Other -☐ Injection Depth at which water was first found BORE HOLE CONSTRUCTION: SWI. Estimated Flow Rate Depth of Completed Well 498 From al Construction approval Yes No. 180 200 gpm Yes No. I Type 24 g pm 380 360 Explosives used 6g tom 490 want ke or pounds 6 480 SEAL ROLE Diameter From Material cement (12) WELLLOG: Ground elevation 611 To 498 From Material Soil 13 How was seal placed: Method 🔲 A. 🔲 B 😿 C 🔲 D 🔲 B Yellow Clay 13 80 Grav Claystone Other . 80 98 Light Grav Claystone Backfill placed from ... ft to _ 98 1102 Dark Gray Claystone Gravel placed from ... Size of gravel .ft to . 102114 Brownish Gray (6) CASING/LINER: To |Ganga Steel Plastic Light Gray (vary hard) 114 Welded Threaded 168 区口 Gray Sandstone (clam -172 shells) 172 190 Light Gray Sandstone 190 198 Greenish Sandstone 198 265 265 285 Ā 498160 Grav Sandstone Brownish Gray 285 289 Greenish Gray l location of shoe(8) 294 Dark Green Sandstone 289 PERFORATIONS/SCREENS: 294 302 Dark Gray Sandstone Saw cut --Method 302 323 Greenish Gray لم Material **Туре** ___ 323 470 Screens Gray Sandstone Tele/pipo sizo Slot size Gray Sandstone/w Fractures 470 Casing Number, Diamet 490 区口 1/8 60 490 498 Gray Claystone 460 497 611 48 128 _ لم 12-19-88 TZ-6-88 Completed Date started. (unbonded) Water Well Constructor Certification: I certify that the work I performed on the construction, alteration, or (8) WELL TESTS: Minimum testing time is 1 hour abandonment of this well is in compliance with Oregon well construction Flowing Artesian standards. Materials used and information reported above are true to my best M Atr ☐ Bailer ☐ Pumo knowledge and belief. Time Drill stom at Drawdown WWC Number _13 Yield gal/min Date 12-20-88 1 hr. 11Gpm 490 (bonded) Water Well Constructor Certification: I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. all work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and _ Depth Artesian Flow Found Temperature of water Yes By whom Was a water analysis done? Did any strate contain water not suitable for intended use? 

Too little belief WWC Number. ☐ Salty ☐ Muridy ☐ Odor ☐ Colored ☐ Other Date 12-20-86 Depth of strate: . PINK COPY - CUSTOMER 020003 10.00 AEITOM COBA - CONSTRUCTOR

WHITE COPIES - WATER RESOURCES DEPARTMENT

	104
STATE OF OREGON M/31	05/3W-2R
WATER WELL REPORT	
(1) OWNER: Well Number:	(9) LOCATION OF WELL by legal description:
Name ROTH LAND AND BUILDING DEVISIONMENT	County Martion Latitude Longitude
ATTO OTST AVE. W. B. STATER IVE	DOUMNESSANDERPOULDNOTS, Romes 5 WEST E OF W. WM.
(2) TYPE OF WORK:	OREGON 24 4 4 4 14 15 15 15 15 15 15 15 15 15 15 15 15 15
I   FR OF WORK:	
(8) DRILL METHOD	Street Address of Well (or nearest address) 6838 Battlecreek Road South Salem, Oregon
TO Rotary Air Rotary Mind Cable	(10) STATIC WATER LEVEL:
Other	135 ft. below land surface. Date 11-25-87
(4) PROPOSED USE:	Artesian pressure lb. per square inch. Date
XXDomestit	(11) WATER BEARING ZONES:
(5) BORE HOLE CONSTRUCTION:	Depth at which water was first found 244 Feet
Special Construction approval Yes No Depth of Completed Well 535 A.	From To Betimeted Flow Rate SWL
Yeu No	244 Ft 273 Ft 4 GFM 135'
HOLE SEAL Amount	476 Ft 521 Ft 21 GPM 135'
Smitter From To Material From To sacks or pounds	
10" 0' 100' Cement 0' 100' 36 Sacks	(12) WELL LOG: Ground elevation
6" 100 535"	Material From To SWL
	Soil 0 1
How was seed placed: Method	Brown Clay 1 7 Tan Clay Sticky 7 22
Backfill pleced from 1. to 1. Material 1.	Tan Clay Sticky 7 22 Brown Clay 22 81
Gravel placed fromft. toft. Size of gravel	Gray Clay 81 85 .
(6) CASING/LINER:	Gray Claystone 85 244
Diameter From To Gauge Steel Plastic Welded Threaded	Multi-Colored Sandstone WB 244 273 Gray Sandstone 273 312
Casing 6" +1 100' 250 ft	Gray Sandstone 273 312 Green & Gray Sandstone 312 352
	Dark Gray Sandstone 352 476
4" 0' 535' PVC   XX	Multi-Colored Sandstones WB 476 521 Gray Sandstone 521 535 135
Liner 4" 0'   535'   PVC   □ XX   □	Gray Sandstone 521 535 135'
Final location of shoo(s)	5% Bentonite Used To Seal Well.
(7) PERFORATIONS/SCREENS:	
XX Perforations Method Electric Saw	Air Test May Fluctuate.
Screens Type Material	Driller Reccomended Pump Be
Slot Tele/pipe From To size Number Diameter size Casing Liner	Set Between 475' - 515'
255 295 45 1/8 x 6 In.	
4/3 /23 /3 /3 /3 /3 /3 /3 /3 /3 /3 /3 /3 /3 /3	
	Date started 11-24-87 Completed 11-28-87
	(unbonded) Water Well Constructor Certification:
(8) WELL TESTS: Minimum testing time is 1 hour Flowing	I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction
Pump Beiler EXAtr Artesian	standards. Materials used and information reported above are true to my best knowledge and belief.
Yield gal/min Drawdown Drill stem at Time	. WWC Number
25 535 Ft 1bs.	Signed Date
	(bonded) Water Well Constructor Certification:
Temperature of water Depth Artesian Flow Found	I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. all
Was a water analysis done?	work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and
Did any strata contain water not suitable for intended use?   Too little  Salty Minddy, Odor Cloored Other	
Depth of strate:	belief. MONDERS DRILLING, INC. WWC Number 1325 Signed Date 12-4-87

YELLOW COPY - CONSTRUCTOR

. 8809C 10/86

BINK COBA - CRELOWER

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WHITE COPIES - WATER RESOURCES DEPARTMENT

STATE OF OREGON
WATER WELL REPORT

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85/3W-24

(as required by ORS 597.765)						<u> </u>
(1) OWNER: Well Number OF C	(é) îcocaleton	OF WELL by le	gal des	cript	ion:	
Name ROTH LAND AND BUILDING DEVELOPMENT Address 4196 81st Ave. N.E. WAITER RES City Salem State Oregon Zip SALEM.	DURCES DEPTIO	n_ Latitude	1	ongitud	e	<u>-</u>
Address 4196 81st Ave. N.E. SALEM	OREGUN O	th Nor8, Range 3	<u>West</u>		_BorW.	WM.
City Salem State Oregon Zip Salem	Section 24			- 44		
(2) TYPE OF WORK:	Tax Lot	LotBlock	:	Subd	ivision_	
XXNew Well Deepen Recondition DAbandon	Street Address of W	(ell (or nessest address) _ lecreek Road	Courth	Ç,	100	<u> </u>
(3) DRILL METHOD	·			, De	irem.	ALEROII
XIXRotary Air		VATER LEVEL:	•	•		
Other	<u>210</u>	below land surface.		Date	·12-3	<u>87                                    </u>
(4) PROPOSED USE:	Artesian preasure	lb.per squ	are inch.	Date		
XXXDomestic Community Industrial Irrigation	(11) WATER B	EARING ZONE	S:	•		
Permal   Injection   Other	Donth of which materials	s first found	462	. Fee	et.	• • •
(5) BORE HOLE CONSTRUCTION:	From		Betime	40.2 171-	. Data	SWL
Special Construction approval Yes No Depth of Completed Well . 490 R. Yes No Depth of Completed Well . 490 R.		T₀ 485 Ft	17 (		rosto	210'
Explosives used	462 Ft.	463 FL	1/_5	TIM.		210
HOLE SEAL Amount	·					-
Drameter From To Material From To sacks or pounds						
10" 0" 40" Cement 0" 40" 16 Sacks	(12) WELL LO	G:			•	
6" 40' 490' Cement 0' 40 10 Sacks	(22, 1122220	Groundenvan				
6 40 490	<del></del>	Material		From	To	SWL
The state of the s	Soil		(		1	<del></del>
How was seal placed: Method	Brown Clay	<u> </u>			5	
Beckfill placed fromft. toft. Material	Light Tan Cl	aγ		25 [·]	25 27	<del>                                     </del>
Gravel placed fromft. toft. Size of gravel	Gray Clay Gray Claysto	150		<u>27</u> 27	136 .	<del>  </del>
<del></del>	Gray Sandy C			Ľ36	143	
(6) CASING/LINER:	Gray Sandy C			143	224	$\vdash$
Diameter From To Gauge Steel Plastic Welded Threaded Confus. 6" +1 40 250 KK G KK G	Light Gray S			224	256	
	Gray Sandsto				315	<del></del>
	Dark Gray Sa			315	332	
	Green & Gray				351	
Liner 4" O' 490' PVC II XX KX II	Gray Sandsto		13	351	462	
SDR-26	Light Colore	ed Coarse, And	1	p '	•	
Final location of shoe(s)		d Limestones.			<u> </u>	
(7) PERFORATIONS/SCREENS:	And Sandston			462	485	
XX Perforations Method Electric Saw	Gray Sandsto	one .		485	490	210'
Screens Type Material						
Slot Telepine	5% Bentonite	e Used To Seal	. Well	•	<del> </del>	<del>                                     </del>
From To efize Number Diameter size Cesing Lines 370 470' 120 1/8 x 9 In.	As Tost Mo	Flustwata			<del>                                     </del>	
370 470 120 1/8 x 9 In.	HTL TEST ME	Fluctuate.	<del></del>		<del>                                     </del>	<del>  </del>
	Driller Rec	comended Pump	Be	- ••	<del>                                     </del>	
	Set In Perfe				•	
	Date started 12-1-	AT:	pleted _1	2-3-	37	
		Well Constructor Co	· · ·			
(8) WELL TESTS: Minimum testing time is 1 hour		e work I performed o			on, elter	ation, or
☐ Pump ☐ Bailer KKAtr ☐ Artesian	shandonment of this	well is in compliance	e with O	regon '	well con	struction
	standards. Materials : knowledge and belief.	used and information i	reported a	Doze 81	e turue to	my best
		•	W	WC No	mber	
17 490 Ft. 1hh.	Signed		Da			
	(handad) Water Wa	11 Constructor Certi	fleeties-			
	I accept respons	bility for the constru	ction, alte	ration,	or aban	donment
Temperature of water Depth Artesian Flow Found Was a water analysis done?	work performed on the	is well during the con-	stroction (	dates r	ecorted (	above, all
	work performed du	ing this time is in is. This report is true	to the he	nce W stofn	un und V knowi	इस्ट्रेड ध्रमपु हिस्स्य अस्ता
Did any strata contain water not suitable for intended use?   Too little  Salty   Moddy   Odor   Colored   Other		DRILLING, I			mber 1	
Depth of strate:		Mousies	Da	7.	2-4-8	7
	OPY - CONSTRUCTOR	PINK COP				2000 2000
MINITERATED - DATES TECHNOLOGICAL PROPRIET	Ar- lacerraisistran					

							<del></del>
				<b>-1</b>		80/31/0	
		OREGON	· W/	٦١٠	X15	1) 0000/2	race
WATI (es ro	GR WK	LL REPORT (0R8 587.765)	<u></u>	<u> </u>	10	(START CARD) # 8638	
(1) OW	NER:	1 & Barbar	Well Image	Number 28	2815	(9) LOCATION OF WELL by legal description:	
Name I	S746 P	attlecreek	Creek Rose	<b>d</b> .		County Mar 10H Letitude Longitude Longitude Row Row	WM
	alem		State Ci	22 p 9	7301	Section 24 SW 14 NB 14	, ,,,,,,,,
(2) TY	PE OF	WORK:	•	•		Tex Lot Block Subdivision_	<del></del>
New W			Recondition	Ahandon		Street Address of Well (or nearest eddress) 6746 Battlecreek Road	
<u>.</u>		ETHOD  Rotary Mud	Cebie		- 1	(10) STATIC WATER LEVEL:	
Rotary.						35 ft. helow land surface. Date 6-20	)-89
(4) PR	OPOS:	ed use:				Artesian pressure [h. per square inch. Date	
Domest	_ =			Inigation		(11) WATER BEARING ZONES:	
Them:		Injection   LE CONST!				Depth at which water was first found	
Special Cor	utroction	approval Yes No	DepthofC	ompleted Well _	495 A	From To Estimated Flow Rate	SWL
Explosives	Ye	on Type		amt		250 253 1 418 466 4	35
-	iole	. L 13p	SEAL		nount	420	
Diameter 10	From	To Materia 19 dry Ben	tonite 0	To sacks 475	pounds		
26		795				(12) WELL LOG: Ground elevation	
						Material From To	SWL
	<u>                                     </u>	Method		D [] B		Topsoil 0 2 Brown Clay 2 10	11
Other.	AB	per 690-	210-340			Gray shale 10 68	
Beckfill pla	eced from.	ft to			`	Brownish gray shale 68 164	1
		fL to	ft. Shoofgr	avel		Light gray soft sandstone 164 192 Soft gray shale 192 250	+
	SING	LINER:	Zavgo Steel Pla	ctic Welded	Threaded	NYMERICAL SHARE I	
Casing	60	+1 19	250 □ C	1 0		Dark green sandstone, hard 250 253	
_		<del>                                     </del>		)	. 🗆	Soft gray shale 253 371 Brownish gray shale 371 418	+
					ö	Light gray sandstone 418 466	
Liner:						Hard gray sandstone 466 495	
		(a) 19°		ם כ			1
Final locat		ATIONS/SC	DEFING.			DEGERMEN	
• •	Perforation	_	ereno.			DEGETVE	-
	Screens	туре	M	laterial		JUNES 1888 LU	+
	To	Slot size Number	Tele/ Diameter , sis		Liner	MATER RESOURCES DECT.	
From	10					: LEM. OREGON	
		<del>                                     </del>		_	0.0		1
					<u>.</u>		
						Date started 6-20-89 Completed 6-21-89	
45)		7070.20				(unbonded) Water Well Constructor Certification: I cartify that the work I performed on the construction, alt	matten er
` -		ESTS: Minim		Flow	og -	i abandament of this wall is in compliance with Oregon well co	nstruction
□ P	-	☐ Baller  Drawdown	Drillstonet		proc	standards. Materials used and information reported above are true knowledge and belief.	
Yield g	5	460	495		ы.	Simul Mort D Rass Date 6-21	<u>753</u> -89
						Signed Date	
	1		<u> </u>			(bonded) Water Well Constructor Certification: I accept responsibility for the construction, alteration, or about	ndonment
Temperat			Depth Artesia  By whom	n Flow Found _		work performed on this well during the construction dates reported	i above. all regon well
Wasa wai	ter enalysi trata contr	e domer — — res alta wester not suitable		Too little		construction standards. This report is true to the best of my know	wiedge and
☐ Salty	☐ Mod	dy 🛘 Odor 🗖 Co	olored 🛘 Other _	· · · · · · · · · · · · · · · · · · ·		7/10. 17 84. 5. 6-21-	
Depth of			******		-	ND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER	9609C 8/88
<i>ORIGINA</i>	L&PR	T COPY - WATER	acerouncies die	WEST WENT.	ara/U	TT 447 1 - AAUINUMANANA	

WATER WELL REPORT STATE OF OREGON.

REPRESENTATIONS



## RECEIVED

State Well No.

AUG271981 WATER RESOURCES DEPPto Permit No. .

	SA	LEM, OREGON					
(1) OWNER:	(10) L(	CATION OF	WELL				
Wie Pown	County	Harion	· • D	riller's well r	annber		·
2264 Door Loke Ct S.R.		14 Section	× 25	т. 8s .	R 36		W.M.
Solom · Ordgon	Tex Lot #		Lot	IIIk	80	division	
City	Address at	- WOLL MCHINES		er Lake	.Ct.	S.E.	
(2) TYPE OF WORK (check):			Salem,	Oregon			<u></u>
New Well 12 Despening □ Reconditioning □ Abandon □	(11) W	ATER LEVE	Le Como	leted we	aII.		·
If abandonment, describe material and procedure in Item 12.	_· 1					*	90 ft.
(3) TYPE OF WELL: (4) PROPOSED USE (chec	P-)-	which water was first	75	it. below la			
	O Artesian p					nch. Date	
Prince Mark III Day D Indication O Test Well O Other	D 1						ta .
Cable C Bored D Thereal: Withdrawal C Reinfection	_ C. (12) W	ELLLOG:	Diameter o	f well below o	asing		**************
CASING INSTALLED: Steel XX Plastic	Depth dril	Red 53	<u> </u>	Depth of c	ompleted	WOIL JE	- <u>/ IL</u>
Threaded . Welded		n Describe color, tex and nature of each s	trebum and s	Martin Cold Report 1	rabal W	10 AL 1285	
6. Diam from \$1. ft to 100 ft Gauge 250	for each c	hanon of formation.	Report carl	chance in a	osițion o	Static W	ater Level
Diam from	end indic	ate principal water-b	earing strate	<u>.                                    </u>			
LINER INSTALLED:		MATERI	AL		Prom,	To	8WL
Diam from 0 525 th Gauge SDR-26	Soil				0	2	
Diam. from It to It. Quite		Brown Clay			2	6	
(6) PERFORATIONS: Parlorated XX Yes  No .	Ten (			•	6	12	
Type of perforator used Electric Sew		Sticky Clay			12	36	
Size of perforations 1/8 in by 8 in.		mosed Wood		•	36	41	
70. perforations from	Bucket	Sticky Cla	77		41	45	
		Siltatore	•	•	45	54	
perforations from		Sticky Clay			54	72	
		Sticky Clay			72	81	
		Sticky Clay			81	90 '	
Manufacturer's Name Type		Shale		_	90	130	
m.m. 9-46 ft in		Sandatone	: -		130	395	
Colonia Colonia de Col		Gray Stick	r Clay		395	415	
Threwdown is amount water level is low		Sandatone		• •	415	505	
(8) WELL TESTS: below static level		Sticky Clay			505	518	
Wes a pump test made? [] Yes XW No H yes, by whom?		Sandatone			518	530	751
** * * * * * * * * * * * * * * * * * *	hrs	· ·					
Air Test May Fluctuate			<del></del>			T	
5 14 1 20 1 20 1 270 A	hrs.	,,,,	<u> </u>				
	hes.	··				1	
Batter test							
Artesian flow g.p.m.  Temperature of water Dooth artesian flow encountered	ft Work str	rted 7-7	7 19.8	Complet	ad	7~1	13 198
		I drilling machine m				7-	
CONSTRUCTION: Special standards: Year Now.							•
Well seal Meterial used Cement Bentonite	Drillin	g Machine Oper is well was constr	and and a	andanaon 	nmarois	ikin Mat	erieki we
Mell testion man term term term to the contract to the contrac	The sand inf						
Diameter of well born to bottom of seal	[Signed		on due	E	Da	to .8=1:	1., 1981
Diameter of well bore below and		(Orling M	chine Operatio	E) 37.	1195	• . •	
Number of sechs of cament used in well seal	Drillin	g Machine Operato	A 8 TYCKNOC	IXO	******		
How was cenient ground placed? All Ground Pulled	Water	Well Contractor	's Certific	atton			
Q. Backa Danite	Th.	is well was drille	d under m	imiedictio	n and t	piè Lebor	t is tree (
Was pump installed? NO	the bes	t of my knowleds	e and belic	Ľ.			
	A 1444	Miller, Wes				(Zyge	or print)
Were drive choe used?	Address	5875 Gaff	in Rd.	Salem.	Orego	n :	ration of the section of
		& _	<b>∕</b>				
Type of Water? depth of strata  Method of scaling strata off	[Signe	مرموري ال		TO CALL	eter) .		. سريد دسي . د سريد دسي .
		uctor's License No.				8-11-	19.8
Wes well gravel pecked?	. Canal	WANT DEVENING TAR.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
CHANGE DIRECT LIGHT							

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report
sto to be filed with the

WATER RESOURCES DEPARTMENT, BALEM, CHECON STRID within 20 days from the date of well completion.

	SP*45292-690	8		Water resources department,	NOTICE TO WATER WELL CONSTRUCTOR
	٠.٠			Louis	Gravel placed from
	200	3	7 7 7 7 7 7 7	Wester Well Constructo	E STATE
				[Signed] 1.D. Mandax	.
•		<b>!</b> ::	uoge.	Address R.O BOX 15087 Salem. Oregon	vausable water? ☐ Yes XXNo
	Type or print)	ord/CD		Name	was pump insettuetéV
	1			the best of my knowledge and belief.	The HD Death
	is taue to .	New	Surety Company Name Tion and this res	(manher)  This well was drilled under my jurisdiction	
:				Bond Issued by:	Arout_Pupp
				Bonded Water Well Constructor Cartification	nent used in well scal
	19	•	Date	Signed] Date 19	5
	rials used id belief.	on. Mate: 7ledge an	st know	This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.	Well scaled from lead surface to 10 fr
	cable):	H appli	ation (	(unbanded) Water Well Constructor Certification (if applicable):	_Cement
•	1	3-24		lling machine proved off of wall	(9) CONSTRUCTION: Special standards: Yes O NOXX
	1983	3-24			operature of water Depth artesian flow encountered
:	15 GPM	Н	430	Sandstone	m4%
•	MAN S		8	Gray Claystone	st gal/min, with ft, drawdown after
•		8 8	<u> </u>	Claystone	ALT THE PAY ELUCTUALE 110 Stem at 510 ft. 11/2 hrs.
i	2 GHZ	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3	dstone	nd: pal/min with ft. drawdown after hrs.
} ;		175	155		ast made? I Yes yell No II yes, by whom?
: ;		155	\$	RY	Driller Recommended Fump Be Set At 480'
}		\$	3	Grav Claystone	MIGHT TILESTIS. Drawdown is emount water level is lowered
•		3 2	+	tone	Otem Slot Store Set from ft. to ft.
!		3/3	1		Stat Sime Set from 4 to
1		293	12		facturer's Numa
		42	81	C Clay	7) SCREENS: Well serven installed? I Yes Tiple
. !		87	8		The second secon
		70	62	яу	
		80	अह	Decomposed Wood	1.
:		게	<b>1</b> 1	Tan Clay	Ties of perforations 1/8 in by 10 in.
•		24		Ked CLAY	ctric Saw
ţ		7		Dark Brown Clay	
i		"	°	F	4 Diam from _8 to 510 t. Gauge 160 ESI PVC
:	TANS	26.	Progr	TVZSTLYM	
	•	,		and indicate principal water-bearing strata.	······
	ster Lovel	Static W	eitin e,	inicaness and nature of each stratum and equiver penetrated, with at least one entry for each change of formation. Report each change in position of State Water Level	mge250
	and show	naturials,	t to Grad	Formstim: Describe color, factore, grain stee and structure of meterials; and show	(5) CASING INSTALLED: Steel 57 Plants O Thresded 11 Welded 57
	510 #	1		Death-drifted 510 ft Death-driven well below cosing	
		in y	·		
١,	-24-83	n. Date 3	nd surface	75 ft b	Driven U Domestic - XX Industrial O Ministral
ı	NI	175		1	(3) TYPE OF WELL: (4) PROPOSED USE (check):
			Ě	(11) WATER LEVEL: Completed well.	Now weak L. Acceptance I. Assumptioning I. Assumed I  If abandonment, describe material and procedure in Rem 12.
5,	Oregon	m, Ort	Salem,	Battlecreek Rd.	OF WORK (check):
;	.	Total Control	۱ .		
	WW	Salvaterien H	ľ.	Ta ta	oty Selem Selem Settley in South
:				TION	Name BOB RAY
				(10) LOCATION OF WELL:	(1) OWNER:
1				WCES DEPT. State Furnit No	MAILER RESOURCES DEPT.
		X		O INC	3/
	ኒ ፓ	アルーング	<b>公</b>		WATER WELL REPORT
		,	ا 		女性 のこう こうしょう こうしょう こうしょう こうしょう こうしょう こうしゅう こうしゅう こうしょう こうしょう こうしょう こうしょう こうしょう しょうしょう しょうり しょうしょう しょうしょく しょうしょく しょく しょうしょく しょうしょく しょうしょく しょく しょうしょく しょうしょく しょうしょく しょうしょく しょく しょく しょく しょく しょく しょく しょく しょく しょく

#### STATE OF OREGON WATER WELL REPORT

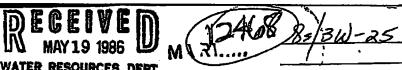
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S DEPT.
(9) LOCATION OF WELL by legal description:
County Marion Letitude County Marion
Township 8 South Nors, Range 3 West Borw, WM.
Section 25  Tax Lot Lot #3 Block I Subdivision Deer 1al
Tex LotLot _#3 _ Block _1Subdivision _Deer_181
Street Address of Well (or nearest middress)  3266 Deerlake ct. S.E. Salem
(10) STATIC WATER LEVEL:
110 ft. below land surface. Date 4-14-86
Artesian pressure lb, per square inch. Date
(11) WELL LOG: Ground elevation
To To Tomp Count
macrae
Fill 0 1 Dark Brown Clay 1 11
Dair Brown Gael
Tan Clay 11 26 Gray Clay Sticky 26 38
Gray Clay Sticky 20 38 54
Dark Gray Claystone 54 75
Black Basalt 75 130
Blue Green Clay 130 133
Gray Sandy Claystone 133 150
Grav Sandstone 150 183
Light Grav Sandstone 183 205
Gray Sandstone 205 357
Gray Claystone 357 378
Gray Snadstone 378 412
Gray Claystone 412 432
Grav Sandstone 432 485
Light Gray Sandstone 485 502 XX
Gray Sandstone 502 520 110'
<del> </del>
<del> </del>
<u> </u>
Driller Recommended
Pump Be Set Between
Pump Be Set Between 460' To 500'
-
Date started 5-13-86 completed 5-14-86
(unbonded) Water Well Constructor Certification:
well construction
standards. Materials used and information reported above are true to my bost
knowledge and belief.
- Doto
Signed
(bonded) Water Well Constructor Certification:
I accept responsibility for construction of this well and its compliance with all Oregon water well standards. This report is true to the best of my
MILE HE CARROLL WHIST WELL BEAUTHRAIS. THE EXPOSE IS LARS WO AND DESCRIPTION.
knowledge and belief.

STATE OF OREGON WATER WELL REPORT 32675 (START CARD) # (as required by OBS 537.765) (9) LOCATION OF WELL by legal description: (I) OWNER: Well Number County Marion DAVID ROSLING Latitude Township8 South N or S. Range 3 West 3206 Deer Lake Court SE Eor W. WM. Address State Oregon Zip 97301 Section 25 NE_ NE ¥. Salem Lot #3 Subdiv<u>ision</u> Block Tax Lot. (2) TYPE OF WORK: Street Address of Well (or nearest address) Deer Lake Estates Abandon Recondition XXNew Well Deepen Salem, Oregon 97301 3206 Deer Lake Ct SE (3) DRILL METHOD: (10) STATIC WATER LEVEL: ☐ Rotary Mod ☐ Cable XX Rotary Air 232 ft. below land surface. Other. Artesian pressure __ _ ib. per square inch. Date (4) PROPOSED USE: . (II) WATER BEARING ZONES: ☐ Injection ☐ Thermal 431 Ft Douth at which water was first found (5) BORE HOLE CONSTRUCTION: **Estimated Flow Rate** From Explosives used Yes XX No Type. Amount 1/3 GPM 445 Ft 431 Ft sacks or pounds Th | Diameter From To | Material | 10" | 0' | 22' | Cement | 8 3/4" | 22' | 125 | Bentonite 125 34 8 3/4" 125 140 Cement 125 140' 8 (12) WELL LOG: Ground elevation. 6" 140 620 ⊠c □ p How was seal placed: Method A From Material Other _ Brown Clay ff to Material Backfill placed from_ Multi-Colored Clays 19 Size of gravel Gravel placed from.... 13 Medium Boulder (6) CASING/LINER: 22 13 Multi-Colored Clays Threaded hable?? 22 41 1401 Light Tan Sticky Clay XIX XX 65 ₫ 41 Gray Sticky Clay 65 181 Dark Gray Sandy Clay П 126 81 Black Basalt 126 131 Grav Sandy Clay 366 131 Gray Claystone 366 384 Soft 140 Feet Gray Clay Final location of shoc(8) 431 384 Gray Sandy Claystone (7) PERFORATIONS/SCREENS: 431 Gray Sandstone 609 Perforations Method . 609 616 Gray Sandy Claystone ___ Material . ☐ Screens Type_ 616 620 Gray Clay Soft Casino Linex Diameter . <del>Mar 1 9 1992</del> WATER RESCURCES DEPT 3-11-92 LEM, OREGON 3-13-92 (8) WELL TESTS: Minimum testing time is 1 hour Date started Flowing Artesian (unbonded) Water Well Constructor Certification: DE Air ☐ Baller I certify that the work I performed on the construction, alteration, or abandon-☐ Pump ment of this well is in compliance with Oregon well construction standards. Materials Time Drill stem at Yield gal/min Desardown used and information reported above are true to my best knowledge and belief. 620 Ft 1 hr. 1/3 WWC Number Air Test GPM May Fluctuate. Date Signed . (bonded) Water Well Constructor Certification: I accept responsibility for the construction, alteration, or abandonment work per-Temperature of Water 49° .Depth Artesian Flow Found formed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon well construction standards. This report Was a water analysis done? Yes By whom. Did any strata contain water not suitable for intended use? 

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\textc WWC Number 1325 Salty Muddy Odor Colored Other Date 3-15-92

Depth of strata:

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT

SWL

232'

SWL

2321

9809C 10/91

THIRD COPY - CUSTOMER

SECOND COPY - CONSTRUCTOR

То

<i>\b</i>	STATE OF OREGON WATER WELL REPORT (as required by OBS \$37.765)  JUN	EIVED 3 0 1992	SS (START CARD) #	13w	/25	aa
	WATER HES	JURCES DEPT. (9) LOCATION O		description	n:	
	Name DAVID ROSLING	County Marion	Latitude	Longi		
	Address 3206 Deerlake Court SE	Township 8 Sout	h N or S. Range NE	3 West u NE	E or 9	
	City Salem StateOregon Zip 97301  (2) TYPE OF WORK:	Section 25	Lot Block		4 ~ ddivision	
	XKNew Well Deepen Recondition Abandon	Street Address of W	ell (or nearest address)			
	(3) DRILL METHOD:		ke Court SE	Salem.	Oregon	
	XX Rotary Air Rotary Mud Ceble	(10) STATIC WAT	EK LEVEL: elow land surface.	,	Date 5-9-	92
	Other  (4) PROPOSED USE:		lb. per sq	-		•
	XXDomestic Community Industrial Irrigation	(II) WATER BEA				
	☐ Thermal ☐ Injection ☐ Other			311 Ft	· •	
	(5) BORE HOLE CONSTRUCTION:  Special Construction approval . Yes XXNo Depth of Completed Well 500 ft.	Depth at which water v	vas hist iound			
8	Explosives used Yes XX No Type Amount	From	To	Estimated		SWL
	Tubiograph man CT and Milk and a state of the state of th	311 Ft	500 Ft	1/3 GP	<u>M</u>	240'
	Dismeter From To   Meterial From To sacks or pounds			<del> </del>		<del> </del>
	10" 0' 25' Cement 0' 25' 14 10" 25' 94' Bentonite 25' 94' 26					
U	10" 94' 100 Cement 94' 100' 5	(12) WELL LOG:				
	6" 100 500	(-,	Ground elevat	ion		
	How was seal placed: Method A B X C D D E	l	Material	Fn	om To	SWL
	Other	<u> </u>	Marchin		<u> </u>	1
	Backfill placed from ft. to ft. Material  Gravel placed from ft. to ft. Size of gravel	Soi1		0	1	
	(6) CASING/LINER:	Brown Clay		1	5	↓
	Discheter Krom To Genue Steel Plastic Welded Threaded	Tan Clay	<u> </u>	5 16	16 41	+
	Casing: 6" +1 100' .250 X	Gray Clay Gray Sandy	Clev	41		
			one Broken	68	83	
		Dark Gray C				
	Tiner:	Gray Sandy Gray Clayst		13		+
	100 Pt	Gray Clayst		31		1
	Final location of shoc(s)	Gray Clayst	one	40		240'
V	Perforations Method					┼
	Screens Type Material	·			<del></del>	<del>                                     </del>
	Slot Telejripe Brown To sire Number Dismeter size Casing Liner					
			•			+
					<del></del>	+
					<u> </u>	<u>ــــــــــــــــــــــــــــــــــــ</u>
	(8) WELL TESTS: Minimum testing time is 1 hour Flowing				<u>5–11–92</u>	
	Pump Bailer XXAir Arteslan	I cortify that the v	ell Constructor Certification I performed on the	e construction.	alteration,	or abando
	Yield gal/min Drawdown Drill stem at Time	ment of this well is in	compliance with Oregon reported above are true	well construct	ion standard	s. Materia
	1/3 500 Ft 1 hr.	used and information	rebourer snove are ture			
	A: Mark Mark Mark	St 4		W\ Dat	WC Number te	
	Air Test GPM May Fluctuate.	Signed	Constructor Certifica			
	Temperature of Water 50° Depth Artesian Flow Found	Y accept responsib	ility for the construction	, alteration, or	abandonne	t work pe
	Was a water analysis done? Yes By whom	formed on this well du	ring the construction da ompliance with Oregon t	tes reported ab	ove. All wor	c performe
	Did any strate contain water not suitable for intended use?   Too little	is true to the best of	ny knowledge and belie	£		1225
	Salty Muddy Odor Colored Other	MONDE	RS DRILLING.	TNC W	WC Number 5-20-1	
	Depth of strata:					

Sol	
. 5	

£ 4

ID COLA - CONSLENCIOR 1HIED COLA - CUSTOMER 9809C 8091	ORIGINAL & FIRST CUPY - WATER RESOURCES DEPARTMENT SECON
formed on this well during the construction detec reported above. All work performed during the cost of the performed with these is in compliance with Onegon well construction sandards. This report is tree to the best of my knowledge and belief of the performance of the performa	With a water analysis done?   Yes By whom    Did any strains comain water not suitable for intended use?   Too little    Salty   Muddy   Odor   Colored   Other
(bonded) Water Well Constructor Certification:  I secon responsibility for the construction, at abundonment work per-	Temperature of Water 53°F Depth Arcestan Flow Found
Signed 716 25.93	
. Exist and information reported above are true or year lenowledge and belief.	nd 1 802 2
I certify that the work I performed on the construction, alteration, or abandon- ment of this well is in compliance with Oregon well construction standards. Materials	Yield gal/min Drawdown Drill stem at Time
(unbouded) Wieter Well Constructor Cardiffention:	Flowing Artesian XI Air Casian
Date started 10/21/95/LEM, UHEGON 10/25/93	(8) WELL TESTS: Minimum testing time is I hour
WATER RESOURCES DEPT.	
1661 7 S AAM	
- GENED -	
	From To airs (Gamber, Diameter, airs Casing Liner
Light Gray Bard Sandstone 574 578	Screens Aype ————————————————————————————————————
Gray Sandstone	bothsM anoitandhaf
Light Gray Bard Sandstone 437 441	(1) LEKLOKYLIONS/SCHEENS: Lines Jocephan of spoe(s) Lindex Bude St. Sn.
Dark Brown Sandstone 301 437	First location of shoe(s) Titlbex shoe at 80'
Light Brown Sandstone   195 295   195 295	
Gray Sandstone 64 195	
BING CISA BOCK 47 61	
Brown Broken Rock 35 47	Caning: 6 +1 80 .254 3
Bisck Broken Bock 31 35	Diameter, From , To , Genge Stort Fluxic Widded Threaded
Brown Sticky Clay 2 19 31	Gravel placed from ft. to ft. Size of gravel
Lopsoil	Backfill placed from ft. to of .ft.
JWZ of mora is lateral.	How was seal placed: Method (A) A B C D D E
Cround elevation	How was seal placed: Method & A B C D D E
(13) METF FOG:	
811 1 825 529	10 0 25 betonite 0 25 525 lbs.
811 2/1/1 100 250	Dismeter From To Meserial From To sachs or pounds
811 2/1 2 1/2	HOHE SEASON VICTORIAN VICTORIANI VICTORIAN VICTORIAN VICTORIAN VICTORIAN VICTORIAN VICTORIAN VIC
From To Estimated Flow Rote TAVL	Special Construction approval   Yes   No   Depth of Completed Wei   198   R.   Explosives used   Yes   R.   Amount
26S bonot kind esse talse dolder in depol	(5) BOBE HOTE CONSLIBINGATION:
sources are annually repositive fact	M Domestic Community   Industrial Intigation   Other
(II) WATER BEARING ZONES: Antesian pressure here inch. Desc.	(4) PROPOSED USE:  St. Demerities   Leteraties   Infermine   Management   Managemen
118 ft. helmy land surface. Date 10/26/93	—————————————————————————————————————
(10) SIVIIC MYLES L'EARL'	(3) DESICE MELHOD:    Capic   Robing   Capic
Street Address of Well (or nearest address) 3206 Deer Lake Crt.	K New Well Deepen Recondition Abandon
Tax Lot followie Block Subdivision	(3) LISE OF WORK:
Township 8.5 N or S. Ranger 3W R or W. W.M. Section 2.5 N Or S. Ranger 3W	Address 3206 Deer Lake Crt. S.B.
County Marion Latitude Longitude	NITED AND ROSPING
(a) LOCATION OF WELL by legal description:	(I) OMMER: WELL Number: 3073
(START CARD) #	(merce can to particular)
S719E	WATER WELL REPORT I'VE SILVE
	SIVIE OF OREGON / MACH
	1 0 4
<del>-</del>	S86690-81

¥A	State of Oreg	on (as requ	aired by OF	6 537.7	(65) (M)	142.j 1759 Page	1 of 1 85/3W/25 and 4 43151
(1	) CVAER: Ware Willi	CAN R MAG	AD 7_		Well No.		(9) LOCATION OF WELL by legal description:
	Address 8330	EUREKA S	a Jr. H.		•	•	County MARION Lat. Long.
_	City VERY	P)			St CA	Zip 93004	Township 8 S Range 3 W SM. Section 25 BF 1/4 BF 1/4
(2	TYPE OF WORK:	nea abit	,		DECE	IVED	Tax Lot Lot 1 Block 2 Subdivision Street Address of Well (or nearest Address)
(3)	DILL HETROD:	eotary a	TP	ī			3175 BEER LAKE CT. SALEM, OR 97301
						1995	(10) STATIC WATER LEVEL:
	PROPOSED USB: 1			IAW		OURCES DEF	120° ft. below land surface. Date 07/08/
(5)	BORE HOLE COME			_	•		Artesian pressure 1b per square in. Date
	Special Constru Explosives used	iction aj 1 ko	pproval: <b>K</b> Type	•		d. Well 540 ft Mount	
	HOTE	_		SRAL		EOUIC .	Depth at which water was first found 285' Prox To Est Flow Rate
	10" 0'		Material Butchith	Fr 0'	on To	Amount 24 Sacks	285' 460' 5.5 GPH
	6" 50°	540'			<u> </u>		
	<u> </u>				<del></del>		
	Seal placement : Backfill: fr		COURED DRY ft to			<del></del>	(12) WRIL LOG:
			ft to	ft	Material . Size		Ground elevation Haterial From To SH
[6]	CASING/LINER:				<del> </del>	<del></del>	BROWN CLAY 0 12
	Diam.	Pron	To Gai	uge Hai	terial	Connection	TAY CLAY
	Casing 6°	+2"	50' .2			VELDED	BROWN & GRAY CLAY (STICKY) 32 44
		_		<del>-</del> -			GRAY CLAYSTORE 44 204
	Liner 4"	<u>01</u>	540' PVC		STIC	777 Ani	
		. —	•	, PLA	DIIC :	VELDRO	
	Pinal Location o	f shoe(s	s) 50'				ATT THE COLUMN THE COL
	PROPORATIONS/SCR					<del></del>	AIR TEST GPH MAY PLUCTUATE
	[X] Perforation [] Screens	s Kethod Type	BLECTRIC		. Material		
		Slot			Tele/pipe		
	From To 400' 520'	Size	Number D	iar. /8" x	size	Casing/liner	
			~ ·	10 V	.J	LINER	Date started 07/06/95 Completed 07/08/95
	· ·	<u> </u>	-		<u></u>		
					· · ·		(unbonded) Water Well Constructor Certification: I certify the work I performed on the construction, alteration, or aban
(8)	BLL TESTS: Minic	nn test	ing tipe i	s ] kam	<u> </u>		- OMEGET OF THIS WELL IS IN COMPLIANCE WITH OFECOM WATER SUMPLY
	Test type AIR		-		•		well construction standards. Materials used and information reported above are true to my best knowledge and helief.
	Yield GPM	Dra: đem	_	Drill s	tem	. Time	WC Ember
	5.5			515"	: .	l hr.	Signed Date
			<b>-</b>		; <del>-</del>	· ·· ·	(bonded) Water Well Constructor Certification: I accept respon
			_ ····		1 : .	• • •	sibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported
	Temperature of	water 51	i P	Depth A	rtesian Flo	ow Found	above. All work performed during this time is in compliance
		_			•		•
	Bas water analy	sis done	13 RO .	By whom			With Oregon water supply well construction chandands whim
	Was water analy Reason for water Depth of strate	r not su	er 80 itable for	DE6 DA ATOM			with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.  MONDERS DRILLING, INC.  WE Humber 746

98098 10/91

STATE OF OREGON	MARI	65215	WELL I.D. LABEL#	LI 12137	
WATER SUPPLY WELL REPORT	47,24,24,24	JUZZ	START CARD#		
(as required by ORS 537.765 & OAR 690-205-0210)	5/5/2	2014	ORIGINAL LOG#		
(1) LAND OWNER Owner Well I.D.					
First Name JOSH Last Name BOYD		(9) LOCATI	ON OF WELL (legal	description)	
Company			Twp 8.00 S 1		n w em
Address 5474 LANDON STREET S.E.			E 1/4 of the NE		
City SALEM State OR Zip 97306		Tax Map Number		Lot	1000
2) TYPE OF WORK New Well Deepening C	onversion	Lat	" OF		DMS or
Alteration (complete 2a & 10) Abandonment 2a) PRE-ALTERATION	t(complete 5a)	Long°_	or		DMS or
Dia + From To Gauge Stl Plate Wid Thr	d			earest address	<del></del>
Casing: O O	}	3205 DEER LAI	KE COURT S.E. SALEM, O	REGON 97317	
Material From To Amt sacks/lbs			<del></del>		
Seal:		(10) STATIC	WATER LEVEL		
	nd.	(IU) SIAIIC	Dat	te SWL(psi)	+ SWL(ft)
Reverse Rotary Other	~		1/Pre-Alteration		
		Completed V			70
4) PROPOSED USE	uity		Flowing Artesian?	Dry Hole?	
Industrial/Commercial Livestock Dewatering		WATER BEARIN		vater was first for	
ThermalInjection Other		SWL Date	From To Es	st Flow SWL(pa	si) + SWL(fl)
5) BORE HOLE CONSTRUCTION Special Standard	(Attach copy)	5/2/2014	80 120	50	70
Depth of Completed Well 120.00 ft.					
BORE HOLE SEAL	sacks/				
Dia         From         To         Material         From         To           10         0         58         Bentonite         0         9	Amt Ibs	<b> </b>			
8 58 78 Cement 9 58	15 S	L			ᆜ┖┸—
6.13 78 120 Cement 58 78	6 6	243 Table V V	66		
		(11) WELL L	Ground Elevati	on	
How was seal placed: Method ABXCXD	L_E		Material	From	To
Other BENTONITE DRY		Top soil Red and brown si	itu elav	0 2	25
Backfill placed from ft. to ft. Material Size	<del>,                                     </del>	Brown and blue-		25	56
	~	Gray claystone		56	80_
Explosives used: Yes Type Amount		Porous dark gray		80	92
5a) ABANDONMENT USING UNHYDRATED BENTOI	NITE	Fractured dark gr	ay basali	92	120
Proposed Amount Actual Amount					
6) CASING/LINER Casing Liner Dia + From To Gauge Stl Pls	te Wid Thrd				
Casing Liner Dia + From To Gauge Stl Pls  ( ) ( ) 6   X   1   78   .250   ( ) (					
4.5 0 120 #160 0		<del></del>	<del></del>		
	ום םנ	·			<del> </del>
		-			
		_			
Shoe Inside Outside Other Location of shoe(s)	78				
Temp casing Yes Dia From To				<del></del>	<del>-  </del>
7) PERFORATIONS/SCREENS			<del> </del>		
Perforations Method Drill Screens Type Material	<del></del>	Date Started4/	202014 Com	nplete 5/2/201	14
	of Tele/				
Screen Liner Dia From To width length sle	ots pipe size		ter Well Constructor Certif		
Perf Liner 4.5 108 118 .625 0.63	34		work I performed on the compliant		
<del> </del>			dards. Materials used and i		
			owledge and belief.		
		License Number	1629 I	Date <u>5/5/2014</u>	
8) WELL TESTS: Minimum testing time is 1 hour		Cianal			
·	g Artesian	Signed JAME	S GUNN (E-filed)		
Yield gal/min Drawdown Drill stem/Pump depth Duration	<u>n (hr)</u>	(bonded) Water	Well Constructor Certifica	ition	
50 119 1.	5		bility for the construction,		
	<b></b>		on this well during the constr		
			g this time is in complian lards. This report is true to t		
Temperature 54 °F Lab analysis Yes By		License Number	_	•	
Water quality concerns?  Yes (describe below) TDS amount Description  Amount	nt Units	Picerse Mamber	1273	Date <u>5/5/2</u> 014	<u> </u>
		Signed FLOY	D G SIPPEL (E-filed)		
		Contact Info (opt			

#### STATE OF OREGON EXEMPT USE WELL MAP

(as required by ORS 537.545 & OAR 690.190)
This map is supplemental to the WATER SUPPLY WELL REPORT

#### **Oregon Water Resources Department**

725 Summer St NE, Salem, OR 97301 (503)986-0900



#### LOCATION OF WELL

Latitude: 44.85054692 Longitude: -122.99491363

Datum: WGS84

Township/Range/Section/Quarter-Quarter Section:

WM 8,00S 3,00W 25 NENE

Address of Well:

3205 DEER LAKE COURT S.E. SALEM, OREGON 97317

Well Label: L112137 Well Log: MARI 65215 Printed: Jun 02, 2014

DISCLAIMER: This map is intended to represent the approximate location of the exempt use well provided by the land owner. It is not intended to be construed as survey accurate in any manner.



#### **MARI 62027**

STATE OF OREGON WATER SUPPLY WELL REPORT (as required by ORS 537.765)

WELL I.D. # L 98373

Instructions for comple	eting this report are o	n the last page (	of this form.		START CAR	D#_100497	3	<del></del>
(I) LAND OWNER Name John Powell		ell Number NV		(9) LOCATION County Marion		_		
Address 3225 Deer L	ake Ct SE			Tax Lot 1600		Loi		
City Salem	State C	т	p 97304	Township 6	s	Range 3	V	V WM
			<del></del>	Township 6 Section 25	NE	/	4 NE	1/4
(2) TYPE OF WORK	_		ment Conversion	Lat •	• • or		. (deo	rees or decimal)
(3) DRILL METHO Rotary Air Rotar Other		Auger 🔲 Cable	Mud	Long° Street Address of W			_	rees or decimal)
(4) PROPOSED USI  Domestic ☐ Con ☐ Thermal ☐ Inje	nmunity 🔲 Industr	ial [] Irrigati	on	(10) STATIC WA	ft. below land surfi		ite <u>9-23-08</u>	
	CLION LIVERO	CT CORG		A	ft. below land surfi	ice. Da	ite	
(5) BORE HOLE CO Depth of Completed We Explosives used: Ye	11 <u>520</u> ft.	-		Artesian pressure	ARING ZONES		ite	
			**	Depth at which water	r was first found 4	<u>,                                      </u>		
BORE HOLE Dispeter From	To Material	SEAL From To	Sacks or Pounds	From	To		Flow Rate	SWL
10"  0  7		6   150	32 secies	43	45 498	1/4		N/A
6" 79 5	20			488	450	11 apm		199'
						<del> </del>		
How was seal placed:		□в □с	□D □E	(12) WELL LOG	Comm	4.73		
Other bentonite po				1		ad Elevation _	· · · · · ·	
Backfill placed from 50	ft. to <u>79</u> ft.	Material 18		Meti		From	To	SWL
Gravel placed from 440	fl. to <u><b>520</b></u> fl.	Size of grav	el <u>6/9 stilca sund</u>	Topsoil Shall beautions			2	
				Shale, brown/ora			19	
(6) CASING/LINER		· ·		Shale, light brow Claystone, grey,			51 53	<b></b>
Dismeter Fro	79 Gauge		Welded Threaded	Sandstone, grey,			59	
Cuang.	10 1200	- 15 15		Sandstone, gray,			98	
		- 6 6	H H	Sandstone, gray,			198	
	79 .250 480 \$160			Sandstone, it gre			232	
Liner: 4" 42"	480 #160			Sandstone, grey,			295	
	_ <u></u>	_ 🛛 🗖		Sandstone, It gre			383	
Drive Shoe used 🔲 insi	de 🗹 Outside 🗀 Noi	ne .		Sandstone, it gre Sandstone, it gre	y, whata ayers		377 408	
Final location of shoe(s)	79			Sandstone, drk g	rev. medihani		439	
				Sandstone, drk g	rev. hard	<del></del>	520	199'
(7) PERFORATION				1				
Perforations	Method			Dickerson Wei	Orilling, Inc.			
✓ Screens	Type JOHN	Mate	arial PVC	Date Started 9-17-0	8 Ca	mpleted 9-23	-08	
From To S	Slot Number Diam	eter Tele/pipi	Casing Liner	]				
	Size	size		(unbended) Water \	Well Constructor C work I performed on		d	
480 520 .0	30	4"		abandonment of this	well is in complianc	e with Oneonn	water comb	g, aneranon, or
<u>       </u>	<del></del>	<del></del>		construction standard	s. Materials used at	d information	reported abo	ve are true to
				the best of my know!	edge and belief.		-	
				WWC Number 1574		D-4- 0-94	Los	
4m \$100 1				1917	10:	Date <u>9-24</u>	<del>""</del>	
(8) WELL TESTS: N Be ☐ Pump		ge is I hour	Artesian	Signed Kan	Eall	W	_	
Yield gal/min 1	Drawdown Dr	III stem at	Time	(bonded) Water We				
11	5201	1	hr		pility for the constru			
				abandonment work p				
				above. All work perf supply well construct				
Temperature of water <u>52</u>		ntesian Flow Fo	2nd box	and belief.	···· summitte 1 (118	June 13 II III C	~ mt nest At I	m) annumerke
Was a water analysis don					_			
Did any strata contain wa		_	ioo little	WWC Number <u>1571</u>		_ Date <u>9-24</u>	-08	
Salty Muddy 🗆		Other	. ARRE		117 11	·/·		
Depth of strata: <u>H2o 131</u>	77 us	SEP 3	Ú 2008	Signed	Ween + B	The		

85/3W-25a

WATER WELL REPORT	EA
WATER WELL REPORT	
STATE OF OREGON SEP 2019	83
WATER-RESOURCE	
SALEM OF	
	(10) L
1) OWNER:	
ROTH LAND AND BUILDING DEVELOPMENT	County
ddress 4196 81st Street N.E.	Tax Lot
State State Oregon	Address e
2) TYPE OF WORK (check):	Million 6
Vew Well MK Despening □ Reconditioning □ Abandon □	(44) 5
I abandonment, describe material and procedure in Item 12.	(11) W
3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth et
	Artesien
Potent Mod [ ] Day [ ] Indication [ ] Test Well [ ] Other [ ] .	
▼ □ Bored □ Thermal: Withdrawel □ Rejnjection □	(12) V
(5) CASING INSTALLED: Steel XK Plastic D	Depth dr
Threaded U Welded AR	thickness
6 Diam from	for each and indi
Diam. from	
LINER INSTALLED:	
4 Diam from O ft to 503 ft Gauge 160 PST PVC	_Soi
(6) PERFORATIONS: Perforeted? (IX cs   No	Dar
Type of perforator used Electric Saw	Tan
Size of perforations 1/8 in. by 10 in.	Red
220 perforations from 443 ft. to 483 ft.	Ten
perforations from	Gra
perforations fromft. to	_Lig Dar
(7) SCREENS: Well across installed?   Yes WYo	Gra
Manufacturer's Name	Lig
Type	Gra
Diam. Stat Size Set from ft. to ft.	Lig
Diam Slot Sizo Set from ft. to ft.	Gra
Decordown is amount water lovel is lowered	
(8) WELL TESTS: below static level	<b></b>
a pump test made? [] Yes XXNo II yes, by whom?	l
mid: gal/min, with ft. drawdown after hrs.	i ——
" Air Test May Fluctuate	l —
Airtest 25 gal/min with drill stem at 500 ft. 1 hm.	l ——
Reiler test gal/min, with ft. drawdown after hos.	ļ
resian flow g.p.m.  Depth arterian flow encountered ft.	
	Works
(9) CONSTRUCTION: Special standards: Yes   No RK	Datew
Well seel Material used Cement - Bentonite	(amba
Well sealed from James w	and in
Districted of Acti Date to parties of hear	[Signe
Diameter of well bore below scal	P
Number of special of comment taked in west occur	Bond.
1 Sack Bentonite Used	
have in the second of the seco	the b
Wes pump installed?	Name
Was a drive shoe used? I Yes XXNo Flags Size: location ft.	1
Did any atrata contain unusable water?   Yes XXVo	Addre
Type of Water? depth of strata	[Sign

Method of scaling strata off

Gravel placed from .....

Was well gravel packed? 1 Yes WNo

TEPINK			
O) LOCATION OF WELL			
	ell sumber		
K Keetion 25 T. 88	R. 3W		W.M.
ex Lot # 1800 Lot 4 Bik	2 st	ıbdivislon	
ddress at well location: Deerlake Est	ates		
Battlecreek		lem	
11) WATER LEVEL: Completed			·o
epth at which water was first found	<u> </u>	33	
	w land surfa		
	per equare		
12) WELLLOG: Diameter of well below	_	_	***********
heath drilled 503 ft. Depth	of complete	dwell 5	<u>503 ₽</u>
ermation: Describe color, texture, grain size and a hickness and nature of each stratum and aquifer pe or each change of formation. Report each change in a indicate principal water-bearing strata.	in position o	of Static W	later Level
MATERIAL,	From	To	SWL
Soil	0	1	
Dark Brown Clay	1	6	
Tan Clay	6	13	<u> </u>
Red Clay Sticky	13	26	<u> </u>
Tan Clay Sticky	26	53	<u> </u>
Gray Claystone	53_	71	ļ
Light Gray Claystone	71	157_	<u> </u>
Dark Gray Claystone	157	200	<u> </u>
Gray Sandstone	200	330	<u> </u>
Light Gray Sandstone	330	394	<u> </u>
Gray Sandstone	394	452	<u> </u>
Light Gray Sandstone	452	470	<del></del>
Gray Sandstone	470	503	110'
		+	<del> </del>
		<del> </del>	<del> </del>
		+	<del> </del>
		+	<del> </del>
<del>.</del> <del>.</del> <del>.</del>	-+	+	<del> </del>
		+	<del></del>
<u> </u>	<del></del>	+-	<del> </del>
		<del>ــــــــــــــــــــــــــــــــــــ</del>	
	pleted	7-	
Date well drilling machine moved off of well		7=	6 1983
(unbonded) Water Well Constructor Co	rtification		
This well was constructed under my dire and information reported above are true to r	nà pest en	CAMEGRE :	HINT DEIDGE.
[Signed]	Date.	*******	<u>, 19</u>
Bonded Water Well Constructor Certifi	cation:		
Bond Issued by:	Sundy Comp	any Name	
This well was drilled under my jurisdi- the best of my knowledge and belief.			nt is true to
Name MONDERS DRILLING INC.			porprint)
Address P.O. Box 15087 Salem	Orego	<u>97</u>	309
[Signed] D. Monders Well Co.	T		^-
Date		_ <del>7-7</del> _	, 198,3

State Well No.

State Permit No. .....

Size of gravel:

WATER HISOURCES DEPARTMENT, BALLEM, OREGON 97810 within 30 days from the date of well completion. 8P*45392-690

WATER WELL REPORT STATE OF OREGON
DA90 PLEASE, TYPATE
(1) OWNER:
Name ROTH LAND AND BUILDING DEVELOPMENT.
Address 4196 81 Street N.E.
City Salem State Oregon
(2) TYPE OF WORK (check):
New Well MK Despening   Reconditioning   Abandon
If shendonment, describe material and procedure in Item 12.
(3) TYPE OF WELL: (4) PROPOSED USE (check):
Rotary Air KK Driven O Domestic KKindustrial O Municipal O
Rotary Med   Duy   Integration   Test Well   Other
Bured C Thormal: Withdrawal C Reinfection C
(5) CASING INSTALLED: Steel MX Plestic D
Interned L Memor Aug
,0*Diam from
LINER INSTALLED:
- Not all par min
4 Diam from -5 ft to 495 ft Gange 100 PST PVC
(6) PERFORATIONS: Perforated? XXYes D.No.
Type of perforations 1/8 in. by 10 in.
194 perforations from 416 ft to 476 ft
perforations from
perforations from
(7) SCREENS: Well screen installed?   Yes XXNo
Manufacturer's Name
TypeModel No
Diem. Stat Size Set from ft. to ft.
Diam. Slot Size Set from ft. to
(8) WELL TESTS: below static fermi
Driller Recommended Pump Be. Set At 466'
t gal/min, with ft. drawdown after hre.
Air Test May Fluctuate
Air test 20 gal/min. with drill stem at 495 ft. 1 hra.  Beiler test gal/min. with ft. drawdown after hra.
Beiler test gal/min. with ft. drawdown after hrs.
perature of water Depth artesian flow encountered ft.
(9) CONSTRUCTION: Special standards: Yes NAW
Well seal—Material used
Well sealed from land surface to
Diameter of well bore to bottom of seal10
Diameter of well boro below seal
Number of sucks of coment used in well seal
Wes pump installed?
Was a drive shoe used? U Yes XXNo Plugs
Did any streta centain umusable water?   Ves WNo

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1

Type of Water?

Method of sealing strata off

Gravel placed from .....

Was well gravel packed? D Yes YVNo

(10) LOCAT	ION OF WELL	Ĺ¢			
County Mari	on	Driller's well			<u> </u>
<u> </u>	# Section 25	<u>r. 8s</u>	R 34		W.M.
Tax Lat #	Lot	Blk		bdivision	
Address at well loca		ce Estat			
	Battle	creek Rd	<u>. , s</u>	alem_	
(11) WATER	LEVEL: Con	apleted w	ell.		
Depth at which water	er was first found			6	<u>5 ft.</u>
Static level	90	ft. below l	क्ते का <u>र्</u> गक	ce. Date	1-15-83
Artesian pressure				inch. Date	
(12) WELL L	OG: Dismeter	r of well below	casing	611	
Depth drilled	496	fit. Depth of			496 st
Formation: Describ	e color, texturo, grai				
thickness and natur	re of each stratum an formation. Report es	d aquifer pene	trated, w	ith at lear f Stotic V	t one entry
and indicate princip	pel water-bearing str	eta.	,	2 (1444)	ictory Treater
	MATERIAL		Prom	The	SWL
Soil			0	2	
Brown Cla	<del></del>	:-	2	5	
Red Clay	<b>*</b>	<del></del>	5	111	<del></del>
Tan Clay			11	22	···
Gray Clay	Stricky		22	33	<del></del>
Gray Clay		•••	33	55	
	y Claystone		55	26	
Gray Clay		•	76	178	
Grav Sand			178	343	~
Grav Clay			343	349	
Gray Sand			349	381	
	y Sandstone		381	392	
Gray Sand			392	475	
Gray Clay			475	487	
Gray Sand			487	496	901
			<u> </u>	<u> </u>	
			<u> </u>	<u> </u>	
	<u></u>		L	<u> </u>	<u> </u>
		<u> </u>	<u></u>	<u> </u>	
Work started	4-14 198		ed	4-1	<u>19 83</u> .
Date well drilling n	rachine moved off of v	well		4-1	6 19 83
(unbonded) We	ater Well Constr	actor Certif	ication	(if appl	icable):
This well w	as constructed und	er my direct s	arpervis	ion. Mat	erials used
	reported above are	true to my l		_	
[Signed]			Date	*************	., 19
Bonded Water	Well Constructo	r Certificat	ion:		
Bond (number)	Issued by	:	rety Company	w Marro	
110-110-110	as drilled under m			-	is true to
the heet of my	od hra aphalwam	liof			
Name MONDE	RS DRITLING	INC.			
	Box 15087				
ľ	•				·
[Signed]	D. Mond	DAA Iter Well Constru	tor	**********	1101 Pt Propt case .
· · · · -	· · · · · · · · · · · · · · · · · · ·	Date	4.	-22	19.83
ĺ		**************************************	***************************************		سالواسد، دحه و ه

Size of gravel:

depth of strata

_	Address 3285 D City SALEM	T & JULIE K. IRVIN KER LAKE CT. S.B.	Rett No.	10-95 Eip 97301	Section 25	scription:	
	) TYPE OF FORK: HI DRILL METHOD: RO	ь	ECEIVI	D	Street Address of Well (or near 3285 DEER LAKE CT. S.E. SA	rest Address)	ı
(4)	PROPOSED USE: DO	DHESTIC	JUL 20199 ER RESOURCE	S DEI	(10) STATIC WATER LEVEL: 150 ft. below land surface Artesian pressure lb		/13/95
(5)	BORE HOLE CONSTR Special Construc Explosives used	tion Approval: 10	SALEM, ORECOMP Depth of Comp A	SON 1. Well 470 ft Monnt	(11) WATER ARARIES 20083: Depth at which water was fir	per square in. Date	
			SEAL Prom To	Amount 20 SACES	Pron To	Est Plow Rate 20 GPM	897 150
	Seal placement me Backfill: from	ethod Pourke Dry  ft to	ft Material	<u> </u>	(12) WELL LOG:		•
	Gravel: from		ft   Size	•	. Material	Ground elevation Prop To	evi.
163	CASTEG/LIBER:	<del></del>	· ·		TOP SOIL	0 1	527)
10,	Dian.	Pron To Gau	ge Material	Connection	REDISH BROWN CLAY	1 8	
	Casing 6"	+1' 50' .25	O STERL	Velded Velded	Brown Clay Tan Clay (Sticky)	8 37 37 45	
			_ <del></del>		GRAY CLAYSTONS	45 198	
			<del></del>		GRAY SANDY CLAYSTONE	198 274	
	Liner 4"	0' 470' PYC	PLASTIC	VELDED	GRAY CLAYSTONE GRAY SANDY CLAYSTONE	274 368 268 288	
	mi-a				GRAY CLAYSTORE	368 382 382 410	
	Pinal Location of	: shoe(s) 50°	•		MULT-COLORED SANDSTONS	410 423	150'
(7)	PERFCRATIONS/SCRE	RIS:			GRAY SANDY CLAYSTONS GRAY CLAYSTONS (STICKY)	423 467	
	[X] Perforations	Method HLECTRIC 8		•	APUT CHUIDICHD (DIICHI)	467 470	
•	[] Screezs	Type Slot	Haterial				
	Pron To	Size Kumber Di	Tele/pipe iam. size	Casing/liner	AIR TEST GPN MAY PLUCTUATE		
	350' 450'		8" X '5"	CINER CINER			
_				<del></del>	Date started 07/11/95	Completed 07/13/95	
			·		(unbonded) Water Well Constructor	Certification: T mentic	for the
			·		the work I performed on the const	ruction, alteration, or	aband.
(8)	FELL TESTS: Minim	na testing time is	1 honr	<del></del>	- onmeat of this well is in complia	nce with Oregon water so	ענממם
- '	Test type AIR		:		well construction standards. Mate reported above are true to my bes	ridis Esed and informati t knowledge and belief	TON
	Viola mw		Drill stem		1	WC Worker	
	Yield <del>CPM</del> 20		at 465'	Time _ 1 hr.	Signed	Date	
					(bonded) Water Well Constructor Co	ertification: T assent :	AERAW.
			!		sibility for the construction, al	teration. or abandonment	work
	Temperature of w	rater 51 F	lepth Artesian Fl	ov Found	performed on this well during the above. All work performed during	e construction dates ren	orted
	Was water analys	is done? HO	ly whom		with Oregon water supply well cons	_	
	Reason for water	not suitable for	use	•	report is true to the hest of my l	cowledge and helief.	12
		•			None and and all a		
	Depth of strata	0 -			MONDERS DRILLING, INC. Signed Marc Monde	WC Bunber 1	746

	• •	BALEA, OREGON 97510 and angle for the date of well or middle.	Andrew Markey Office of a series of a seri
069-26994-99	<u> </u>	WATER RESOURCES DEPARTMENT,	Grand pleed from It to water well consistenced
			Web well green to seek ON Cl. 89 Y Cl. Sheek and West well green to well an an W
<u>78</u> .er,	6-5		Method of scaling circle of the state of the
	301	tabren .4.L [bengis]	Abstra to riteria Tracka V Jo octy.
		the process of the	old Kill, 25 V 🔘 Treatew eldermor missimos extente vine hM
Contraction in the contraction i		Cateron man memb LeB SA ba mille D _ EN E esembly	A moltered seed
(2)22300		Name Miller West Well Drillin	A friged
		the best of my knowledge and belief.	
	Mycomposity Religious of Autoria	colsoficity on referr belifts saw law aid!	
	M warmer O web	Bond Issued by:	· manner and the state of the s
•	210	Bonded Water Well Constructor Certificati	solute, less liew at best insense to exists in redamifi.
6I	······anter	[bamais]	Al less woled end flew to mismeld
	_	and information reported above are tree to my b	
Ser alerately,	most vision	This well was constructed under my direct s	41 of sealure local moral beless IIsW
applicable):	H) notiso	(unbonded) Weter Well Constructor Certifi	
<u> </u>	<u> </u>	How to no bayour emidson parillab lisw etect	(9) CONSLEDCLION: Special attendands: Yes [2] NGE
<u> 58er OS-</u>		Work started 1-15 19 83 Complete	Al
2000	_		
	+		Haller test and male it dim with it diswardown alter
		Cement	Ar test A OZZ in most little drill of mark from 1 most also
		Well-Backfilled With	Ary Test May Fluctuate
	+	LIGW	and real-man with the dimensional and the district of the dist
		6" Casing Removed From	Wes a pump tent made? T Yes XW No. M yes, by whom?
<del></del>	<del></del>		
	<del></del> -		(8) AKEIT LESLS: PERMEDOME IS SUBSTILL MADES, HARET IN SUMMERO
<del></del>	c 1002	Gray Sandatone	fi
0 09		Dark Gray Claystone	A at A mortage m
55		Gray Claystone	
196		Gray Clay Sticky	oman s'ambalamin
08		Dark Gray Sandstone	(7) SCREENS: Well extra means at Yea Zero
55		Light Gray Sandstone	
OF			A
<u> </u>		Fight Gray Claystone	3) od A mofi emitembrog
<u> </u>		Dark Gray Claystone	A of A and smitspire
<u> </u>	53 14		
<del></del>	<del>_</del>	Tan Clay Sticky Multi-Colored Decomposed	been referented to eqq!
E		Brown Clay	(6) PERFORATIONS: Perforation II Yes ENVo
	<u> </u>		The state of the s
	<u>0 S</u>	Tros	
TAS QI	morN.	TANSTAM	TIMER INSTALLED:
		and indicate principal water-bearing strate.	4
The seat one seek the force I would be	s diliw betw 48 in mitter	thickness and nature of each circium and equifer penel for each change of formation. Report each change in p	055° 000 4 94 L+ 000 000 000 000 000 000 000 000 000
wods bos siels	ison to suct	Formstion: Describe color, tentume, grain sine and stru	(b) CASING INSTALLED: Seed TX Practic C
31 O E		Depth drilled 550 ft. Depth of c	
119	Zaiss	(12) WELL LOG: Diameter of well below of	O molito O 150W test O molitopini O gatt O bodd waters
. Date	प्रधा काम्म्	Artesian pressure liber per	□ lequinated □ listundrated attracted □ moving XX at the resident □ moving XX at the resident □ moving □ list variest □
			(8) LASE OF WELL. (4) PROPOSED USE (check):
8-05-1 aa		Sporol tanil new redow delaw to dayou	
	7		If abandament, describe mutarial and procedure in item 12.
अ. ०८-१ _{व्यक्}		ANTER TRACES COmbiesed W	_
	T	(11) WATER LEVELs Completed wo	□ nobanedA □ garlundithanooM □ garlanogeod XM IlèW weM
	TIF	BR Meeroeltted	(2) TYPE OF WORK (check): New Well HX Desponing   Recommitments   Recommitment
₩ OL	<b>T</b>	Address at well location: Decreek Bd. Rd. Ace Toeck Bd.	(3) LLEE OF WORK (check):
miniv	ibdu8 Si	S int o io. No interest of a real location:  Decree at well location:  Decree at well location:  Address at well location:	(3) LABE OF WORK (check):  State Or State  Other Salem
winim A Or	Terres  HC T	Address at well location: Deer 186. S. Address at well location: Deer 186. Bet 186.	(3) LABE OF WORK (check):  Cata gallem : Steps Oregon  Ashires 4196 81 84° N°E°
onining of the state of the sta	Terres  HC T	Coming Maricon  Noring Maricon  Noring A section  Noring Battle Estate  References at well location: Decree State Estate  Address at well location: Decree State Estate  References at well location in the State Estate	Name Roth Land And Building Development Address 4196 81 St. N.E. Oty Salem Steep Oregon  (2) TYPE OF WORK (check):
miniv A Or	HE E	Address at well location: Deer 186. S. Address at well location: Deer 186. Bet 186.	(3) LABE OF WORK (check):  Cata gallem : Steps Oregon  Ashires 4196 81 84° N°E°
ਚ OI	HE E	Coming Maricon  Noring Maricon  Noring A section  Noring Battle Estate  References at well location: Decree State Estate  Address at well location: Decree State Estate  References at well location in the State Estate	(1) OWNER:  Name Roth Land And Building Development Address 4196 81 st. N.E.  Oity Salem same Oregon
radaiv	HE E	(10) LOCATION OF WELL.  Comby Marion Marion Dearlake Estate Address at well becatom: Deerlake Estate  Redices at well becatom: Deerlake Estate  Battleoreek Bd.	(3) TYPE OF WORK (check):  Name Roth Land And Building Development Address 4196 81 8t. N.E.  See Oregon  See Oregon
Al Of	HE E	(10) LOCATION OF WELL.  Comby Marion Medica S5 7 85  Tarlor 6 HR S  Address at well becatom: Deerlake Estate  Redress at well becatom: Deerlake Estate  Battleoreek Bd.	(3) TYPE OF WORK (check):  (2) TYPE OF WORK (check):  (3) TYPE OF WORK (check):  (4) OWNER:  (5) TYPE OF WORK (check):
miniv A Or	HE E	(10) LOCATION OF WELL.  Comby Marion Medica S5 7 85  Tarlor 6 HR S  Address at well becatom: Deerlake Estate  Redress at well becatom: Deerlake Estate  Battleoreek Bd.	(3) TYPE OF WORK (check):  (2) TYPE OF WORK (check):  (3) TYPE OF WORK (check):  (4) OWNER:  (5) TYPE OF WORK (check):
miniv A Or	HE E	SOURCES DEPT  County Marion  M. M. Section  John Deerlake Estate  Total 6 Bit 2  Battleoresk Refer  Battleor	STATE OF OREGON  (1) OWNER,  Address 4196 81 8t. N.E.  Address 4196 81 8t. N.E.  Address 4196 81 8t. N.E.  (2) TYPE OF WORK (check):
miniv A Or	HE E	SOURCES DEPT  COUNTY MATTON OF WELL.  County Matton  M. Mection 25 T. 85  Tox Lot. # 100 CATTON OF WELL.  Deatlectes at well location: Deatlectes Estate  Battlectes Estate  Battlectes Estate  Battlectes Estate	STATE OF OREGON  (1) OWNER,  Address 4196 81 8t. N.E.  Address 4196 81 8t. N.E.  Address 4196 81 8t. N.E.  (2) TYPE OF WORK (check):

	Per WWC # g socker TREC	EIVED	1/2 2-	(41)
	WALLES WALLES COLUMN TO THE BERNESS OF THE BERNESS	TT 1383 W /	な/マラータア	
	STATE OF OREGON WATER RES	SOURCES BYEN STATE PROMITING		
	TOTAL ENERS	"OREGON K"	bardose	l
	(1) OWNER:	(10) LOCATION OF WELL:		<u>.</u> .
	(1) Ollitaria	Comby Marion Dallers well:	number	·
	Address 4196 81 St. N.E.			WM.
	City Salem State Oregon .	Tex Lot # Lot 6 Bilk 2 Address at well location: Deer Lake Esta:		
	(2) TYPE OF WORK (check):	Battlecreek Ro		
	New Welking Deepening Becombitioning Abandon Brandon II abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed w	all.	
	(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found  Static level None ft. below is	340 and surface. Date 1-2	4-83
<i>/</i> _\	Roberty Air KIX Driven D Dumestik MX Industrial D Municipal D		r square inch. Date	
	Reinsy Mad   Dag   Infigation   Text Well   Other   C	(12) WELL LOG: Diameter of well below		,
	(5) CASING INSTALLED: Steel XX Plastic	Formation: Describe color, texture, grain size and stru	completed well O	l show
	Threaded  Welded XR	thickness and nature of each straium and aquifer pensifer each change of formation. Report each change in a and indicate principal water-bearing strate.	bested, with at least one	e entry
	Diam from	MATREIAL	From To S	WL.
	LINER INSTALLED:	Soil	0 2	
<u> </u>	Diam fram	Dark Brown Clay	2 8	
1	(6) PERFORATIONS: Perforated?   Yes WNo Type of perforator used	Tan Clay Sticky	8 28	
	Size of perforations in. by in.	Dark Gray Claystone	28 95 95 200	
	perforations from	Light Gray Claystone Light Gray Sandstone	200 272	
•	13 y	Gray Clay Sticky	272   281	
	perferations from	Grav Sandstone	281 340	
	(7) SCREENS: Well screen installed?   Yes XNo	Light Gray Sandstone	340 415	
_	Manufacture 's Name	Gray Clay Sticky	415 428 428 452	
	Type	Gray Clatstone Gray Sandatone	452 560	<u> </u>
	Diem. Stot Size Set from ft. to ft. to ft.	Grav Clav Sticky	560 576	
	(8) WELL TESTS:  Drawdown is amount water level is lowered below static level	Gray Claystone -		0
	Was a pump test made? [] Yes Yo No II yes, by whom?	Casing Removed, Well		
	cld: gal/min with ft. drawdown after has.	Backfilled Withh Cementt	<del></del>	
<u> </u>	" Air Test May Fluctuate		<del> </del>	
			<del>  </del>	
	Beiler test gal/min, with it are woods over min.			
ſ	emperature of water Depth artesian flow encountered	Work started 1_21 19 83 Complete		1983.
	(9) CONSTRUCTION: Special standards: Yes   No.	Date well drilling machine moved off of well		1983
	Well seal-Material used	(unbonded) Water Well Constructor Certif	ication (if applical	ble):
_	Well seeled from land surface to ft.	This well was constructed under my direct and information reported above are true to my	supervision. Materia best knowledge and l	is used belief.
1	Diameter of well have below seal	[Signed]	Date, 1	
	Diameter of well have below seal	Bonded Water Well Constructor Certification	tion:	
	How was consent grout placed?	Para Torred has	mety Company Name	
4		This well was drilled under my jurisdiction the best of my knowledge and belief.	m and this report is	true to
4	Was pump installed?	Name Miller, West Well Drilli	Tigge or pr	rint)
1	Was a drive shoe used?		elem. Oregon	
	Type of Water? depth of strate	[Simeil -1.D. Mondus		
~	Method of sealing strata off	Water Well Constr		983
	Was well gravel packed?	Date		<i>V.N.</i> J
4	Gravel placed from	WATER RESOURCES DEPARTMENT,	EP*4F	2335-680
	The original and first copy of this report are to be filed with the	BALKIN, OHEGON 97810 within 30 days from the date of well completion.		. <b>-</b>

069-282910	· .	ES DEPARTMENT, date of well completion.	BAD MEXIAS	MOTICE TO WATER WELL CONSTRUCTOR The original and linst onty of this report are as he linst with the
				A
., 19O.			.·. ··· ·	Microsoft of sealing attention of the strains are sealing attention of the sealing attention of the sealing attention of the sealing of the sealing attention of the sealing attention of the sealing of the sealing attention of the sealing of the sealing of the sealing attention of the sealing of the sealing attention of the sealing of
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	ogeao me	TEG POR PHT	Address 5882 esembba	-31 soldsoot sold sould ovin a self. Sectors old sour code syin a saw.
(Salagra)				
•	- 5	and belief belief Drilling	the best, we have and the same of the best	A depot TH squ't will the squ't will be shall be
of eight at :	Congeny Nems and this report		u belljib saw llew aldT	
		syd barn		gang turned ria
	я	structor Certification	Bonded Water Well Cons	abss
		7	[beagis]	A the matter of the woled one it was a far.
**********	re symanamys r	200	ds betroget notismrolni bris	Or mineral from the form of feed in mineral from to feed in mineral from the feed in mineral fro
Pasts stars Paifed fa	ervision. Mate	ed under my direct sur	fourtence asw llow aid!	A of each to be for the first
:(errre):	ligge W noti	Sonstructor Certifica	(unbonded) Weter Well C	TrameD feer former
			evera enithem gnillin llow ets (	(9) CONSLIBNCIION: Special standards: Yes   William
8 61	1-5		Work steated 1-26	Compensation of water Doptin artesian flow emonstrated fig.
8 er (	15-1	betalgrand 58 e1	3C V	R.p.m. Septembered and R.p.m.
				and various
				and motorous for the same
	1		· · · · · ·	1 and 1. a SIC m
				elsufour yaw jaer ria "
	<del>                                     </del>			and with a disk aincless the
	<del> </del>			Tes a pump test mede?   Yes XIIVo II yes, by whom?
	<del>                                     </del>	-		(8) ARTT TROTO: Pepa confe loze
	<del>}                                    </del>			between is level water water level is lewered
	<del> </del>	<b></b>	<del></del>	1)
	<u> </u>		01° 27° 00 '02"	And See and the second see and
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			· · · · · · · · · · · · · · · · · · ·	oman a transcription of labora
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10EL	Z15 9		Multi-Colored Ser	(7) SCREENS: Well success installed?
	924 50	S enco	Dark Gray Sandato	Alaminimed al manime moil ambisming
	1 253 0		Light Gray Sandati	At of At, moll emilianing
		79	Gray Claystone	4 SCH of A SI 4 mort southout not 20
		95	Decombosed Rock	7 CG4 7 CV7 30
		\£	Brown Clay	nd 9 vd.mi 8\r eminemined to edg.
			Red Clay	Type of perfect read Electric Saw
		2	Ten Cley	(6) PERFORATIONS: Perforated No. 12 No.
	<u> </u>	<u>z</u>		the Part of the Part of the Part Puc
	2	<del></del>	Medium Boulders	LINER INSTALLED:
ZWZ	of man	u	IABESTAM	
		न्यायक प्रया	tead ratew fequentry etacibni ban	Span from the design of the control
fove Level	on of Statte Wa	යකර හැ නිගහන සාහ කරේ	for each change of formation. No	055. sam 11. 11. 12. and 11. 11. 11. 11. 11. 11. 11. 11. 11. 11
Walte and	o en magazane; s el, with at least	क्षात्रकार स्टब्स स्टब्स स्टब्स्ट हुन स्टब्स्ट इस्टब्स्ट इस्टब्स्ट इस्टब्स्ट इस्टब्स्ट इस्टब्स्ट इस्टब्स्ट इस्ट इस्टब्स्टिस स्टब्स्टिस स्टब्स्टिस स्टब्स्टिस इस्टब्स इस्टब्स इस्टब्स इस्टब्स इस्टब्स इस्टब्स इस्टब्स इस्टब्स इ	Formstion: Describe color, texture thickness and mature of each size	
		512 ft. Deptholoson		(B) CASING INSTALLED: Steel XR Fresh
777	" Home balake			
# Sr		THE PART OF A STREET	וופו אומיוידי דערערבי הי	D Bond D Thempile Withman D Rompiles
अ डि	<b>-</b>	ismeter of well below cerein		The way and a migration of the Well of the World
म टि			expecting gradestry.	D model D minester T minester D model D model D model D minester D
	oted, finds ores		omesong malesdrA	Markey Air XX Darwells Demarks Described Discovery Air Average Discovery Discovery Markey Discovery Markey Discovery Markey Discovery Markey Discovery Markey Discovery Discover
	Patiste Date are fresh. Date	n hand waled at OS   The req. adi	omesong malesdrA	(3) LALE OF WELL. (4) PROPOSED USE (check):
	ASA Date 1 other 10 o	nd SO its below land a	first as which water was first four Static lavel Greening presents	(3) TYPE OF WELLs  (4) PROPOSED USE (check):  [Buttery Mat   Durante   Duran
	ASA Date 1 other 10 o	Completed well.  A OS O  Inc. perent per experience.	(11) WATER LEVEL. Depth at which water was first four Statis level	Now Well XIX Despending   Récommittéeming   Abandom    U abandomment, describe material and procedure in item 12.  (3) TYPE OF WELLA.  (4) PROPOSED USE (check):  Describe Mandral   Mandral    Describe Mandral   Describe    Describe Mandral   Descri
	ASA Date 1 other 10 o	nd SO its below land a	Hat:  (11) WATER LEVEL.  Spain level was first four level.  Artesian presente	(3) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (4) PROPOSED USE (check):  [1] International description of the proposition of th
	ASA Date 1 other 10 o	Completed well.  A OS O  Inc. perent per experience.	Address at well location: Decl.  (11) WATCR LEVEL.  Depth at which water was first four  bintic level.	(2) TYPE OF WORK (check):  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  [10] Check Ch
	ASA Date 1 other 10 o	Completed well.  Completed well.  A Discovered in the peregrams of the peregrams.	Advess at well location: Decl.  Depth at which water was first four steam level.	(3) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (7) TYPE OF WELL.  (8) PROPOSED USE (check):  (9) TYPE OF WELL.  (10) PROPOSED USE (check):  (11) Check OF WELL.  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (10) TYPE OF WELL.  (11) TYPE OF WELL.  (12) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (7) TYPE OF WELL.  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (10) TYPE OF WELL.  (11) TYPE OF WELL.  (12) TYPE OF WELL.  (13) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) TYPE OF WELL.  (7) TYPE OF WELL.  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (14) TYPE OF WELL.  (15) TYPE OF WELL.  (16) TYPE OF WELL.  (17) TYPE OF WELL.  (17) TYPE OF WELL.  (18) TYPE OF WELL.  (18) TYPE OF WELL.  (19) TYPE OF W
	BS-pl ated constructed desired over	Lake Estates Llecresk Rd. Completed well  ad  A  Second Se	Address at well location: Decl.  (11) WATCR LEVEL.  Depth at which water was first four  bintic level.	Address 5522 7th Ave 5.E.  (3) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WORK (check):  (6) PROPOSED USE (check):  (7) TYPE OF WORLD.  (8) TYPE OF WORLD.  (9) TYPE OF WORLD.  (10) PROPOSED USE (check):  (10) TYPE OF WORLD.  (11) PROPOSED USE (check):  (2) TYPE OF WORLD.  (3) TYPE OF WORLD.  (4) PROPOSED USE (check):  (5) TYPE OF WORLD.  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WORLD.  (9) TYPE OF WORLD.  (10) PROPOSED USE (check):  (11) PROPOSED USE (check):  (12) TYPE OF WORLD.  (13) TYPE OF WORLD.  (14) PROPOSED USE (check):  (5) TYPE OF WORLD.  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WORLD.  (9) TYPE OF WORLD.  (15) TYPE OF WORLD.  (16) PROPOSED USE (check):  (17) TYPE OF WORLD.  (18) TYPE OF WORLD.  (18) TYPE OF WORLD.  (19) TYPE OF WORLD.  (19) TYPE OF WORLD.  (19) TYPE OF WORLD.  (10) TYPE OF WORLD.  (10) TYPE OF WORLD.  (10) TYPE OF WORLD.  (10) TYPE OF WORLD.  (11) TYPE OF WORLD.  (12) TYPE OF WORLD.  (13) TYPE OF WORLD.  (14) PROPOSED USE (check):  (15) TYPE OF WORLD.  (16) TYPE OF WORLD.  (17) TYPE OF WORLD.  (17) TYPE OF WORLD.  (18) TYPE OF WORLD.  (19)
\$-12-	michvibdes  354  cated cocker	Lake Estates  1. ccreek Rd.  Completed well.  ad  130 It bolow land.  170 It bolow land.	Antens at well location: Deel.  Address at well location: Bat.  Deel I WATCH LIEVEL.  Deel at which water was first four control of the contr	Address 5522 7th Ave 5.E.  (3) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  14 chandement, describe material and procedure in item 13.  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  15 character, the material of the tem 13.  16 character of the tem 15.  17 character of the tem 15.  18 character of the tem 15.  18 character of the tem 15.  19 character of the tem 15.  10 character of the tem 15.  11 character of the tem 15.  12 character of the tem 15.  13 character of the tem 15.  14 character of the tem 15.  15 character of the tem 15.  16 character of the tem 15.  17 character of the tem 15.  18 character of the tem 15.  19 character of the tem 15.  10 character of the tem 15.  11 character of the tem 15.  12 character of the tem 15.  13 character of the tem 15.  14 character of the tem 15.  15 character of the tem 15.  16 character of the tem 15.  17 character of the tem 15.  18 character of the tem 15.  19 character of the tem 15.  10 character of the tem 15.  11 character of the tem 15.  12 character of the tem 15.  13 character of the tem 15.  14 character of the tem 15.  15 character of the tem 15.  16 character of the tem 15.  17 character of the tem 15.  18 char
\$-12-	michvibdes  354  cated cocker	S T SS R R L STARKS Estates  Take Estates  T	Marion  W Meeting  Includes at well location: Deel  Makes at well location: Deel  (11) WATER LEVEL.  Depth at which water was first four  level to be a first four  Maricular pressure	Memos Ted Richard.  Address 5522 7th Ave 5.E.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  14 cherchen the describe material and procedure in Rem 12.  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  15 chercy Max.  16 chercy Max.  17 chercy Max.  18 chercy Max.  19 chercy Max.  10 chercy Max.  11 chercy Max.  12 chercy Max.  13 chercy Max.  14 chercy Max.  15 chercy Max.  16 chercy Max.  17 chercy Max.  18 chercy Max.  19 chercy Max.  10 chercy Max.  11 chercy Max.  12 chercy Max.  13 chercy Max.  14 chercy Max.  15 chercy Max.  16 chercy Max.  17 chercy Max.  18 chercy Max.  19 chercy Max.  19 chercy Max.  10 cher
\$8-12-	michvibdes  354  cated cocker	S T SS R R S L S S L S S L S S L S S L S S L S S S S S S S S S S S S S S S S S S S S	Markens of which water was first four Deed (11) WATCR LEVEL. Depth at which water was first four level and level and transcome of the control	Neme Ted Richard  Address 5522 7th Ave 5.E.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  Now Well XEX Despends   Recommitted in Rem 13.  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  10 Address 5522 7th Ave 5.E.  11 Address 12 Address   Dements 12 Address 2.E.  12 Address 12 Address 2.E.  13 Address 12 Address 2.E.  14 Address 12 Address 2.E.  15 Address 12 Address 2.E.  16 Address 12 Address 2.E.  17 Address 12 Address 2.E.  18 A
8-12-	Paddivinden Backdivinden Backdi	S T SS R R S L S S L S S L S S L S S L S S L S S S S S S S S S S S S S S S S S S S S	RESOURCES DEFT.  (10) LOCATION OF W.  (11) WATER LEVEL.  (11) WATER LEVEL.  (11) WATER LEVEL.  (12) LOCATION OF W.  (13) WATER LEVEL.  (14) WATER LEVEL.  (15)  (16)  (16)  (17)  (18)  (18)	STATE OF OREGON  (1) OWNER.  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (1) OWNER.  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (1) OWNER.  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (1) OWNER.  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (1) PROPOSED USE (check):  (1) PROPOSED USE (check):  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (1) PROPOSED USE (check):  (1) PROPOSED USE (check):  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (1) PROPOSED USE (check):  (1) PROPOSED USE (check):  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WELL.  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (1) PROPOSED USE (check):  (1) PROPOSED USE (check):  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WELL.  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (1) PROPOSED USE (check):  (1) PROPOSED USE (check):  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WELL.  (6) PROPOSED USE (check):  (7) PROPOSED USE (check):  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (1) PROPOSED USE (check):  (1) PROPOSED USE (check):  (1) PROP
WA	medivided September 1997  A Substitution 1994  B Su	VELLs  Differ's well num  S5 T 85 R  Loc 6 R  Completed well.  A30 R below lands  ad  A40  A50  A50  A50  A50  A50  A50  A50	RESOURCES DEFT.  (10) LOCATION OF W.  (11) WATER LEVEL.  (11) WATER LEVEL.  (11) WATER LEVEL.  (12) LOCATION OF W.  (13) WATER LEVEL.  (14) WATER LEVEL.  (15)  (16)  (16)  (17)  (18)  (18)	STATE OF OREGON  (1) OWNER;  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check);  (5) TYPE OF WELL.  (6) PROPOSED USE (check);  (7) OWNER;  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (1) OWNER;  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check);  (5) TYPE OF WELL.  (6) PROPOSED USE (check);  (7) OWNER;  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (1) OWNER;  (1) OWNER;  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check);  (5) TYPE OF WELL.  (6) PROPOSED USE (check);  (7) OWNER;  (8) TYPE OF WELL.  (9) TYPE OF WELL.  (10) OWNER;  (11) OWNER;  (12) OWNER;  (13) OWNER;  (14) OWNER;  (15) OWNER;  (16) OWNER;  (17) OWNER;  (18) OWNER;  (18) OWNER;  (19) OWNER;  (19
73 73	Paddivinden Backdivinden Backdi	State Fermit No.  VELLs  Deliar's well num  SE T SE R  Lac 6 Rule 2  COmpleted Well.  A	Arcalus presents  Scattle NATER LEVEL.  (11) WATTER LEVEL.  Canning Marylon  Bath  Canning Marylon  Bath  Canning Marylon  Bath  Canning Marylon  Canning Maryl	WATER WELL REPORM,  (1) OWNER;  (2) TYPE OF WELL.  (3) TYPE OF WELL.  (4) PROPOSED USE (check):  (5) TYPE OF WORK (check):  (6) PROPOSED USE (check):  (7) OWNER;  (8) TYPE OF WORK (check):  (8) TYPE OF WORK (check):  (9) TYPE OF WORK (check):  (1) OWNER;  (2) TYPE OF WORK (check):  (3) TYPE OF WORK (check):  (4) PROPOSED USE (check):  (5) TYPE OF WORK (check):  (6) PROPOSED USE (check):  (7) OWNER;  (8) TYPE OF WELL.

 $\checkmark$ 

WATER WELL REPO STATE OF OREGON	RTM
SIATE OF OREGON	10491

## RECEIVED

State Well No. 85/3w-25

PLEASE TYPE or PAINT EN 41983 State Permit No. WATER RESOURCES DEPT SHIEMOCRESON OF WELL: (1) OWNER: Name STEVE TATONE . . County Marion 4711 Shire Ct. S.E. Address 4 Section 25 т. 85 14 W.M. Salem Oregon Lot 8 Tex Lot # 2 2.00 <u>mt 2</u> State . Şabdiviniya Deerlake Estates Address at well location: (2) TYPE OF WORK (check): Battlecreek Rd., Salem New Well Fix Deepening □ Reconditioning □ (11) WATER LEVEL: Completed well. If abandonment, describe material and procedure in Item 12. 110 Depth at which water was first found (3) TYPE OF WELL: (4) PROPOSED USE (check): ft. below land surface. Date 4-21-83 Static level Rotary Mir TM Driven Rotary Mud () Dug Artesian pressure lbs. per square inch. Date Dug Borod Irrigation Test Well Other 0. Withdrawn ☐ Reinjection (12) WELLLOG: 496 Depth drilled ft. Depth of completed well (6) CASING INSTALLED: Formation: Describe color, teature, grain size and structure of materials; and show thickness and nature of each stratum and equifer penetrated, with at least one entry Welded .79... .. ft. Gauge ...... 250. for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata. *Diam. from ...... ft. to ..... ft. Gauge LINER INSTALLED: MATERIAL From 496 A. Gauge 160 PSI PVC ..£b. Soil 0 Brown Clay 2 (6) PERFORATIONS: Perforated? Yes O No Tan Clay Electric Saw Type of perferator used Red Clay 13 24 Size of perforations 10 Gray Sticky Clay 24 108 perforations from 436 st to 476 Multi-Colored Clay 33 74 Gray Claystone 107 White Bandy Clay 107 112 (7) SCREENS: Well screen installed? ☐ Yes XX No Gray Claystone 112 208 Manufacturer's Name . 208 Gray Sandstone 335 Gray Sticky Clay *33*5 351 362 .... Slot Size ...... Set from ..... Gray Claystone Slot Size ...... Set from .... A............. Gray Sandstone Drawdown is amount water level is lowered (8) WELL TESTS: (8) WELL TESTS: below static level
Driller Recommended Pump Be Set At 466!
We a pump test made? I Yes KINO If yes, by whom? 12 Hour Pump Test 4-29-83 10.3 GPM After 1 Hour gal/min. with ft. drawdown after hrs. 6.0 GPM After 4 Hours Air Test May Fluctuate 6.0 GPM after 12 Hours gal/min. with drill stem at 495 ft. Airtest hra. Bailer test gal/min.with ft. drawdown after hrs. dan flow ersture of water Depth artesian flow encountered ...... ft. 19.83 Work started 4-19 19 83 Completed .21 (9) CONSTRUCTION: Special standards: Yes NATU Date well drilling machine moved off of well Well seal—Material used ......Cement (unbonded) Water Well Constructor Certification (if applicable): This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief. Well sealed from land surface to ..... Diameter of well bore to bottom of seal ......1Q....... in. _ Date..... Number of sacks of cement used in well scal ...... **Bonded Water Well Constructor Certification:** How was coment grout placed? .....Air. Grout..Pump. _Issued by: _ Screty Company Name This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Name ...MONDERS_DETILING_INC. Was pump installed? ......No... . Type ...... HP ...... Depth ..... Was a drive shoe used? 15 Yes D No Pluss ...... Size: location ...... Address P.O. Box 15087 Salem Oregon 97309 Did any strata contain unusable water? 

☐ Yes XIXXo Type of Water? depth of strata [Signed] ___ D. Mandora Method of sealing strata off <u>4–22...., 19. 83.</u> Was well gravel packed? ☐ Yes XIXo Size of gravel:. Date ..... Gravel placed from ...... ... ft. to ....

> NOTICE TO WATER WELL CONSTRUCTOR The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT, BALEM, CRECON 97810 within 80 days from the date of well commission.

57°45292-690

# RECEIVED

STATE OF CREGON OCT O , sees		
WATER SUPPLY WELL CEPORT 4 2002	WELL I.D. # L. 57198	
(as required by ORS 537. MATER RES., 14 ISPER DEDT	START CARD # 1015250 1	
(as required by ORS 537, WATER RESUURCES DEPT Instructions for completing USA 1284; OMPREM that page of this form.	Ontario Orașio II	
(1) LAND OWNER / \ Well Number	(9) LOCATION OF WELL by legal description:	
Name KEN VANOSDOL	1 a AAAAAAAA	
Address 3375 DEER LAKE CT. SE		
	Township 8.5 N or S Range 3 6 E or W. WM.	
	Section 25 Skg 1/4 NE 1/4	冏
(2) TYPE OF WORK	Tax Lot OTOC Lot Block Subdivision	DRAFT
□ New Well □ Deepening ★Alteration (repair/recondition) □ Abandonment		
(2) DDIT METION.	Street Address of Well (or nearest address) SAME AS 1	[뉲
(3) DRILL METHOD:		
Rotary Air Rotary Mud Cable Auger	(10) STATIC WATER LEVEL:	
Other	336 ft. below land surface. Date 9667	
(4) PROPOSED USE:	Artesian pressurelb. per square inch Date	
Community   Industrial   Irrigation	(11) WATER BEARING ZONES:	
☐ Thermal ☐ Injection ☐ Livestock ☐ Other		
(5) BORE HOLE CONSTRUCTION:	Depth at which water was first found	
Special Construction approval   Yes   No Depth of Completed Well   1761.		_
Explosives used  Yes No Type Amount	From To Estimated Flow Rate SWL	121
	420 432 3 apm 336	[잔
. HOLE SEAL	7	DRAF1
Diameter From To Muterial From To Sacks or pounds		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ىلىت
6 0 497 (EXISTING - ORIGINAL		
SEAL UNDISTURBED	)	
	(12) WELL LOG:	
How was seal placed: Method □A □B □C □D □E	Ground Elevation	
Mother EXISTING	Crowns purroupal	
Backfill-laced from 1. to 1 Material	Material From To SWL	
Gravel placed from fb_to ft. Size of gravel	REMOVED LINER TO	田
		K
(6) CASING/LINER:	MINIMIZE WASHING EFFET	DRAFT
Diameter From To Gauge Steel Plastic Welder Threaded	OF SEDIMENT LINER	知
	BROKE OFF AT 102 THEN	
_ CEKISTING O O O	REMUNING LINER WAS	
	DRILLED OUT, CAMERI	
	WAS RAN DOWN THE WELL	
11mm: 4 0 GPO 1160   X X		•
(REMIMED)	TO FILID STATIC AT 336	
Drive Shoe used   Inside     Outside   None	APD WATER BEARING 2015	
Final location of shoc(s) EXISTUG	LAS 420 -432 ORIGINAL	_
(7) PERFORATIONS/SCREENS: NOWE	SEAL WAS UNTOISTURBED 336	DRAF]
Perforations Method	AND SHOWED AND CASTADIAN.	121
	WATER	
Screens Type Material Material		
From To size Number Diameter size Caring Lines		للاست
From 10 / Marchanitery brancher, Sale Classes 1200-		
<del>/                                     </del>		
<del>////////-</del>		
	Dela desid State log On the Charles	
(8) WELL TESTS: Minimum testing time is 1 hour	Date started 7/23/02 Completed 9/28/07	
Pump □ Bailer <b>DA</b> Air □ Artesian	(unbonded) Water Well Constructor Certification:	
Yield gal/min Drawdown Drill stem at Time	I certify that the work I performed on the construction, alteration, or abandon-	
	ment of this well is in compliance with Oregon water supply well construction	
3 497 thr.	standards. Materials used and information reported above are true to the best of my knowledge and belief.	
	WWC Number 1750,	
	Signed Date 9/80/07	
670		
Temperature of water 53 Depth Artesian Flow Found	(banded) Water Well Constructor Cerdification:	
Was a water analysis done? My Yes · By whom	I accept responsibility for the construction, alteration, or abandonment work	
Did any strata contain water not suitable for intended use? NO 1 Too little	performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well	
Salty Muddy Odor Colored Other	construction standards. This report is true to the best of my knowledge and belief.	
Depth of strata:	WWC Number	
	Signed Date	

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/:	310	-25	_	 
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DECEIVED OCT 16 1992 WATER RESOUR

1986 LES DEP	89/3W-25
(9) LOCATION OF WELL	by legal description:
County Marion Latterda	/ Tonoitude

(1) OWNE	2.		Orange We	11 NA1	SAL	<del>EM, OR</del>	(9) LOCATION OF WELL by	logol	locarin	Hon:	
Name_	R: ROTH LAN	D AND	BUILDI	NG D	EVELO	PMENT	County Marion Letitude		Longitud		,
Address	4196 81s	t Stre					Township 8 South Nors, Re	3 W	est	_E or W,	WM.
City	<u>Salem</u>		State O	rego	n Zip		Bertion 25 -	<u> </u>			
(2) TYPE (	)F WORK:						Tax Lot Lot 16 B	ock	Subd		-
IX New Well	Despen	Recon	dition	☐ Ab	endon		<ul> <li>Street Address of Well (or nearest address</li> </ul>	). <u></u>			
(3) DRILL	METHOD:						Deerlake Estates Pha			_	
Rotary Air	Rotary Mu	ı 🗆 (	Cable	☐ Oth	iet		(10) STATIC WATER LEVE	L:			
	······································					<del></del>	140 A. below land surface.		Date	<u>5-1</u>	.8 <u>–86</u>
		<del></del>					Artesian pressure [h. p	r square in	h. Date		
(4) PROPO	SED USE:	☐ Indust		Irrigat	<b>u</b>		(11) WELL LOG: Ground electric	ation			
hermal	Injection	Other		i miliku	<u></u>		Material	From	To	WB?	SWL
(5) BORE							Soil	0	1		
(0) 2011		oth of Comp			515	£	Brown ? Clay	1	13		
•	<b>S</b> p	cial Standa	rds date of s	pprova			Tan Clay	13	54	ļ	<b> </b>
HOLE	To Meteri	SEAL From	То	-	Amount		Gray Claystone Light Gray Claystone	54 112	112 136		
		1 1					Gray Claystone	136	206	<del>                                     </del>	<del> </del>
10" . 0'	601 Cemer	t 0'	60'	28	Sacks		Gray Claystone Gray Sandstone	206	348	<del>                                     </del>	$\vdash$
6" 60°	535.	1-		-			Green Sandstone	348	392		
		<del></del> _	AAA				Gray Sandy Claystone	392	405		
How was seal place	ar Method 📙	а ⊔В	لا تعمم	9 🗆	ıR		Gray Sandstone	405	475		<u> </u>
Backfill placed from	n . A to	Α.	Materia				Light Gray Sandstone	475	486	XX	<del>-</del>
Gravel placed from							Gray Sandstone	486 525	525 535	<del> </del>	140
(6) CASING	LINER:						Gray Sandy Claystone	ركد	1232	$\vdash$	1.240
Diamete	· From To	Gauge 250					Air Test May Fluctuate				
Casing 6"	<u> +1  60'</u>	. 430			XX 						
	+						5% Bentonite Used To Se	B.]	1	<del> </del>	<del> </del>
						_	Well	+	+	<del> </del>	-
Liner 4"	0' 51	160	□ ¾	X	TX.		Driller Reccomended	+	1	<del>                                     </del>	
	1				□ .		Pump Be Set Between				
al location of al						<del></del> -	475' To 500'				
(7) PERFO	-								<b> </b>	<b></b> -	
Perforati		M	ectric				<del> </del>	+	+		
Screens	Type Slot		M					-	+	1	
om To		ber Diam			Casing	Liner					
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					□.	_ 🗖 🧻	Data structed : -5-15-86 c		5-1	8-86	·
					<u> </u>		Dan sid ka	completed _			
(8) WELL'	rests: Mi	imum te	sting ti	me is	1 hour Flowing		(unbonded) Water Well Constructor  I constructed this well in compliant			wall acco	skratio
Pump	☐ Baller	XXX		I	☐ Artesia		standards. Materials used and information	n reported	above a	re true to	my be
Yield gel/min	Pumping leve	) Dr	ill stem at	1	Time Whr		knowledge and belief.				
8	<del> </del>	51	.5	$\dashv$	1 hr		Signed		Date_	·	<u> </u>
							(bonded) Water Well Constructor Co	rtificatio	m:		
							I accept responsibility for construc	tion of th	is well a	nd its co	mplian
Temperature of we			pth Artesia	n Flow I	Found		with all Oregon water well standards. T	his report	is true	to the be	st of m
Was a water analy							knowledge and belief.		Date 5		
Did any strata con							Signed D . Mandax				

### MEGELVEL

STATE OF OREGON WATER WELL REPORT

JUL 1 6 1984
WATER RESOURCES DEPT

8\$/3W-25a

SALEME STREET, OF PRINT IN INK (as required by ORS 587.765) (for official use only) (10) LOCATION OF WELL by legal description: (1) OWNER: Marion 34 of Section _ ROTH LAND AND BUILDING DEVELOPMENT 8 South (Remark Rent or West) WM. Addres 4196 81st Street N.E. (Township is North or South) State Oragon Phase 2 Tex Lot 2404 Lot 17 Block Selen MAILING ADDRESS OF WELL (or nearest address) (2) TYPE OF WORK (check): Deerlake Estates Reconditioning D Abendon 🗆 Deepening [ Now Welly 5 Battlecreek Rd. Salem. Ore. ecribe material and procedure in Item 12. (11) WATER LEVEL of COMPLETED WELL: (4) PROPOSED USE (check): (3) TYPE OF WELL: Depth at which water was first found Martin MA ☐ Municipal ☐ Rotary Atr XX Domestic ft. below land surface. Date 6-14-84 Thermal:

Withdrawal Static level Reinjection Rotary Mud 🚨 Duz Intestion lbs, per square inch. Date Artesian messuro ☐ Grounding . 🗅 (12) WELL LOG: Diameter of wall below casing ft. Depth of completed well 500 Depth drilled (5) CASING INSTALLED: 圾 Plastic Formation: Describe color, texture, grain size and structure of materials, and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata. Threaded Welded 250 _.Diam_from +1 £ to _59 _ ft. Gruze __e Æ. Genra ..... ft. to _ Diem. from ..... LINER INSTALLED: Plantic Steel MATERIAL From To Soil m Gauge 160_PST " Diam. from __O. A to _500_ A 17 Brown Clay Perforated? 28 (6) PERFORATIONS: 17 Red Clay 1/8 28 35 Size of perforations Light Tan Clay Sticky # to 480 A <u> 39</u> 240 52 35 perforations from Grav Clay 207 perforations from ft. to 52 **Grav Claystone** 235 Coarse Gray Sandstone 207 perforations from . ft. to. 235 420 Gray Sandstone (7) SCREENS: Well screen installed? 

Yes KNo 455 420 Grav Claystone Manufacturer's Name 476 455 Light Gray Sandstone Model No. Type. 1301 476 500 Grav Sandstone .... Bet from . Sint Size ... ___ Set from____ ft. to. Sint Size _ Diam. Drawdown is amount water level is lowered (8) WELL TESTS: Driller Recommended Pump Be Set At 4701 gal/min. with ft. drawdown after bre <u> Air Test May Fluctuate</u> gal/min. with drill stem at 408 ft. hrs. Air test gal/min. with ft. drawdown after hrs. Bailer test Artesian flow g.p.m. Depth artesian flow encountered. perature of water 5**-**14 _13 /completed Date work started. Special standards: Yes 🗆 Noxel (9) CONSTRUCTION: Date well drilling machine moved off of well Cement (unbonded) Water Well Constructor Cortification (if applicable): Well sen!—Material used This well was constructed under my direct supervision. Materials used and Well sealed from land surface to information reported above are true to my best knowledge and belief. 10 Diameter of well hore to bottom of scal Diameter of well bore below scal. Date ... 15 secks X pounds D (Signed) Amount of sealing material (bonded) Water Well Constructor Certification: Air Groutt Pump How was cement groat placed? Issued by: (mumber) MONDERS DRILLING INC. On bahalf of _ Depth. (type or print pame of Water Well Co HP - Spellateni quing asW Туре Was a drive shoe used? D Yes X No Plugs Size: location This well was drilled under my jurisdiction and this report is true to the ☐ Yes XXNo Did any strata contain unusable water? best of my knowledge and belisf: depth of strata Type of Water? (Signed) Method of sealing strata off Was well gravel packed? 

Yes Size of gravel: <u>6-16-84</u> **1370** (Dated)

NOTICE TO WATER WELL CONSTRUCTOR.

The original and first copy of this report

are to be filed with the

ft. to

Gravel placed from .

WATER RESOURCES DEPARTMENT, BALEM, OREGON 97310 within 30 days from the date of well completion. BP*46866-690

STATE OF OREGON
WATER SUPPLY WELL REPORT 1 8 2002
(as required by ORS 537,765)
Instructions for completing that the property in the completing that the property is the completing that the completing the completing that the completing the completing that the completing that the completing the completing that the completing that the completing that the completing the completing the completing the completing that the completing th

MARI 56944 ----

DEC 07 2004(START CARD) # 144205

(1) OWNER: SALEM, OFFICO N. 61283	IN LANGUAGE DEPT.
(1) OWNER: Well Rumber: 61283	(8) LOCATIONESTRESCUBS TO THE COURTY SECURITY SECURITY LONGITUDE
Namo Clarence & Betty Wolf	Township B/8 NorS. Range , 3/W E or W. of WML
Address 4730 Aubum Rd NE #84 City Salem. State OR Zip 97301	Section 24.354 NW 1/4 NE 1/4
	Tex lot 3600 Lot Block Subdivision Street Address of Well (or nearest address) 7038 Battle Creek Rd.
(2) TYPE OF WORK:	Salem, CR
X:New Well -Deepening Attention (repair/recondition) :  Abandonment	(10) STATIC WATER LEVEL:
(3) DRILL METHOD:	143 ft. below land surface. Date 11/8/190:
XiRotary Air Rotary Mud   Cable Auger	, Artesian pressure (b. per square inch. Date
Other	(11) WATER BEARING ZONES:
(4) PROPOSED USE:	Depth at which water was first found 180
Xi Domestic   Community Industrial Impation	
Thermal imjection jLivestock Other	From To Estimated Flow Rate SWI 170 180 3 14
(5) BORE HOLE CONSTRUCTION:	230 248 12 14
Special Construction approval Yes X'No Depth of Completed Well 281 R.	
Explosives used Yes X No Type Amount  MON E SEAL Amount	<u> </u>
HOLE SEAL Amount  Diameter From To Material From To sacks or pounds	(12) WELL LOG:
10 0 69 Bentonite 0 50 21 eacks.	Ground elevation
6 54 261	Meterial From To SWI
	Clay brown fill 0 8
• • •	Clay brown med 8 17   Claystone green & brn rusty seamy 17 33
	Claystone white slity hard 33 35
How was seal placed: Method A B ;C D E	Silstone brown tan hard 35 37
X.Other poured and probed  Back@piccod from SD	Siltstone gray med-hard 37 42
Back@piaced from 50 ft. to 59 ft. Material Bentonite Genvel placed from ft. to ft. Size of gravel	Silstone grey & black hard 42 47     Sandstone fine grained drk grey 47
	lhard 52
(6) CASING/LINER:  Diameter From To Gauge Steel Plastic Welded Threeded	Silstone grey hard 52 59
Casing: 6 41 59 .250 X: X : 1	Claystone light gray hard 59 72 Claystone drk gray wishells hard 72 85
	Claystone grey sity hard 85 87
	Sandstone grey & purple hard 87 99
Liner: 4 -4 281 160 X X	Silstone grey wishells hard 99 120
LIG. 4 - 1 201 100	Sandstone grey med hard 120 144   Sandstone fine blue grey soft 144 183 14:
Final location of shoo(a)	Sendatone m-hard blue gray 183 206
(7) PERFORATIONS/SCREENS:	Sandatone soft brownish grey 206 220
X Perforations Method Electric Saw	Sandstone m-hard 220 235 14
Screens Type glots Material PVC	Sandstone hard brownish grey 235 281 14
Siot Telepipe	
From To size Number Clameter size Casing Lines 202 260 1/8 60 6 in X	
102 ; 200 . HO . HO . HO .	
	Date started 11/5/1902 Completed 11/6/2002
	(unbonded) Water Well Constructor Certification:
<u> </u>	I certify that the work I performed on the construction, alteration, or attandonment of this well is in compliance with Gregon water supply well construction standards.
(8) WELL TESTS: Minimum testing time is 1 hour	Motorials used any information reported above syl true to my best knowledge and
Pump Batler X:Alt Plowing Artesian	belief.
Yield cet/min Drawdown Drill stem at Time	Signed WWC Number 1384 Signed Date 14/7/2002
	Signed Signed CANACA. Data 11/7/2002  Macil Drilling Company, Inc.
15 260 1 hr.	
	(bonded) Water Well Constructor Certification: I accept responsibility for the construction, effection, or stendorment work
·	performed on this well stiffing the construction dates prported above. All work
Temperature of Water 56 Depth Artesian Flow found	performed during this time is in apparationage with Option water supply well
Was a water analysis done? Yes By whom  Did any strate contain water not suitable for intended use?	construction standards. Trip-region to trule to furnificeation my knowledge and belief.  WWC Number 4394
	Signey & 7/44
Depth of strata:	Mack Drilling Company, Inc. RECEIVED
ORIGINAL - WATER RESOURCES DEPARTMENT FIRST COPY - CON	

MARI 58163

(WELL I.D.)# L 70508 (page one of two) (START CARD) # 165598

TITAL SAME	TOTAL TO	r comp	Herrit Chr.	reput	410 011	44.0	t page of trus		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
(1) OWN					V	Vell Nu	mber <u>70508</u>		(9) LOCATION OF V	-	_	-		
Name Day				stillo					County Marion				Longitude 44	51.084
Address 71		tlecre	<u>ik Rds</u>						Township 8	<u>s</u>	Range		w	WM.
City Sale:				Sta	te OR		Zip (	97306	Section 25a	NW	1/4	NE	1/4	
2) TYPI										ol	Block_		Subdivision	
				eration	(repair/	recondi	tion) 🔲 Abar	donment	Street Address of Well	(or nearest a	ddress) .	7184 Bat	de Creek Rd	l. S, Sale
3) DRIL	LME	THOL	h:						OR, 97306		<u> </u>			
Rotary	Air [	Rote	ry Mud		lo	Aug	Bei		(10) STATIC WATER	LEVEL:				
Other									85 ft. belo	w land surfa	œ.		Dato 06-1	6-04
4) PROI	POSEI	USE							Artesian pressure	n	. per squ	are inch.	Date	
Domes	tic	Con	munity	☐ Indi	ustrial		Inigation		(11) WATER BEARD	NG ZONE	3:			
Thoma	3	Injec	ion	Liv	estock		Other							
S) BOR	E HO	LE CC	NSTRU	CHO	N:	-			Depth at which water was	first found	130			
Special Co	nstructi	01 Epp1	Y [ lavo	es N	o Dept	h of Co	mpleted Well	283 fl						
			No T		_		mount		From		To .	Estin	ated Flow Ra	te SW
_	OLE	_			SEAL				130	140		1/2		85
Diameter	From	Tb	Mate	eriai	From	To	Sacks or p	ounds	150	160		3		85
			Bentonii		0	50	28 sacks		207	224		1,5		85
6 1/8	59	283				1					- 1 \ / 4	-		
										RECE	:IVE	יעו		
					t —				(A) THE TAGE			<u> </u>		
How was s	eal plac		Method		<u> </u>	lB I	C DI	)  E	(12) WELL LOG:	ellik 2	8 28D	4		
Othe	-					,- ,			Otoma	Contraction of the Contraction o				
Beckfill pi				.59	ft.	Mate	rial Bentoni	te	MalWa	TER RESC	URCE	S DEPA	m To	SWI
Gravel pla		_	ft. to		fl.	•	of gravel		Top soil	SALEM,	OREG	ONO	1	
(6) CAS									Clay & Clay stone br	· · - · - · · · · · · · · · · · · ·		1	8	
	lameter	Fro		Gange	Steel	Plasti	ic Welded	Threaded	Clay br sticky			8	15	1
_		1+1	ls9	.250			12		Boulder			15	17	
Casing: 6"		ᢡ	<del>-   -</del>		l	占		ä	Clay stone tan seamy			17	25	
_		+	-	$\vdash$	18	ä			Clay stone light gray		-	25	31	
		+-	<del></del>		18	ᆸ		ă	Clay stone gray m-ha			31	57	<del> </del>
iner: 4		-3	283	160	1片	Z			Silt stone dark gray m			57	68	
1061: <u>-</u>		1-		<del>                                     </del>	18			ñ	Silt stone light gray, I			68	73	1
Final locat		 hon(=)			וו	ليا		Ļ	Silt stone gray w/shel			73	88	
7) PERI				NS:					Sand stone gray dark			88	93	7
Perf			Method E		ia Ca	141			Silt stone light gray			93	96	
Scre					ic on		laterial PVC		Clay stone light gray	hand		98	100	
	CHS	Sto				Tele/p	be		Sand stone gray m-ha			100	105	
263  2	То 283	1/8	38   38	er   Die	meter	, sta			Sand stone layered b			105	108	
200		100	<del>-  </del>	╌		+-	—		Sand stone light gray		d lavera	108	154	85
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<del></del>	-	+	+-	+-		1	<del>-</del>	片	Sand stone light gray		ors	207	224	85
		+	<del></del>	+		<del>                                     </del>		7	Siit stone gray			224	232	85
				<u> </u>		<u> </u>			******continued on pa	so two			<del></del>	<del></del>
D/ 687579	Y TODO	TO. Y	#i===			in 1 L			Date started 06-14-04	g	Com	pleted 08	-16-04	
oj WEL	LIES	19: Y	linimum	(CSCIII)	R ome	43 T EE	<b>748</b>		(unbonded) Water Well	Constructo				
		<b>,</b>	D-#1	per	<b>-1</b>			wing	I certify that the work				alteration or a	handoom
Pum	•	_	Bailer	_	Air		☐ Art		of this well is in complish	ce with Oneo	on welot	monte we	l construction	stondards
Yield g	aVmin	D ₁	rawdown	280	Drill ste	m et		Time	Materials used and informand belief.	ation repolite	d above	are true to t	he best of my	knowledg
5			<del></del>	200			<del></del>	1 hr.	and delier			WILLIAM TO THE STATE OF THE STA	Number 139	4
			<del></del>	+		<del>-</del>	<del></del>	<del></del>	Simulation of	111	all	***C	Date 08	
	اــــــا						<u></u>	<del></del>	Signed And House Well Co.	1//	40.4	OTD:		
Temperatu	•			-			v Found		(bonded) Water Well Co				- Anondoum-	t more
Was a wat	-			Yes B	-			l'ad	accept responsibility	ior ine consti ning the cons	truction (	instituten, o	ed above. All	work work
Did any et			ter not suit					iitie	performed on this well and performed during this tim construction stemards. T	e is in comp	ince wi	Drosphy	rater supply w	
	<b>□</b> • • • • •	ldy [	]Odor [	_]Color	redi [		r		construction stentiards. T	nis reposedis i			y knowledge a Number 139	
Salty	□wm	• -	-								# M	7.09/WC	NUMBER 133	→
	_								Signed	. [ ] .	1Xs		Date 06	



# RECEIVED

JUN 28 2004

# Mack Drilling Company, Inc. WATER RESOURCES DEPT SALEM, OREGON

Domestic + Commercial + Environmental + Geotechnical Drilling & Well Services

(1) OWNER:	Well Number Start Card #		70508 165598
Name:		•	100000
David Stewart & Jean Castillo	Site		
Address:	7184 Battle (	reek Rd.	S
7184 Battle Creek Rd. S	Salem, Or 9		
City:			
Salem, OR 97306	Pac	ge two of 1	two
(12) WELL LOG:		1	
Material Material	From	To	SWL
******continued from page one******			
Silt stone dark gray w/shell	232	248	85
Clay stone gray sandy	248	256	85
Sand stone wigravel small	256	274	85
San stone light br & gray	274	283	85
			_
			***************************************

<u>~</u>

1345 20TH STREET SE • P.O. BOX 12067 • SALEM, OREGON 97309-0067 • (503) 371-4399 • FAX (503) 375-0961

### STATE OF OREGON WELL LOCATION MAP

This map is supplemental to the WATER SUPPLY WELL REPORT

### Oregon Water Resources Department

725 Summer St NE, Salem OR 97301 (503)986-0900



**LOCATION OF WELL** 

Latitude: 44.85138888 Datum: WGS84

Longitude: -122.9975

Township/Range/Section/Quarter-Quarter Section:

WM 8.0S 3.0W 25 NWNE

Address of Well:

7184 BATTLECREEK RD S, SALEM, OR 97306

Well Label: L70508

Well Log: MARI 58163

Printed: November 4, 2014

DISCLAIMER: This map is intended to represent the approximate location of the well location. It is not intended to be construed as survey accurate in any manner.

Generated by OWRD



MARIA	
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### RECEIVED OVER THE COUNTER

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	Poregon PPLY Well i	<b>5</b>	•	OVE	KIN	COUNTER		2212	1	
(es required b	7 ORS 537.765)			-	•		WELL L.D. # L_ START CARD #		962	
-	r completing this	report are or	the last	page of this	form.	·	SIARI CARD		103	
(1) OMVES:	• •		Well No	mber		(9) LOCATION OF	WELL by legal des	eription:		
delicus 264	nie U	Cook		E		County Mar.			ogitodo	
sy Salen			R		77305	Township 5-		3 · w		W. WM.
TYPE OF		900 C	<u> </u>			Section 25			1/4	
	Despening Alto	cation (repair)	frecondit		EM	Dar Lot 3000 Street Address of W	ell (or newest address)	7087°	ubdivision Ratti	4 6 8
) DRILLME	THOD:					I KM S	Salem	· ·	MALL	<u> </u>
	Rotary Mud		☐\\Amag		211	39) STATIC WAT	er level:			
Other PROPOSE				CCT	3777100	es media	slow land surface.		Dato <u>9 -</u>	20-29
<u>-</u>		Dindustriai		RETAIL	的。唯	A DEPLIE PRESENTO	ib. per squ	ero inch.	Duto	
<u> </u>		Livestock	H	)ther		(II) WAIGE DEAD	and Zones;			
) BORE HO	LE CONSTRUC	TION:				Dopth at which water w	as first found 5	<b>'</b> 4		
pecial Construct	lon approval [ Yes	No Dep	th of Car	opleted Well	85 a		<del></del>			
ixplosives used HOLE	Yes (20%) 1)		A	1100EEE		From	To		d Flow Rat	
	To Mater	· SEAL	-	G		54	80	4.		38
10 0	52 Cemo	al L3	الأكا	9+b	, , , , , , , , , , , , , , , ,	<del> </del>	+	<del> </del>	<del></del> ,	
	Bento		-3	i Sa				<del></del>		<del></del>
							1			
6 52			لِلِ			(12) WELL LOG:				
low was seed plac	od: Mothod		}B [[	C DD	□B		d Elevation			
Other	m ft. to	<u>R</u>	Materi	<b>a</b> 1		Mater	L-1	The same	1 -	T
revel placed from				gravel			au with	Prom	To	SWL
) CASING/L	NER:					Small Co	bbles	0	10	
Districtor	From To (	Garge Stad	Plantie		Threaded	Gray Cla	4	10	24	
ming: 0 1 /	+1.5 53			图			stone	24	44	
-	1 1					Fractured	Stone with	44	54	
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hor: 4-10	+1. 85	<i>160</i> 🗆	E			<del></del>	3			
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inal location of a	m()Casing TONS/SCREEN	Rin	3 <u>5</u>	<u>z 54                                    </u>						
Perfocations	•	Sau					· · · · · ·			<b> </b>
Screen	Туре		Ma	orial				<del></del>		<del>                                     </del>
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के कि	FX6 44	Diameter	<u> </u>	_ 📮 🗀 🗀	<b>EQ</b>					
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				_	崩				<del>                                     </del>	<del></del>
					<u> </u>					
) WELL TES	l'8: Minimum t	esting time i	ls 1 box	T	. [	Dato started 9~17	- 99 Com		-20.	. 99
Pump	Bailer	<b>₩</b> Air		Flow Artes	ing	(unbonded) Water Well	•			
Yield gal/mbs	Drawlern	Drill ster	n et	_	bare	of this well is in complic	I performed on the com see with Oregon water s	combu well on	referention of	landonia
45		83	2	<del></del>	l be	Materials used and informand belief.	्र सम्मन्या ध्वीवधारम् <b>१०</b> ००० स	र्व श्वरी को स्थाप प	est of my in	nowiedge
					f	win	ma.	WWC Nu	<u>  17</u>	03
	- 64	Durch Advices	- M	<u></u>	—— [	Signed /	unclo		Pato 91	21/99
imperature of wa is a water analys		Depth Artesia fes By whom			<del></del>	(boxided) Vilter Weil C				
•	eju austervot ecitep er neuest	-		☐ Too lit		I accopt responsibility performed on this well d	rick the construction of	cration, or abs tos reported al	naenment v 2000. All w	ork ork
Salty   Muck			Other			performed during this tin construction standards.	to is in compliance with	Ornore webs	enrolv mel	1
optic of strate:		-				WA	20-	WWC Nu		13
•					-	. <b>L</b> II	U X			

(USE ADDITIONAL SHEETS IF NECESSARY)

Ducate with the	STATE OF OREGON STATE WELL NO. 18/3W-250
(1) OWNER: STATE ENGIN	EER (11) XVEY I PESUS. A PROMOTOR & AMOUNT & AMO
Name SCAN ENGLISH. CRES	Was a pump lest mader Yes No If yes, by whom?  Yield: gal/min. with tt. drawdown after
(2) LOCATION OF WELL:	Baller test / O gal /min. with 7/O st. days J.
County Marcon Owner's number, it any  14 14 Section 2.5 T. 85 R. 3  Bearing and distance from section or subdivision corner Received.	W.M. Artesian flow g.p.m. Date Temperature of water 56 West o chargest and
Prompilation W line of the NE K of S. 25 T8.	WELL LOG: Diameter of well 6' inc
IN lessel of aid WEK of Sec. thengo NG 8000 ft to the point, thouse 183 0 W 115 ft. It well	29089 Formation: Describe by color character also of metals
3) TYPE OF WORK (check):  W Well A Despening [] Reconditioning []	TOPSOIL O
It abandonment, describe material and procedure in Item 11.	bandon   HED CLAY 2 6 2 (WEATHERED BASALT 6 2 BLUE CLAY 25 3
digation I That Well II Other II Cable II Jet	VELL: BOULDERS 31 3.
(6) CASING INSTALLED: Threaded □ Welded	red   WHITE SHADSTONE 7544 //
"Diam from tt to t Gage th Gag	
(7) PERFORATIONS: Perforated?  Yes j	No I
SIZE of perforations in by in perforations from the to	1 G. P. M. @ 7/
perforations fromft. toft. to	# 8 G PM @ 921 # 1 G PM @ 1157
perforations fromft toft to	
SCREENS: Well screen installed   Yes	M No
Diam. Slot size Set from 11 to Diam. Slot size Set from ft, to	# Work started 5-20. 19 6. Completed 5-2/- 19
CONSTRUCTION:  well gravel packed?  Yes No Size of gravel:	(13) PUMP:
Gravel placed from	"1 + Type: Jame for HP. Types
Material used in seal—SMMITARY SEAC  Did any strata contain unusable water? Tyes No  Type of water?  Dopth of strata	Well Driller's Statement:  This well was drilled under my jurisdiction and this report true to the best of my knowledge and belief.
Method of sealing strata off CASCD + BREKT.  (10) WATER LEVELS:	NAME J. A. SHEED + SONS (Person, firm, or corporation) (Cyne or print)
Static level 40 ft. below land surface Date 7  Artesian pressure Iba. per square inch Date	Driller's well number
[Signed] Stan Suturblate 5-2	[Signed] O. 7, Success, (Well Driller) 5-2/
, , ,	TIONAL SHEETS IF NECESSARY)

WATER RESOURCES DEPT CONTROL OF THE				
ALEXE CORDOR FUND  On set write above the integral E-COUNTER DEFT  To ref well completes.  (1) OWNER:  The County of the County	The original and first copy of this report	RECEIVED	ماذ	(57)
within to days from the days  (1) OWNER:  The Complete Co			<u> - WZ/22</u>	45a
(1) OWNER:  Senior FO WORK (check):  New Well is Despeting   Juscontitioning   Abandon   Homotopa    Reading and dirimon from notion are modification comes  (2) TYPE OF WORK (check):  New Well is Despeting   Juscontitioning   Abandon   Homotopa    Reading and dirimon from notion are modification comes  (3) TYPE OF WORK (check):  New Well is Despeting   Juscontitioning   Abandon   Homotopa    Reading and dirimon from notion are modification comes  (4) TYPE OF WORK (check):  New Well is Despeting   Juscontitioning   Abandon   Homotopa    Reading and dirimon from notion are modification comes  (4) TYPE OF WORK (check):  New Well is Despeting   Juscontitioning   Abandon   Homotopa    Reading and dirimon from notion are modification comes  (5) TYPE OF WORK (check):  There is a senior of the sen	The same to the same to the same to the same to	≈ or PWATER RESOURCES DEPT above this line. ALEM. OREGON		<del></del>
None Court Manufacture State of the State of			•	<del></del>
Secretary   Properties   Prop	Name ROY KRUTSCH		iber	
Canter of Work (check):				W.M.
New Well & December   Recorded to the native and procedure in them 12.  (5) TYPE OF WELL: (4) PROPOSED USE (check):				
Methodement describe materials and procedure in New New (S.)    Color   Driven   Dri				
(3) TYPE OF WELL  (4) PROPOSED, USE (check):  Retary   Driver   Demistric   Industrial   Mandelpal   Mandelpal   Industrial   Mandelpal   Industri				
Porting   Demonstrate   Demonstrate   Indicated   Mendelpal   Demonstrate   Demonstr			it.	
Diese   Bored   Irrigation   Test Well   Other    CASING INSTALLED: Threaded   Wellded    C. Thism. from	Rotary [] Driven []		22	<u>ft.</u>
CASING INSTALLED: Threaded   Welded   C. Thian, from   C. to   C. Gage   L. S.				<u>-28-80</u>
Comment   Comm	CASTAGO TANGMAY I TO	Artesian pressure lbs. per square	inch. Date	•
PERFORATIONS:   Perforation   R. to   R. Gago   Perforation: Described   Test   Ro.		(12) WELL LOG: Diameter of well bel	ow casing	6
Persection   Describe color   Exchange grain describer of color   Section		Depth drilled 57 ft. Depth of complete	ed well 5	7 st
PERFORATIONS: Performicol   Yes   No.  Type of performitors used  Since of purformitors in by in performitors from st. to st st.		Formation: Describe color, texture, grain size and	d structure of	materials;
Site of perforation seed  Site of perforations from	PEDEOD AMONG.	With at least one entry for each change of formette	n Danset such	allere e
Site of perforations in by in perforations from \$\frac{1}{2}\$ to \$\frac{1}			Pal Water-beart	ng strata.
performations from ft. to ft ft.				SWL
perforations from				-
(7) SCREENS: Well screen installed?   Yes   No    Monthacturer's Name   Model No.   Diam.   Site size   Set from   ft. to   ft.    (8) WELL TESAS:   Drawdown is unmark water level is lowered below static level    Wes a pimp test made!   Yes   No   ft yes, by whom?    Relief test   Diam.   Site size   Diam.   No   ft. drawdown after   hra.    Artesian flow   Depth artesian flow encountered   ft.    Diam.   Site size   Diam.   Site	·	Shale & LENSOS		· .
Minimacharet's Name  Minimacharet's Name  Type		SAUDSPORE	24 57	
Monthacturer's Name  Type  Diam. Silet size Set from 1: to 1:  Diam. Silet size Set from 1: to 1:  Diam. Silet size Set from 1: to 1:  (8) WKILL TESTS: Drawdown is amount weter level is lowered below static below static below static below static below static below static sta	(7) SCREENS: Well screen installed? [] Yes M No			
Dism. Stot size Set from 1. to 1. to 1. to 1. Diam. Stot stote Set from 1. to 1. to 1. Diam. Stot stote Set from 1. to 1				
Diam. Hot size				
(8) WELL TESTS: Drawdown is amainst water level is lowered below static level is lowered below static level is lowered below static level.  Was a pump test made!	The Man Control of the Control of th			
Wes a pimp test made?   Yes   No If yes, by whom?    Keld: gal./min. with ft. drawdown after   hrs.				4
Relier test	(8) WELL TESTS: Drawdown is amount water level is lowered below static lovel		_	
Baller test 30 gal./min. with 5 ft. drawdown after / hrs.  Artesian flow g.p.m.  Departure of water Depth artesian flow encountered ft.  (9) CONSTRUCTION:  Well seal-Material used Constructed in the machine moved off of well 12 - 28 - 1980  Defiling Machine Operator's Certification:  This well was constructed under my direct supervision.  Mathematics of well bore below and ceal in.  Number of sacies of cament used in well seal formatical used and helled.  [Signed] Machine Operator's Certification:  This well was defiled under my jurisdiction and this report is true to the best of my knowledge and helled.  Water Well Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and helled.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and helled.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and helled.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and helled.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and helled.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and helled.  Name Contractor's Certification:  This well gravel packed?   Yes No Size of gravel:   Contractor's License No SO Date Well Contractor's License No SO Date Well Contracto	Was a pump test made!   Yes   No If yes, by whom?			
Baller test 30 gal./min. with 5 ft. drawdown after / hra.  Artesian flow g.p.m.  Deparature of water Depth artesian flow encountered ft.  (9) CONSTRUCTION:  Well seal-Material used CONSTRUCTION:  Well seal-Material used Performance to 20 m.  Diameter of well bere to bettom of ceal in.  Diameter of well bere below seal in.  Number of sacies of cament used in well seal seal seals.  How was coment grout placed?  Water Well Contractor's Certification:  This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.  [Signed] Materials used and information reported above are true to my best knowledge and belief.  [Signed] Materials used and information reported above are true to my best knowledge and belief.  [Signed] Materials used and information reported above are true to my best knowledge and belief.  [Signed] Materials used and information reported above are true to my best knowledge and belief.  [Signed] Materials used and information reported above are true to my best knowledge and belief.  [Signed] Materials used and information reported above are true to my brilling Machine Operator's License No. 138  This well was drilled under my jurisdiction and this report is true to the pest of my knowledge and belief.  Name Materials used and information reported above are true to my brilling Machine Operator's License No. 138  Water Well Contractor's License No. 138  [Signed] Materials used and information reported above are true to my best knowledge and belief.  Name Materials used and information reported above are true to my best knowledge and belief.  Name Materials used and information reported above are true to my best knowledge and belief.  Name Materials used and information reported above are true to my best knowledge and belief.  Name Materials used and information reported above are true to my best knowledge and belief.  Name Materials used and information reported above are true to my best knowledge and belief.  Name Materials	Kield: gal/min. with ft. drawdown after hrs.			
Bailer test 30 gal/min. with 5 ft. drawdown after / hra.  Artesian flow g.p.m.  Deparature of water Depth artesian flow encountered ft.  (9) CONSTRUCTION:  Well seal-Material used Construction flow encountered ft.  Well sealed from land surface to 20 ft.  Diameter of well bore to bottom of ceal 10 in.  Diameter of well bore to bottom of ceal 10 in.  Diameter of well bore below seal 10 in.  Number of sacies of cument used in well seal 10 sachs  How was cement grout placed?  Continued Machine Operator's Certification:  This well was constructed under my direct supervision.  Materials used and information reported above are true to my bear throwledge and belief.  [Signed] Machine Operator's License No. 738  Water Well Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the part of the best of my knowledge and belief.  Name Contractor's Certifica				
Artesian flow  persture of water Depth artesian flow encountered  ft.  (9) CONSTRUCTION:  Well seal-Material used  CONSTRUCTION:  Well seal-Material used  Diameter of wall bore to bottom of seal  Diameter of wall bore below seal  Diameter of wall bore below seal  Diameter of wall bore below seal  Number of sacks of cement used in well seal  Elow was coment grout placed?  Water Well Contractor's Certification:  This well was drilled under my direct supervision.  Materials used and information reported above are true to my best knowledge and belief.  [Signed]  Drilling Machine Operator's License No. 138  Drilling Machine Operator's License No. 138  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name  Construction  Type of water?  Method of sealing strata off  Was well gravel packed?   Yes   No   Size of gravel:   [Signed]  Gravel placed from		.:	<del></del> -	<del></del>
West well gravel packed   Yes   No Size of gravel;   Gravel placed from   Size   Size   Size of gravel;   Signed   Size	And a second sec			
(9) CONSTRUCTION:  Well seal-Material used  Well sealed from land surface to  Diameter of well bore to bottom of ceal  Number of sacks of cament used in well soal  How was coment grout placed?  Was a drive shoe used?   Yes   No Flugs   Size: location   Size: location   Size   Size: location   S				
Well sealed from land surface to 20 m.  Diameter of well bore to bottom of seal 20 in.  Diameter of well bore below seal 30 in.  Number of sacies of cament used in well seal 30 sacks  How was coment grout placed?  Comparing License No. 138  Water Well Contractor's Certification:  This well was constructed under my direct supervision.  Materials used and information reported above are true to my best knowledge and belief.  [Signed] ***License** Date 4 6 19.5 /*  Drilling Machine Operator's License No. 138  Water Well Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name **Contractor** Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name **Contractor** Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name **Contractor** Certification:  This well was drilled under my direct supervision.  Materials used and information reported above are true to my best knowledge and belief.  [Signed] ***License No. 138 /*  Water Well Contractor** License No. 138 /*  [Signed] ***License No. 138 /*  Water Well Contractor** License No. 108 /*  [Signed] ***License No. 138 /*  Contractor** License No. 108 /*  [Signed] ***License No. 108 /*  Contractor** License No. 108 /*  Contractor				
Weil sealed from land surface to  Diameter of well bere to bottom of seal		Date well drilling machine moved off of well	2 - 28-	1980
Diameter of well bore to bottom of seal			 !=>=+ +====	
Diameter of well bare below seel	Diameter of well have to be the	Materials used and information reported ab	ove are true	to my
Number of sacios of cement used in well seal			m 4-6-	108/
Water Well Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name **CAALOSCA*** West De'!!!**  Did any strate contain unusable water? ** Yes M No **  Type of water?		(Drilling Machine Operator)		, was
Was a drive shoe used?   Yes No Plags   Size: location   ft.   Did any strain contain unusable water?   Yes No   Type of water?   depth of strain   Mathod of scaling strain off   Was well gravel packed?   Yes No   Gravel placed from   ft. to   ft.   Contractor's Certification:  This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Name   Address   Second   Second		Drilling Machine Operator's License No.	796	
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.  Was a drive since used?   Did any strata contain unusable water?   Type of water?  Method of scaling strata off  Was well gravel packed?   Yes No Size of gravel:  Gravel placed from		Water Well Contractor's Certification:		
Was a drive shoe used?   Yes   No Plugs   Size: location   ft.    Did any strata contain unusable water?   Yes   No    Type of water?   depth of strata    Method of scaling strata off    Was well gravel packed?   Yes   No   Size of gravel:    Gravel placed from   ft. to   ft.    Contractor's License No   SO   Date   4-6-   10-8-/-		This well was drilled under my jurisdicti	on and this r	eport is
Type of water?   Yes & No   (Person, firm or corporation)   (Type or print)    Type of water?   depth of strate   Address 5382 Survey/view fd. NE    Method of sealing strate off   Was well gravel packed?   Yes & No   Size of gravel:   [Signed]     (Water Well Contractor)    Gravel placed from   ft. to   ft.   Contractor's License No. 650   Date 4-6- 19 \$/				
Method of sealing strata off		(Femon, firm or corporation)	(Aype or prin	<del>23</del> .
Was well gravel packed?   Was well gravel packed.   Was well gravel pa		Address 3362 SUNNYHIEW FOR	NE	
Gravel placed from	West graff ground manhads (7 Year Mayor Stee of grant		<u> </u>	
COMMERCIAL INCOMES NO 19-/			···•_	
(USB ADDITIONAL PHEETS IF MECESPARY) SP-655-119				

<b>~</b>		5
	WELL	IVLD
alp a	WATER WELL REPORT 8140 WATER RESC	8 1992 DURCES DÉPT. (START CARD) # 45897
	(1) OWNER: Name Tolon Miller Well Number.	OREGON (9) LOCATION OF WELL by legal description:
<u>~</u>	Address 2537 Landau 3+ SE City Solem State OR Zip 97366	Torrello SCS Ness Press 3 - 144
	(2) TYPE OF WORK:  Recondition	Tax Lot Lot Black Subdivision Street Address of Well (or nearest address) Nane
<u>~</u>	(3) DRILL METHOD  Rotary Air	(10) STATIC WATER LEVEL:
	(4) PROPOSED USE:	156 ft. below land surface. Date 9-30-92  Artesian pressure lb. per square lach. Date
	Domestic	(11) WATER BEARING ZONES:  Depth at which water was first found
	(5) BORE HOLE CONSTRUCTION: Special Construction approval  Yes No Depth of Completed Well 300 ft.	
	Yes No	179 280 20 156
	HOLE SEAL Amount Diameter From To Material From To sacks or pounds 10 0 108 Cement 0 108 30 Sacks	
		(12) WELL LOG: Ground elevation
	6 108 300	Material Prom To SWL
-	How was seal placed: Method	Light brown clay 2 6-8
~	Other	Dark brown clas 58 75
*	Hackfill placed from ft. to ft. Material ft. Size of gravel	Red Clay 75 92
~	(6) CASING/LINER:	Weathered rock 174 194 156
👟	Diameter From To Gause Steel Plastic Welded Threaded	Weathered rock & brown clay 194 226
	(ata 61 +1 108 250 R	Blue Claystone 726 234 Gray Claystone 234238
	,	Gray Clarstone 234238 Broken rock 238 240 156
<b>5</b>		Black baselt 240 254
**	Liner 4 1/2 in O 300 1/60   R R   R	Broken rock 254255 156
	Final heatlon of shorts!	Black baselt 255 274 Gray baselt 274 279
	(7) PERFORATIONS/SCREENS:	Broken haselt 279 250 156
25/	Perforations Method Saw	Gray haselt 280 298
-	Screens Type Material	Blux Clay 298 303
	From To size Number Diameter size Casing Liner	4½ x 6 Packer Set at
	240 300 % 6 /02	160 ft.
~		Date started 9-25-92 Completed 9-30-92
<u>~</u>	(8) WELL TESTS: Minimum testing time is 1 hour	(unbonded) Water Well Constructor Certification: I certify that the work I performed on the construction, alteration, or
<b>=</b>	☐ Pump ☐ Baller	abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.
~	20 300 1hr.	Signed Edward B. Schmid Date 10-1-92
Pump	-35 591 41	(bonded) Water Well Constructor Certification:
	Temperature of water 59 . Depth Artesian Flow Found	I accept responsibility for the construction, elteration, or abandonment work performed on this well during the construction dates reported above, all
<b>~</b> '	Was a water analysis done?	work performed during this time is in compliance with Oregon well
<u>~</u>	Did any streta contain water not stittable for intended use?	construction standards. This report is true to the best of my knowledge and belief.  WWC Number 12 7 3
	Depth of strate:	Signed Floyd Supple Date 10-1-92
	ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECO	ND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER



#### FLOYD SIPPEL WELL DRILLING 1865 Manzanita Street N.B. Keizer, Oregon 97303 390-2841

### RECEIVED

OCT - 8 1992

October 3, 1992

WATER RESOURCES DEET. SALEM, OREGON

State of Oregon Water Resources Department 3850 Portland Road N.E. Salem, OR 97310

### RE: Attached Well Report/Start Card No. 45897

On September 28, 1992 there were questions raised about the construction of this well. Richard Edwards informed me that the Ground Water Division might question the seal location and using the water found below the 238 foot depth.

After the Ground Water Division reviewed the rough field log; I was told by Richard Edwards that Don Miller okayed sealing the well in the upper claystone formation and using all the formation below to the 300 foot depth.

I appreciate the prompt decision made on this matter and would like to thank Richard Edwards for his help and concern. If there are any more questions regarding the construction of this well, please contact me.

Sincerely,

Floyd G. Sipper

FLOYD SIPPEL WELL DRILLING

cc: John Miller (Landowner)

WELL ID#L 61281

(as required by ORS 5 Instructions for complet	<b>WELL REPORT</b> 537. <b>75</b> 的() 1 大 200. Ung this report are on the last	page of this form	Mari 56912	(START CARD) #	144203	
(1) OWNER: Will Name Wait Wells 6985 Third: City Turner.  (2) TYPE OF WOR	ATEA FILSC ATES OF SOLEM CRESON SELECTION CRESON SELECTION SELECTI	OR Zp 97392	(9) LOCATION OF WELL by County Marion Township BIS Nor 8. Re Section 25 A NE Tax tot A 600 Lot Street Address of Well (or nearest Battlecreek: 747	Latitude inge <b>3/W</b> 1/4 <b>SE</b> Block Su	Longitude E or W. of Windle  1/- bdivision	M.
X New Well Deepe	ening Alteration (repair/re	condition) Abandonment	(10) STATIC WATER LEVEL	_ <del>  _                                  </del>		
(3) DRILL METHOD X Rotary Air	D: Rotary Mud Cable	Auger	57 ft. below land surf Artesian pressure		Date 10/2!	5/1902
Other			(11) WATER BEARING ZON	IES:		
(4) PROPOSED US			Depth at which water was first four	nd <b>50</b>		
	Community Industrial election :Livestock	Irrigation Other	From	To Estimated	Flow Rate	,SWL
(6) BORE HOLE CO			. 50	53	2	1
• •		n of Completed Well 261 ft.	145 174	1 <u>50</u> 179	<u>3.</u> 7	57 57
Special Construction appr Explosives used Yes		Amount	211	228	5	57
HOLE Diameter From To	SEAL Material From		(12) WELL LOG:	Ground elevation		
	) Be <u>ntonite</u> : .! ) Cement (	) 6 3 sa <u>cks</u> 5 100 12 eks w/bent			٠_	
6 100 261		Y TOO I I DING WINDON	Material  Basalt bik broken	. <b>F</b> (9	m To 0 6	SWL
		alam	Basalt gray hard wifrxs		6 14	
			Basalt bik vesiculer some	br&blue	1,4	
How was seal placed: Mi	ethod A B XC	D E	i cla <u>ystone</u> Basalt br & gray w/claysto	ne br &	36 36	
X Other poured & p			plue		53	
Backfill placed from Gravel placed from	fil to fil Materi	al f gravel	Claystone blue		53 61 61 80	1
		. 8.0.0	Claystone br sandy Claystone sandy blue som		80 92	
(6) CASING/LINER		Minute Ministra	Claystone sandy blue som	e ķard 🗼 🗀	92 97	
Diameter Fri	rom To Gauge Steel +1 100 ,250 X	Plastic Welded Threaded	Sandstone gray hard		97 110 10 122	57
		# ;	Sandstone drk gray hard Sandstone blue gray wishe		22 150	57
			Sandstone fine grained mil	hard br 1	50	_
Uner: 4	-1 261 <u>160</u>	x x	i seams I Sandstone <u>light gray</u> wigra	wel · 1	174 74 179	57 67
		•	Sandstone white med to se	oft 1	79 211	57
Final location of shoe(s)	100	<del> </del>	Sandstone grey m-hard to		11 228 28 253	57
(7) PERFORATION			Slistone gray hard		28 <u>253</u> 53 <u>262</u>	
X Perforations	Method electric naw	15-1		-		
Screens Sict		Material <u>PVC</u>	Hardness 3 GPG	07 20		
From To size	Number Diameter	size Casing Liner	1.847K			
180 <u>220</u> 1/8 220 260 1/8		<b>X</b>	WATER	RESOURCES DT.	1	
	n a see de la company de l La company de la company d	•	Date started 10/24/2002 SA	LEIVOSENGES ADIS	/2002	
	• • • • • • • • • • • • • • • • • • • •	•	(unbonded) Water Well Constr I certify that the work I performed on	the construction, atteration		
(8) WELL TESTS:	Minimum testing time I	s 1 hour	of this well is in completice with Oreginaterists used and information parties.			
	Bailer X'Air	Flowing Artesian	belief.		-	
Yield gallmin Di	rawdown Drill stam et	Time	Signed as Low I		tumber <u>139</u> 4 0/30/2002	i
16	204 260	1 hr.	Mack Drilling Compa			
	, <del>,,,,,,,,</del>	- 4244	(bonded) Water Well Construct	tor Certification:		
			I accept responsibility for the constru			
Temperature of Water 5	B Depth Artesian Fix	rw found	performed on this well during the cons performed during this time is in comp			•
Was a water analysis don	na? X Yes By whom Mac	k Drilling.	construction standards. This reports	true to the pest of my kno	wiedge and be	
Did any strate contain wa Salty Muddy	iter not suitable for intended use Odor Colored Oth		Signed will be	<i>I II A W</i>	lumber 1394 0/30/2002	•
Depth of streta:		<del></del>	Mack Drilling Compar			

STATE OF OREGON

	4. 14.
Licenses No. 3 o (wear Defice) 3/2 Lo. 19.579	17-18 - Alexandra and a standard and
(Well District	19 Apr. 72 Vandal April 18 Champs
Fred 9 wing M [bengia]	C Wed baseson Bo.1
<u> </u>	
Driller's well number	Standing level anger pertorating 14 14 14 14 14 14 14 14 14 14 14 14 14
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(League with at cathoration) (Tables of Market)	21 & handt fartt saw redsow diploter to dibpod
NAME WEST WELL DRILLING	(9) WATER LEVELS, and delling much
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at troger aidt bne mitcheimit ym rebnu bellfrb asw flew aidt Aelied bne egbelwoni ym is teed eut ot enri	The state of the s
Well Driller's Statements	
	HEOR D II PO 3 2 IF
	M yes, note depth of strata
Invest and mean evode test sile liew to melievele hunoric	Were any atracta needed sealont pollutions FYcs   Were
и и	West curtices enablished seed provided? West I No To what depth 3 JH.
<u> </u>	(8) CONSTRUCTION:
н п	
a a	Give Manufacturer's Name, Model No. and Size
H N	SCHEEMS:
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a a	44 44 44 44 44 44 44 44 44 44 44 44 44
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II H	mt of higher and another to same
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ACCUPATION OF THE PROPERTY OF	(7) PERFORATIONS:
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	Type and size of shoe or well first and some of the original and the same of t
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to order from "84 "04	N 10 0 0 0
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28" 60" Mard Alu adal	<u>"EE " 4 1/01   " " " " " " " " " " " " " " " " " " </u>
	at mont raismaid bound 2 5 maid 8 n 2 5 of m / Moore
mondo da "	15gaD
The word one of the way	M boblestar A
Tross hors - may the "	(6) CASING INSTALLED: If gravel packed
13" 38" 24 feet - 11.	Dang Men D Dang Men D
	To spid of the track Tra
	Domestic if Industrial [ Municipal [ Rotary [
12 4 12 # C 4 4 10	(4) PROPOSED USE (check): (5) EQUIPMENT:
Formetion: Describe by color, character, size of material and structure, and show thickness of aquilers and the idina and rature of the material in each structure penetrated, whin at least one entry for each character of fremous of printedon.	
Formeting: Describe by color, character, size of material and structure, and	It abandonment, describe material and procedure in Item 11.
Total depth it Depth of completed well i & 8 at	☐ mobusedA ☐ garland illamoses ☐ garlandesed 🔟 liew
Plameter of well, fresher.	(3) LALE OF WORK (check):
(II) MEIT FOC:	(BM) = 5.00
Was electric log made of well? [] Xes wife	THE THE PARTY OF T
Temperature of water Was a chemical analysis made? [] Xes 19 Mo	10 d 28 L . 5 7 308 . 1/1 3/4 - 1/1 / 1/1
	Bearing and distance from eaction or subdivision corner
2 to 100 ft	B. F. D. or Street No.
7/10	County Marion Owner's number, it say-
	(s) focytion of well.
<u>H</u> <u>H</u> <u>H</u> <u>H</u>	Com Course
And mote awob ward it dilw alm\lag :hisiY	Address of Attle Chick Of S.
Wes a pump test made? 🛘 Yes 🖼 140 It yes, by whom?	
(10) Melt leals:	OMNIE (1) OMNIE (1)
	(I) OMNEH
EGON State Permit No.	HO HO SIVES CCCC NODEROWS SIVES
The same of the sa	Duplicate with the
CERS REPORT (De Not state wenne 8/2 W-250	TANDRO
725)	

Carry   Continue   C			·····		Y .
NOTICES TO WARREN WILL CONTROL OF THE STATE STAT				"	• •
The optional and first copy			M1 (1)		
at their specific age on the set of the set		The original and first copy	ELL REPORT		
CALCATION OF WELLA SE.  COLOCATION OF WELLA SE		of this report are to be . E. U. JUL 29 1964 Progret of	F OREGON State Well No.	1/34	1-2
(11) OWNER: Name   Fire of   C.   Market   Name   Fire of   Fire of   Fire of   Market   Name   Fire of   Fire of   Fire of   Market   Name   Fire of   Fire of   Fire of   Fire of   Market   Name   Fire of   Fire of		Within 50 days from the date STATE ET.CINEER			•
West a pump test made   Yes give 12 yes, by when   Red Care of the Large   Yes give 12 yes, by when   Red Care of the Large   Red Large   Red Care of the Large   Red Care o		المراجات المستعددة المراجعة ا	<del>                                     </del>	maken Josep	1 60
Soliday   Soli					. 20
C2 LOCATION OF WELL   County Maria of L. Drillie's well number		Address Baby Louise Haven	Yield: 30 gal/min with ft. drawdow		<u>/</u> ;
County   May 1 of   Define's well number   S. R. N. W. N.		Battle Comek Ad. S.E.	•		
County Map   al.   Drillies well number   S.F. 2.   W. M.		* * 44 *		n after	1
Density and distance from sortion or subdivision corner					
Pepth defilled     2			Temperature of water Was a chemical analysis r	nade? 🔲 ?	Zes 🌈
Committee   Comm			. (12) WELL LOG: Diameter of well below e	eding	6
(3) TYPE OF WORK (check):   Now Woll of Despending   Reconditioning   Abundan   Defining   Check   Committee   Check					12
(3) TYPE OF WORK (check):   Now Woll of Despending   Reconditioning   Abundan   Defining   Check   Committee   Check	1		Formation: Describe by color, character, size of materia show thickness of agulars and the loud and nature of i	l and stru he mater	cture, a lai in eg
Solid Street   Soli					TO
Despending   Despending   Beconditioning   Abandon   Despending to Reconditioning   Bandonment, describe material and procedure in form 12   Despending   Describe		(3) TYPE OF WORK (check):		-	2
Carry   Committed   Manufapol   Carry   Deliver   Deli				12	12
Committee   Comm	4	pandonment, describe material and procedure in Itam 12,	Basalt (Fuell + Hard)	<del></del>	19
Demostic   Industrial   Municipal   Coline   Driven   Dri		74) PROPOSED USE (check): (5) TYPE OF WELL:	Recomposed Rasalt	<del></del>	45
Committee   Comm					108
Diam. from ## 6   6   6   6   6   6   6   6   6			Shale (Blue)		772
**Diam from # # to # # Gage    Thinn from # # to # # Gage   Thinn from # # to # # Gage   Thinn from # # to # # Gage   Type of perforations from # # to # # # # # # # # # # # # # # # #		(6) CASING INSTALLED: Threaded   Welded		<b></b>	-
(7) PERFORATIONS: Perforated? If Yes   No Type of perforator used Size of perforations from		· j,			-
(7) PERFORATIONS: Perforated? [Nes   No Type of perforations in by 8 in    perforations from   ft to   ft					
Silve of perforations from				<u> </u>	<del> </del>
Size of perforations in by \$ in.    perforations from		-			_
perforations from ft to ft ft ft perforations from ft to ft					
perforations from ft. to ft.    Deprivations from ft. to ft. to ft.		perforations from 90 st. to 110 st.			
perforations from ft. to ft.    Depth of seal   Sea		-			<del> </del>
(8) SCREENS: Well screen installed   Tes   Model No.  Manufacturer's Name  Type			`		
Manufacturer's Name  Type	•	perforations from			<b> </b>
Manufacturer's Name  Type		(8) SCREENS: Well screen installed   T Yes   The			-
Diam. Slot size Set from fi to ft.  Diam. Slot size Set from fi to ft.  (9) CONSTRUCTION:  Well seal—Material used in seal CECISA & CL34  Depth of seal seal fi Wes a packer used? A Second for Seal LO in.  Were any loose strata commented off? Yes Kno Depth Was a drive shoe used? Yes Kno Depth This well was drilled under my jurisdiction and this regime to the best of my knowledge and belief.  NAME Second fine or corposation Cryps or pathology of sealing strata contain unusable water? Yes Kno Depth Address \$3965 Hayes Villa fit.					
Diam. Slot size Set from ft to ft.  (9) CONSTRUCTION:  Well seal—Material used in seal CECISA & CL3Y  Depth of seal seal ft. Was a packer used? VOE  Diameter of well bore to bottom of seal LO in.  Were any loose strata camented off?    Yes    No Depth    Was a drive shoc used?    Yes    No Size of gravel:  Gravel placed from ft. to ft.  Did any streta contain unusable water?    Yes    No Size of gravel:  Type of water? Depth of strata  Depth of sealing strata contain unusable water?    Yes    No Size of gravel.  Type of water? Depth of strata					
(9) CONSTRUCTION:  Well seal—Material used in seal CLCLS & CL2 Y  Depth of seal	4			My L	19 ( 19 (
Well seal—Material used in seal CLUSA Y CLOV Depth of seal				<i>FI</i>	,,,,,
Depth of seal		(9) CONSTRUCTION:		•	
Diameter of well bore to bottom of scal		Depth of seal ft. Was a packer used?			<u></u>
Was a crive shoe used?   Yes give  Was well gravel packed?   Yes give  Was well gravel packed?   Yes give  Gravel placed from		Diameter of well bore to bottom of scal		•	<del></del>
Was well gravel packed? A Tes   No Size of gravel: true to the best of my knowledge and belief.  Gravel placed from				and this	Mostrony.
Gravel placed fromft. toft  Did any strets contain unusable water?   Type of water?   Depth of strata  Method of scaling strata off		· · · · · · · · · · · · · · · · · · ·	true to the best of my knowledge and belief.	~~	
Type of water? Depth of strata . Address . 3965 Hayes Ville Dr. Sol			NAME George H. Kobinson		
Motion of equitor atom off			(Regular, firm or corporation) (7		
INVESTIGATION OF PROPERTIES STATE OF THE PROPERTY OF THE PROPE			Accress Silver Accessed to the second	py25	
Drilling Machine Operator's License No Z			Drilling Machine Operator's License No.	<b>Y</b>	<del></del>
(10) WATER LEVELS: [Signed] elevel & Robinson			[Signed] Steven H. Robinson		
Static level 30 ft. below land surface Date 36/64  Artesian pressure lbs. per square inch Date Contractor's License No. 13 Date 1			1 7/	8	

### RECEIVLMARI

58254

WATER SUPPLY WELL REP	ORT AUD 1	1 2004	maei	WELL LD. # I	714	09	
(as required by ORS \$37.765) . Instructions for completing this re	WATER RES	OURCES DEPT	58254	START CARD	* <u>166</u>	687	
(1) LAND OWNER	Well Num	T- THE STATE OF TH	(9) LOCATION O	R WELL by lead	description-		
Name Douglas Se	roul			Latitude		Longitude _	
Address 6934 Battle	creek Ad	<u>se</u>	Township 8	N or Range		E0(R)	WM.
City Salem	State OR	Zp 9 7301	Section 2.5	11E_1/4.	<u>Sw</u>	1/4	
(2) TYPE OF WORK			Tax Lot 100	LotBloc		Subdivision ,	
RNew Well Deepening Alte	ration (repair/recondition	a) L]Atanconnent		Vell (or nearest address	3)		<del></del>
(3) DRILL METHOD:  ERotary Air Rotary Mad C	Cable [] Auger		(10) STATIC WAT	<del></del>			
Opher				elow land surface.		Date Of	16/14
(4) PROPOSED USE:			Artesian pressure_		square inch	Date	<u></u>
<b>B</b> Domestic □ Community □ Inc	-		(11) WATER BEAL	RING ZONES:			
☐ Thermal ☐ Injection ☐ Line (5) BORE HOLE CONSTRUCTION	vestock Other		Depth at which water v	vas first found <u>3</u>	6		
Special Construction approval Yes	s No Depth of Con	pleted Well#80n.	From	To		Flow Rate	SWL
Explosives used Yes No Type		munt	36	61	4	5	121
HOLE	SEAL	Sauta on manustra	143	137	•	5	81
Diameter From To Materia	From To	Sacks or pounds	360	460	ļi	<i>5</i>	81
8" 68 79	79	35 Sacks			<del> </del>		-
<del></del>	╼╂╾╼╌┠╌╼╌╂╌		42: 55-24 5 25				<u></u>
How was seal placed: Method	DA DB DAG	D DE	(12) WELL LOG: Grov	and Elevation			
Other			35-4-	4-1	From	To	SWL
Backfill placed from	Material,		Mate	7		<del></del>	SWL
Gravel placed fromft. to	ft. Size of g	Tavel		14	4	36	1
(6) CASING/LINER: Dispeter From To Go	ruge Steel Plastic	Welded Threaded	Weatherd	Basalt	36	61	21
Costony 6 +1 80 0	25008		Hard Base	1+	61	63	
	0 _		Green-Grea	Sandatone	43	69	
<del></del>			Gry Sig	ditore	<u>69</u>	143	2
				en gantite	143	157	81
Lines:			Carry Sam	25 toxe	47	360	81
Drive Shoe used   laside   Outside			Dilama area	(26) JANUARIA	360	760	87
Final location of shoe(s)	10.						
(7) PERFORATIONS/SCREEN    Perforations Method	105 . 	<u> </u>		<del>~ , = 14 + + - + + </del>		<del> </del>	<b> </b>
Screens Type	Mater	ial		<del>~~~</del>		<del>                                     </del>	<del></del>
From To Side Naghts	Tele/pipe	Casing Liner	F837	0 3 7004		<del> </del>	<del>  </del>
From To size Number	Consider State		- Links	<u> </u>			
-			West	1940 3 341			
			€,	in, Unicable			
							L
(8) WELL TESTS: Minimum t	esting time is 1 hou	r	Date started 07/		pleted <u>08/</u>	06/04	<u> </u>
Pump Bailer	<b>E</b> Air	Flowing  Artesian	(unboaded) Water Well				uudaa.
Yield gal/min Drawdown	Driff stem at	Time	ment of this well is in co	k I performed on the compliance with Oregon	water supply w	rell constructi	00
10 ·	480	i hr.	standards. Materials used knowledge and belief.	and information repo	ated above are (	rue to the bes	t of my
		<u> </u>			WWC Nu		3
		<del></del>	Signed pro-	ter		Date	
	epth Artesian Flow Po	and bos	(bonded) Water Well C				en andre
Was a water analysis done? // Ye	s By whom	Andre - North	performed on this well do	y for the construction uring the construction	dates reported a	zbove. All wo	rk K
Did any strata contain water not suital		Too little	performed during this time construction grandarity T	ne is in compliance wi	th Oregon wate	r supply well	
Depth of strata: 36-61				. LATI	WWC Nu	mber	-

ORIGINAL - WATER RESOURCES DEPARTMENT FIRST COPY - CONSTRUCTOR SECOND COPY - CUSTOMER

The original and first copy of this report are to be filed with the	LL REPORTECEIVED	2-12-12-
WATER RESOURCES DEPARTMENT STATE OF SALEM, OREGON 57810 (Please typ	e or print) JANS 1 1978	38/3W-25cc
	bove this HyfATER RESOURCES DEPT.	)
(1) OWNER:	(10) LOCATION OF WELL:	
Name The Same		mber 449-77
Address 4528 24 Way S.E.	S.W % S.W % Beetlon 25 T. 85	R. BW. W.M.
(A) PRIVATE OF TROUBLE (.T. 1)	Bearing and distance from section or subdivision	D corner
		<del></del> .
New Well Despening . Reconditioning . Abandon .  If abandonment, describe insterial and procedure in Item 12.	(11) WATER LEVEL: Completed we	
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found	70
Rotary Driven D Samestic D Industrial D Municipal D	Static level (1) ft. below knd s	roton Data This 147
Dug Bored   Irrigation   Test Well   Other	Artesian pressure lbs. per square	7
	A second presents Ins. per square	inca. Date
CASING INSTALLED: Threaded   Welded   Care 260	(12) WELL LOG: Diameter of well be	
Dism. fromft. toft. Gage	Depth drilled 14/5 ft. Depth of comple	
	Formation: Describe color, texture, grain size a and show thickness and nature of each stratum	nd structure of materials; a and acquirer penetroted
THE PROPERTY OF THE PARTY OF TH	with at least one entry for each change of format	ion. Report each change in
PERFORATIONS: Perforated? Tes [] No.	position of Static Water Level and indicate print	
Type of perforator used	MATERIAL	From To SWL
Size of perforations . in. by in.	Toe Sort	05
perforations from ft. to ft.	KEN CLRY	3 10
perforations fromfL toft.	bravon alay	10 15
	BASALT ROCK	15 76
(7) SCREENS: Well screen installed? [] Yes We'No	KOCK KOCK - Grown.	45 65
Manufacturer's Name	baself lock Head	Les 145 60
Type Model No,		
Diam. Slot size Set from ## to ## ft.		
Dism. Slot size Set from ft. to ft.		
(8) WELL TESTS: Drawdown is smount water level is lowered below static level		
Was a pump test made? [] Yes Wino If yes, by whom?	2	
Yield: gol/min. with ft. drawdown after hrs.	FUC.hner installed 35-14	35'
sin k ulb "	60 Per - Keb - 85: 145'	<del></del>
- Au Silve DI. 17		
Belief test 30 gal/min. with it. drawdown efter / hrs.		<del></del>
Artesian flow g.p.m.	<del></del>	
persture of water Dopth artesian flow encountered	Work started / 10 19 77 Complete	a Nov 12 1977
(9) CONSTRUCTION:		May 13 1977
Well seal-Material used Company	Drilling Machine Operator's Certification:	direct ennarricien
Well sealed from land surface to	This well was constructed under my Materials used and information reported	above are true to my
Diameter of well bore to bottom of sealin.	best knowledge and belief	7/1-16 77
Diameter of well bare below soalin.	[Signed] (Drilling Machine Operator)	Date / 19/1.
Number of sacks of coment used in well seel	Drilling Machine Operator's License No	846
	Water Well Contractor's Cerlification:	
	This well was drilled under my jurisdi	ction and this report is
Was a drive shoe used?   Yes Boo Plugs Size: location ft.	true to the best of my knowledge and beli	
Did any strata contain unusable water?   Yes Pro	(Potem, Tim or corporation)	(Type or print)
Type of water? depth of strata	Address 11401 Steinhauga Ka St	5 Hancoulle, Ola
Method of sealing strata off	[Signed]	7
Was well gravel packed? [] Yes Who Size of gravel:	(Water Well Colle)	cotte)
Gravel placed from	Contractor's License No. 75 Date	(20) 15 1927
(USS ADDITIONAL S	HBETS IF NECESSABY)	8P*0858-119
~ <del></del>		

NOTICE TO WATER WELL CONTRACTOR

-) ·		MARI	
		52999 (START CARDIA 101969	
•	(as regulated by ORS 537.745)  Entirections for consoleting this report are on the last page (FIAm LD)	8 118382	<del>نوانا فرسوانا کا در پیس</del> و
	(E) OWNER: Well Number 502	I IN LANGUAGE WARRED OF COMMITTEE CO.	<b>.</b>
	Name Mark Hunt		e w. wm
	Adden 3011 Delaney Rd. SE	Series 25 SW 14 SW . 14	
~1		7-1-59604- Lot Block Subdivi	
6	(2) TYPE OF WORK  New Wall (RDesponing Abstration (sepain/secondition)) Absendes most	Street Address of Well (or nearest address) Same as about	<u>78</u>
٩Ŋ	3) DRILL METHOD:		
1	Rotary Air Retary Med Cable Anger	(19) STATIC WATER LEVEL: 60 4. below lead surface. Date 4	4/14/98
	Other	Artesian pressure Ib. per square inch. Date	
•	(4) PROPOSED USE:	(II) WATER BEARING ZONES:	
_			•
•	Themal   Injection   Liventock   Contr.   (5) EORE HOLE CONSTRUCTION:	Depth at which water was first found 168 *	
م <i>ن</i>	Special Construction approval [ Yes [ No Depth of Completed Well 205 ft.	To Enimeted How	Rate SWL
, _	Businessed Yes No Type Amount	From To Resimated Flow 168 195 30	68_
-1	HOLE SEAL	100 230	
E)	Diameter From To Material From To Socks or possels		
-	6" 145 205		
	<i></i>		
		(12) WELL LOG:	•
•	How was seel placed: Method	Ground Elevation	
	Obr Didn't change seal	Material Prom	SWI.
-1	Backfill placed from ft. to ft.	Recalt Gray 145 1	68
~	Gravel placed from ft. to ft. Size of gravel	Basalt Gray Brown 168 1	95 68
•	(6) CASING/LANER:  The Game Steel Plantic Widded Thrended	Basalt Black 195 2	05
- 1			
9			
	Carlot		
<i>-</i>			
<b>E</b>	First location of shoc(s)	RECEIVED	
	(7) PERFORATIONS/SCREENS:	MAY 0 1000	
` `	Perforations Method Saw	MAY - 8 1998	
	State	WATER HESOURICES DEPT.	
-	1601 205 65 30 4º 1	SALEM, OREGON	
` ر			
, _			
•			
_	(8) WELL TESTS: Minimum testing time is 1 hour	Date started 4/13/98 . Completed 4/14/	gr
	Floring	(unboaded) Water Well Constructor Cartification:  1 certify that the work I performed on the construction, electrics  1 certify that the work I period On see water smooth well constru	Loc abandonment
-	Pump Builer MAir Artesian	I certify that the work I performed to the construction, discussed of this well is in compliance with Oragon water supply well construction reported above are true to the best of Materials used and information reported above are true to the best of	iction standards. Lary knowledge
A	Yield gol/min Drawdown Drill stem at Time	and helief.	. •
	35 2001 112	WWC Number That	
		Sience	)
-	Temperature of water 56 Depth Astesian Flow Found	(bonded) Water Well Constructor Certification:    accept responsibility for the construction, alteration, or abando	ansent Work
~	West a water analysis doce? Yes By whom	neriumed on this wat ourself the contract the	الاجت سائد
	Did any strata contain water not suitable for intended use? 100 mile	performed during that time is in companies to the best of my knowled	and belief.
_	Suby Muddy Odor Colored Other	WWC Number	5/1/98
7	Depth of strate:	SESSECTION TYPE DESIGNATION	
<b>E</b> \	ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT S	ECOND COPY-CONSTRUCTOR THIRD COPY-CUSTON	
•	CERTIFICATION CO. 1	•	. 🕳

MARI	5	Q	'n	34
TANCALT	2	o	y,	34

(5g)

WATER SUPPLY WELL REPORT (on required by CHS 537,765)	(WELL I.D.)# L 71377	
Instructions for completing this report are on the last page of this form.	(START CARD) # 165531	
OWNER: Well Number	(9) LOCATION OF WELL by legal description:	
ame Randall J. Boesa	County Marion Letitude Longitude	
ddress 7477 Terry CL SE	Township 6S S Range 3W W	WM.
ry Salem State OR Zip 97301	Section 25 NE 1/4 NE 1/4	
TYPE OF WORK	Tax Lot 2800 Lot Block Subdivision	
New Well Deepening Alteration (repair/recondition) Abandonment	Street Address of Well (or nearest address) Next to 3011 Delaney Ros	ed SE
) DRILLMETHOD:		<u> </u>
Rotary Air   Rotary Mud   Cable   Auger	(10) STATIC WATER LEVEL:	
O PROPOSED USE:	60 ft. below land surface. Date 4-30-04 Artesian pressure lb. per square inch.	··
Domestic [Community [Industrial ] Infigation	Artesian pressure lb. per square inch. Date	
Thermal   Injection   Livestock   Other		
s) BORE HOLE CONSTRUCTION:	Depth at which water was first found 60'	
pecial Construction approval Yes No Depth of Completed Well 112 ft.		
explosives used Yes No Type Amount	From To Estimated Flow Rate	SWL
HOLE SEAL	72 112 70	60
Nameter From To Material From To Sacks or pounds		
10" 0 41 Bentonite 0 41 17 sacks		<del> </del> -
·		<del>                                     </del>
·····	(M) N/GI I I OC	<u> </u>
flow was small placed: Method []A []B []C []D []E	(12) WELL LOG: Ground Elevation	
Other Poured and temped		
Bockfill placed from ft. to ft. Material		SWL_
iravel placed from fl. to ft. Size of gravel	topsoil 0 3	
6) CASING/LINER:	brown ciay 3 23	
Diameter From To Gauge Steel Finnik Welded Threaded	shale yellow & brown 23 30	
Casing: 6"   +1   63   250   27	gray brown sandstone 30 46 shale brown with yellow clay 46 58	
	besett brown with clay 158 112 66	
iner: 4 1/2" 0 112 pvc		
	RECEIVED	
inal location of aboe(s) Outside shoe 63	TILOLIVED	
) PERFORATIONS/SCREENS:	400	
Perforations Method SRW	MAY 0 3 2004	
Screens Type liner Material DVX	WATER RECOURAGE DETER	
From To size Number Diameter , size Casing Liner	WATER RESOURCES DEPT SALEM, OREGON	
		<del></del> i
B) WELL TESTS: Minimum testing time is 1 hour	Date started Completed	
Flowing	(unbunded) Water Well Constructor Certification:	
_Pump Bailer Mair Artesian	I certify that the work I performed on the construction, alteration, or aband of this well is in compliance with Oregon water supply well construction again	looment dood-
Yield gal/min Drawdown Drill stem at Time	Materials used and information reported above are true to the best of my know	
70 <u>52   112   11π.</u>	and belief	
	Signed WWC Number 1541  Date 4/30/0	1
Farmer time of tractor 56	Signed Date 4/3/10  (bonded) Water Well Constructor Certification:	<u></u>
Iconperature of water 56 Depth Artesian Flow Found Was a water englysis done?   1   Yes By whom	I accept responsibility for the construction, alteration, or abandonment wo	rk
	nerformed on this well during the construction dates reported above. All wor	Ł
Tid any strata contain water not suitable for intended use?	newayron street the time it is compliance outh [ treets water street, well	
Did any strata contain water not suitable for intended use?	construction standards. This report is true to the best of my knowledge and b	elief.
Did any strata contain water not suitable for intended use?	performed during this time is in compliance with Oregon water supply well construction shaudard. This report is true to the best of my knowledge and b WWC Number 1541	elief.

# RECEIVED

WATER WELL REPORT NOV 1 3196	RU.
WAILH RESOURCE	
SALEM, OREG	ON
- lake ()	
(1) OWNER:	(10) L
Name Scott Lund	i
	County
Cty Vencouver, Washington	N.B.
	TexLet#
(2) TYPE OF WORK (check):	Address at
New Well Doupening [] 'Reconditioning [] Abandon []	44.00
H abandonment, describe material and procedure in Item 12.	(11) W.
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at w
	Static leve
Att 40 Driven 0 Dumestic A industrial 0 Municipal 0 . Received 0 Dumestic 1 Deck Well 0 Other 0	Artesian
Cable D Recod D Thomas: Withdrawal D Reinförtion D	(12) W
(5) CASING INSTALLED: Steel II Plantic	Depth drill
Threaded D. Welded 45	Fermation
6 Diam from \$1 ft to 90 ft Gauge 250	thickness a for each ci
Diam. from	and indica
LINER INSTALLED:	]
Diam. from	
(6) PERFORATIONS: Perforated? [] Yes (5) No	
Type of perference used	<del></del> -
Size of perforations in by in.	
perforations from	
(7) SCREENS: Well acreen installed?   Yes   (2) to	<del></del>
Manufacturer's Namo	
Typo Model No	
Diam	
Dismft. toft.	
WELL TESTS: Drawdown is amount water level is lowered	
WELL IESIS: below static level	
Wes a pump test made? X Yes D No 16 yes, by whem? SOME	
Yield: 20 gal/min, with 79 ft. dnawdown after 2 lms.	
# # # # # # # # # # # # # # # # # # #	
Afr test gal/min, with drill stem at ft. hrs.	
er test gal/min. with ft. drawdown efter hrs.	,
Artesian flow gp.m.	
Temperature of water Depth artesian flow encountered ft.	Work start
(9) CONSTRUCTION: Special standards: Yes □ No 🛎	Date well d
Well seal - Material used	Drilling
Well seeled from land surface to	This
Diameter of well bore to bottom of seal	and infor
Dismeter of well boro below seel	[Bigmed]
Number of sucks of coment used in well seal	D_1711
How was coment grout placed?	Drilling 1
	Water W
	This
Was pump installed? YOR Type SUD HP I Depth 105 A	the best o
Was a drive shoe used? Yes MNo Phage Size: location	Name
Did any strata contain unusable water? [] Yes A No	Address .
Type of Water? depth of strate	
Method of sealing strate off	(Signed)
Was well gravel packed?   Yes   No   Size of gravel:	Contracts

Stato Well No. 15/3W-25 dw

ON .				
(10) LOCATION OF WELL:			<del>-</del>	
County Marion Daller's well	manper			
N.R. & S.E. & Section 25 T. 85	R 3	W.	W.M.	
Tex Lot # Lot Bik	6	ublivision		
Address at well location:			•	
	-			
(11) WATER LEVEL: Completed w	eIL		<del></del>	
Depth at which water was first found		25	Æ	
Static level 26 ft. below b	ind aurie	on. Date	I0-27	
		nch. Date		
(12) WELL LOG: Diameter of well below			6 "	
	_		·	
Depth drilled I22 ft. Depth of			122 ft	
Formation: Describe color, texture, genin size and str; thickness and nature of each stratum and equifor pens for each change of formation. Report each change in ; and indicate principal water-bearing strata.	tretai w	lih at lass	+	
. MATERIAL	Prom	Tb	SWL	
aoi1		<del>                                     </del>		
	<u> </u>	I	<b></b> .	
clay (orange)	_I_	20		
weathered out rock	20_	25		
rock (basalt)	20	72		
gand-stone (green)	72	87		
sand-stone (grey)	87	I22		
		<del> </del>		
		1		
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TO 00 00				
Wark uterted I0-20 19 80 Complete		0-23	0 <u>8 er</u>	
Date well drilling machine moved off of well	/0~	23_	19	
Drilling Machine Operator's Certification:				
This wall was constructed under my direct s	mervisi	on. Mate	rials used	
and information reported aboys are true to my b	est knov	ra egbalv	d balief.	
[Sigmed] Onling Machine Operator) Date 10- 19-80				
Drilling Machine Operator's License No				
Water Well Contractor's Certifications				
This well was drilled under my jurisdiction	and thi	is report	is true to	
the best of my knowledge and belief.  Name	lling	Суреог		
Address				
[Signed] Hard Well Comband	<del></del>		·.·	
Contractor's License No. 13 Date 10-	<b>7</b> 3		., 19.80.	

NOTICE TO WATER WELL, CONTRACTOR The original and Bust copy of title report any to be filled with the WATER RESOURCES DEPARTMENT, SALEM, OREGON 97810 with 50 days from the date of wall completion.

25.e1302ii-030

NOTICE TO WATER WELL CONTRACTOR	REGEIVED			
The original and first copy of this report are to be filed with the	OREGON STATE THE PROPERTY OF T	ac l	, 241-	2514
STATE ENGINEER, SALEM, OREGON STEEL (1) STATE OF	OREGON STATE ENGINEER	P5/	ייעכ	340
within 30 days from the dole of well completion.	bove this line)SALEM, OREGON ^{ate Permit}	No		<del></del>
(1) OWNEB:	(10) LOCATION OF WELL:	····		
Name DAN SOYNT	County MARION Driller's well z	umber		
Address 3944 SENECA	NW 4 SE 4 Section 25 1. 85	P. 3	W	W.M.
(A) SUPPLOTE HOUSE (-back)	Bearing and distance from section or subdivis	don come	2	
(2) TYPE OF WORK (check):				
New Well (A Despening [] Reconditioning [] Abandon [] If abandamment, describe material and procedure in Item 12.	(11) VEARINED & PROVIDE CONTRACTOR	<del></del>		<del></del>
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found	veil.		
Rotary X Driven [] Domestic X Industrial [] Municipal []	Static level /24 ft. below land	surface.	Data Z	15:50
Dug   Bored   Irrigation   Test Well   Other	Artesian pressure Dis. per squa			
CASING INSTALLED: Threaded   Welded sk	(12) WELL LOG: Diameter of well			
1500 Diam from 99 s. to 161 st. Gago 5	Depth drilled /6/ ft. Depth of came			5/ ±.
Diam. from ft. to ft. Gage	Formation: Describe color, texture, grain size	and struc	ture of	naterials;
LINER	and show thickness and nature of each strate with at least one entry for each change of forms	tion. Rep	ort each	change in
PERFORATIONS: Perforated? Yes   No.	partition of Static Water Level and Indicate pri	ncipal wa	ter-beart	ng sfrata,
Type of perforator used TONCH	MATERIAL	From	270	6WL
and of permissions in the by m.	TOPSOIL	10	9	
perforations from	CLAY YELLOW COLOR BASALT WEATHERED	3	33	<del></del> -
perforations fromft. toft.	BASBUT PRACTURED	53	120	·
	BASALT DONSE	100	124	
(7) SCREENS: Well screen installed? The Yes	BASALT SPAMY	124	132.	124'
Manufacturers Name  Type Model No	BASALT WEATHERED	134	151	124
Diam. Slot size Set from ft. to ff.	BASILT FRIETURED	1.57	161	124
Dism. Slot size Set from ft. to				
(8) WELL TESTS: A Drawdown is amount water level is lowered below static level SNEED		ļ		
Was a pump test made? NY Yes [] No If yes, by whom?				
Was a pump test maner in test (1 No 11 yes, by whom? And S  Yield: 2/ gal/min. with 37 ft. drawdown after / hrs.	· · · · · · · · · · · · · · · · · · ·			
Thurt: St. Surviner And 2 at disample steel. A use				·
Baller test gal/min. with ft. drawdown after hrs.		ļ		
Artesian flow g.p.m.		<del> </del>		
perature of water 50 Depth artesion flow encounteredft.	Work started 7-13 1974 Complete	<u>, , , , , , , , , , , , , , , , , , , </u>	15	1975
	Date well drilling machine moved off of well		- 15~	19 > 4
(9) CONSTRUCTION: Well seal-Material used WSLL CELL	Drilling Machine Operator's Cortification			
	This well was constructed under my	direct		
Diameter of well bore to bottom of seal 16"	Materials used and information reported best knowledge and belief	above	are true	to my
Diameter of well bore below seal	[Signed] 77. 7. Succes	Date	>-/5	19.25
Number of sacins of coment used in wall seal	(Orbiting Machine Operator) Drilling Machine Operator's License No.			-
Number of sacks of bentonite used in well seal 3 1 sacks Brand name of bentonite 41944 3844	Positive Operator & Aucust No.			
Number of pounds of bentonite per 100 gallons	Water Well Contractor's Certification:			
of water	This well was drilled under my jurisd true to the best of my knowledge and be		ed this r	eport is
Was a drive shoe used? 🗆 Yes 🔏 No Piugh 🚜 🗷 Size: location ft.	Name J.ASNEED ISOMS			
Did my strata contain unusable water?   Yes Myo	(Person, firm or corporation)	d D (2)	pe er pet	rt)
Type of water? depth of strata	Address 3910 SILVER TON	-U Q		
Method of sealing strata off	[Signed]			<del></del>
Was well gravel packed? [] Yes No Size of gravel:	(Water Well Control of Total	HEUGT)		
Gravel placed fromft. toft.	Contractor's License No Date			., 1945

#### MARI 58668

STATE OF OREGON WATER SUPPLY WELL REPORT (as required by ORS 537.765)

(1) LAND OWNER Name Ken Souders

Instructions for completing this report are on the last page of this form.

Well Number 171374

Mack Drilling Company, Inc. PO Box 12067 Salem, OR 97309

well ld. # L	75010	<del></del> '	×

START CARD # 171374 (9) LOCATION OF WELL (legal description)
County Marion WM 1/4 __ (degrees or decimal) __ (degrees or decimal) Nay SE, Turner, OR 1-06-05 w Rate SWL To SWL EIVEL 2 E 2005 SOURCES DEPT M. OREGON leepening, alteration, or er supply well orter above are true to lteration, or ruction dates reported e with Oregon water best of my knowledge

06/16/2004

Address 1000 Grady Viay GE	1ax Lot 3200 Lot Lot
City Turner, State OR Zip 97392	Township 8 S Range 3
(2) TYPE OF WORK New Well Deepening Alteration (repain/recondition) Abandonment Conversion	Section 25d NW 1/4 SI
· <del>····································</del>	Long or
(3) DRILL METHOD  Ø Rotary Air □ Rotary Mud □ Cable □ Auger □ Cable Mud □ Cable □ Cable □ Cable □ Cable Mud	Street Address of Well (or nearest address) 7635 Shady V 97392
(A) DRADACED LICE	(10) STATIC WATER LEVEL
(4) PROPOSED USE Domestic Community Industrial Irrigation Thermal Injection Livestock Other	95 ft. below land surface. Date 01
☐ Thermal ☐ Injection ☐ Livestock ☐ Other	fl. below lend surface. Date
(5) BORE HOLE CONSTRUCTION Special Construction: Yes No Depth of Completed Well 150 ft. Explosives used: Yes No Type Amount	Artesian pressure lb. per square inch lt. per square inch
	Depth at which water was first found
BORE HOLE SEAL  Diameter From To Material From To Sacks or Pounds  6  0   161   coment   150   156   1 sack	From To Estimated Flow
existing did not disturb	
How was seal placed: Method	(12) WELL LOG Ground Elevation
Backfill placed fromft. toft. Material	Material From
Gravel placed from 166 ft. to 161 ft. Size of gravel 1" crushed	Prior to working on the wall the
(6) CASING/LINER	SWL was 156'. You could hear
Diameter From To Gauge Steel Plastic Welded Threaded	water cascading. The 4" steel
Casing:	liner was pulled with a taper tap. Ran camera down, at 127 to 134,
	water was running in. The area
	was well weathered and enlarged
Liner: 4 0 150 160 0 2 2 0	the bottom, then 6' of cament
	No leakage of water from the
Drive Shoe used Inside Outside None	bottom of casing during the WATER RE
Final location of shor(s)	camera inspection.
7) PERFORATIONS/SCREENS  Perforations Method Electric Saw	
Screens Type Slot Material PVC	1
	Date Started 01-05-015 Completed 01-08-05
From To Slot Number Diameter Tele/pipe Casing Liner Size	(unbonded) Water Well Constructor Certification
130   150   1/8   30   6   160	I certify that the work I performed on the construction, d abandonment of this well is in compliance with Oregon water
130   150   1/8   30   6   160   0   0	construction standards. Materials used and information repo
	the best of my knowledge and belief.
	WWC Number 1394
8) WELL TESTS: Minimum testing time is 1 hour	
☑ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian	Signed again ( Clark
Yield gol/min Drawdown Drill stem at Time 7 45 1 1 hour	(bonded) Water Well Constructor Certification Lacept responsibility for the construction, deepening, a
1 17001	abandonment work performed on this well during the constr
	above. All work performed during this time is in compliane supply well construction standards. This report is true to the
Temperature of water 54 Depth Artesian Flow Found	and belief.
Was a water analysis done? Yes By whom Did any strain contain water not suitable for intended use? Too little	WWC Number 1394   Day 01-07/05
Salty Muddy Odor Colored Cther	WWC Number 1394 Joseph 01-05/05
Ocpth of strate:	7 7 7 7

ATER WELL REPORT E G E I V E D 85 310-25 (F) Read with about the independent No. 85 310-25 (F) Do not write about the independent No. 0REGON	County MARIAL British well number  14 14 Searing and distance from scotten or subdivision corner	Depth Blatte 1 Artesto	(12) WELL, LOG: Diameter of well below caring Depth drilled /2,3 ft. Depth of completed well Formation: Diagrille celler, texture, grain size and structure and show thickness and nature of each piratum and aquit with at least one cate; for each change of formation. Report position of Stude Water Level and indicate principal coder.	CASTERIAL From	Basser 5459 th Basser 505 to Hard 49 112 Black - 8480 to 112 Seales 4 82000		Work started \$ -// - 19 Offennyleted \$ -/5 - 19 Offennyleted Washing machine moved off of well \$ -/5 - 19 Offennyleted Washing Washing Operator's Correlationalisms	# # # # # # # # # # # # # # # # # # #	Water Woll Contractors Correlification:  This well was drilled under my jurisdiction and this report is true to the begins incorreling and belief.  Name Contractors Contraction Contractors Contractors Identees No. 20. Date 3.20. 19.29.  General Parable No. 20. Date 3.20. 19.29.
TICE TO WATER WELL CONTRACTOR The original and fine copy of this report are to be filed with the THE ENGINEER, SALER, OREGONING within 30 days from the date of well completion.	Address 3 K. (2) TYPE OF W	(3) TYPE OF WELL: (4) PROPOSED USE (check):  Rotter & Datven D Setted D Set	Diam from 4 to 555 th to 555 th to 555 th to the total train from the total train train from the total train train to the train trai		(7) SCREENS: Well screen installed? I Yes & And Andrews Name  Type  Diam. Slot skee Set from At to At.  Diam. At to At.	test meder (1 Yes, Person to amount water terel to test meder (1 Yes, Person of whom?  gal/min. with it disassions after by  A gal/min. with A disassions after by	Dorth ertection flow encountered 4. TON:	and surface ore to bot bore below f cement t ? bentonite	Was a drive aboo used!   Yes 1646 Flugs   10a, 100 gala   17his well was a drive aboo used!   Yes 1646 Flugs   25a 1646   17a 164    17a 164

#### MARI 61021

STATE OF OREGON WATER SUPPLY WELL REPORT

10-09-2007

Page '	1	of 2	_
 	_		

WELL LABEL # L 92877 (as required by ORS 537.765 & OAR 690-205-0210) START CARD # 195046 (1) LAND OWNER Owner Well LD (9) LOCATION OF WELL (legal description) First Name Carl Last Name Schmidt County Marion Twp 8.60 S N/S Renge 3.00 W E/W WM Company 1/4 of the SE 1/4 Tax Lot 400 Address P.O. Box 294 Tax Map Number City Turner State OR Zip 97392 DMS or DD Lat " or (2) TYPE OF WORK New Well Deepening Conversion Long DMS or DD Alteration (repair/recondition) Abandonment Street address of well ( Nearest address PT of 400 Bergman Pl. Rd Turner, OR 97392 (3) DRILL METHOD Rotary Air Rotary Mud Cable Auger Cable Mud (10) STATIC WATER LEVEL Date Reverse Rotary Other Pump Truck SWL(psi) Existing Well / Predeepening (4) PROPOSED USE Domestic Imigation Community Completed Well Industrial/Commercial Livestock Dewatering Flowing Artesian? Dry Hole? Thermal Injection Other WATER BEARING ZONES Depth water was first found (5) BORE HOLE CONSTRUCTION Special Standard Attach copy SWL Date SWL(ft) Est Flow To SWL(osi) Depth of Completed Well _523.00 ft. 09-26-2007 90 03 320 BORE HOLE SEAL 09-27-2007 420 430 320 Dia To From From Material To Amt lbs 09-27-2007 505 510 40 320 10 n 99 10 S Bentonite Ð 6 6.13 90 523 Cement 10 QQ 20 (11) WELL LOG Ground Elevation How was seal placed: Method Пв XIC Material From Tο Top soil Clay Brown Backfill placed from ft. to ft. Material 77 Basalt Decomposed Filter pack from ft. to ft. Material Size 77 79 Clay light Brown sticky 79 90 Explosives used: Yes Type Amount Claystone grey firm 90 93 (6) CASING/LINER Casing Liner Dia Sandstone grey firm 95 03 From To Gauge Stl Plate Wid Thrd Sandstone grey dark firm 05 142 Sandstone grey light firm (0) .250 0 99 142 150 Sandstone grey dark firm 0 160 150 172 (6 523 Siltstone light grey firm 172 191 Sandstone grey dark firm 181 215 andstone grey dark firm w/ Sea ahells 215 230 andstone grey light firm Fractures 230 245 Shoe Inside Outside Other Location of shoe(s) 99 Sandstone grey & green coarse firm 245 254 Temp casing Yes Sandstone med. soft Dia 10 From 0 254 265 andstone grey coarse med. soft (7) PERFORATIONS/SCREENS 265 300 Sandstone grey soft coarse 340 Perforations Method Saw Cut 300 Sandstone grey med coarse w/ black sand traces 340 352 Screens Type Material Sandstone greyish terquoise med. & firm 355 Perf/S Casing/ Screen Scm/slot Slot # of Tele/ Date Started 09-26-2007 Completed 10-01-2007 creen Liner Dia To width slots From length pipe size Perf Liner (unbonded) Water Well Constructor Certification 520 40 I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief. (8) WELL TESTS: Minimum testing time is 1 hour License Number <u>1856</u> Date 10-09-2007 Electronically Filed O Pump O Bailer O Flowing Artesian Air Signed MICHAEL K YACKEY (E-filed) Yield gal/min Drawdown Drill stem/Pump depth Duration (hr) 40 520 (bonded) Water Well Constructor Certification I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well Temperature _56 °F Lab analysis Yes By construction standards. This report is true to the best of my knowledge and belief. Yes (describe below) Water quality concerns? Description Amount Units License Number 1394 Date 10-09-2007 Electronically Filed

Signed FUGENE MACK (E-filed)

Contact Info (optional)

WATER SUPPLY WELL REPORT - continuation page	MARI	I 61021	WEL	L LD. # L	92877		_ Pag
continuation page	10-09	9-2007	STAF	RT CARD	# <u>195046</u>		_
(5) BORE HOLE CONSTRUCTION  BORE HOLE SEAL	sacks/	(10) STATIC		LEVEL		·	
Dia From To Material From To Am	t lbs	SWL Date	From	То	Est Flow	SWL(psi)	+ 50/7
	<del>     </del>						H
<del></del>	+  [						
FILTER PACK							H
From To Material Size							
					·		<u> </u>
CO CLASSICIO DELLO	I	(11) WELL 1	LOG				
(6) CASING/LINER	l	·	Material			From	To
Casing Liner Dia + From To Gauge Sti Plate Wild	Thrd	Sandstone grey f Sandstone hard				355 390	39 41
		Sandstone hard ; Sandstone dark ;	grey enev		-	410 420	42 50
88 H	HI	Sandstone grey- Sandstone grey	green stains c	oarse hard v	v/ Fractures	505	51
		Sanascone grey (	- Liuis			.510	52
	H	-				<del> </del>	
8-81-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	HI				<del></del>		
				- <del>-</del>			
	<del></del>		<del></del>			<del> </del>	
(7) PERFORATIONS/SCREENS		<del></del>		<del></del>			-
Perf/S Cazing/Screen Scm/slot Slot #of	Tele/			-			
creen Liner Dia From To width length slots	pipe size						
	==1	<u> </u>					+
		·			<del></del>	<del> </del>	+
	=='						
(8) WELL TESTS: Minimum testing time is 1 hour							
Yield gal/min Drawdown Drill stem/Pump depth Duration (	per)	Comments/I	Remarks				
	_	·	<del>.</del>				
	-						
	7						
Water Quality Concerns	_						
From To Description Amount Un	its						
	<b></b>						
- Desiration							
- Description		İ					
Description							

	1131	(63)
MOTICE TO WATER WELL CONTENT OF THE PROPERTY OF THE WILL CONTENT O	ELL REPORT	
STATE ENGINEER, SALEM, OREGON WIND STATE OF STATE OF WHITE STATE OF WHITE STATE OF WHITE STATE OF STAT	F ORGON State Well No. 2	3w-25
	State Farmer No.	·
(1) OWNER:	(11) WELL TESTS: Drawdown is amount lowered below static in	
Address D. O. Box 435 Salve on On	Was a pump test made? Yes EPNO 11 yes, by whom Yiold: gal/min, with ft. drawdow	
	* * *	*
(2) LOCATION OF WELL:	Air	
County Shall Driller's well number	Arterian flow gal./min. with /26st. drawde	wn after hrs.
14 14 Section 25 T. 8, S, R. 3, ZL, W.M.	Arterian flow g.p.m. Date Temperature of water Was a chemical analysis :	nadet [] Yes 4 No
Bearing and distance from section or subdivision corner	(12) WELL LOG: Diameter of well below ca	
- WALL NO. 11)	Depth drilled 200 ft. Depth of completed we	
***	Formation: Describe by color, character, sice of materia show thickness of agusters and the kind and nature of a stratum penetrated, with at least one entry for each of	he material in each tange of formation.
(3) TYPE OF WORK (check):	MATERIAL .	FROM TO
Well Despening Becombitioning Abandon B	Soil	0/
Sandenment, describe material and procedure in Item 19.	BRANGE - CLAY BRANK - OMEDANISED RE	11 5%
(4) PROPOSED USE (check): (5) TYPE OF WELL:		56 61
Domestic & Industrial   Municipal   Rotary & Driven	11 - DACES HE PASSED ROCK	61 65
Irrigation [] Test Well [] Other	RAN - ROCK	(5)
(A) CASTNO DYSMATTED.	WARNIT ROCK - IS AURIN	76 95
Dism from 1 tt to 28 tt Gage 2550	BASALT ROCK - UKRY SASMY	106 133
Diam. from ft. to ft. Gago	BROWN CLAY	155 159
Diam. fromft. toft. Gage	BRANGE -Chay	159 135
(7) PERFORATIONS: Perforated? [] Yes End	- RASALT - partly (west part)	-148 150
Type of perforator used	Bernf-Chay-Blue	150 163
Size of perforations in. by in.	BROWN -Chay	163 173
perforations from ft. to ft.	Bond - 11	180 200
perforations fromft. toft.		
perforations from ft. to ft.		
perforations from ft. to ft	1 1	
(8) SCREENS: Well screen installed? ☐ Yes EFRO		
Menufacturer's Name		
Slot size Set from ft to ft		
Diam Slot eize Sct from ft. to ft.	Work started 6 - 3 - 66 19 Completed 6- Date well drilling machine moved off of well // -	9-66 19
(9) CONSTRUCTION:	(13) PUMP:	
Well scal-Material used in scal ZASATEATE & MACH CO	1.	
Depth of seal ft. Was a pooleer used?	1 -	LP
Diameter of well bore to bottom of seal in.	Water Well Contractor's Certification:	
Were any loose strata comented off?   Yes HNo Dopth		nd 45de
Was well gravel packed? ☐ Yes ≦ No Size of gravel:	This well was drilled under my jurisdiction a true to the best of my knowledge and belief.	na taus report is
Gravel placed from	NAME PHILIPSH - AGRINSON - LA	1587
Did any stratz contain unusable water?   Yes 15 No	(Person, firm or corporation) (Tyr	S.A.Sal
Type of water? depth of strate	Address 3545 (10311)011 31	· ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
Method of sealing strate off (10) WATER LEVELS:	Drilling Machine Operator's License No.	27
	[Signed] Water Well Contractor)	•
Static level ft. below land surface Date C-17-CC  Ariesian pressure lbs. per square inch Date	Contractor's License No. Date 6-16-	16 . F.
	Contractors License No Dato	Education 18.00

<b></b>	***************************************		
STATE OF ODECON	* * * * * * * * * * * * * * * * * * *	WELL LD. LABEL# L	Page 1 of 2
WATER CIRRI V WEIT DEPORT	MARI 65	2614	1022475
(as required by ORS 537.765 & OAR 690-205-0210)	5/5/2014		•
(1) LAND OWNER Owner Well I.D.			1
First Name JOSH Last Name BOYD Company	•	LOCATION OF WELL (legal de	<del>-</del>
Address 5474 LANDON STEEET S.E.		nty MARION Twp 8.00 S N/S	
City SALEM State OR Zip 97306	===: Iπ»	25 NE 1/4 of the NE 1 Map Number	
(2) TYPE OF WORK New Well Deepening Conver	rsion T	o 1 "or	DMS or DD
(2a) PRE-ALTERATION	Long	g	DMS or DD
Casing: To Gauge Sti Piste Wid Thrd	3205		
Material From To Amt sacks/lbs			
Seal:		) STATIC WATER LEVEL	· · · · · · · · · · · · · · · · · · ·
Rotary Air Rotary Mud Cable Auger Cable Mud	1 1	Date	SWL(psi) + SWL(ft)
Reverse Rotery X Other PUMP HOIST		Existing Well / Pre-Alteration 4/17/2014 Completed Well	203
(4) PROPOSED USE Domestic Irrigation Community	— I '	Flowing Artesian?	Dry Hole?
Industrial/Commercial Livestock Dewatering	WATI	TER BEARING ZONES Depth water	er was first found
Thermal Injection Other	I	WL Date From To Est F	Flow SWL(psi) + SWL(fi)
(5) BURE HOLE CONSTRUCTION Special Standard (A)	ttach copy)		
Depth of Completed Wellft.  BORE HOLE SEAL	sacks/		
Dia From To Material From To Am			···-
_	+		
	711	WELL LOG Ground Elevation	<del></del>
How was seal placed: Method A B C D	E	WELL LOG Ground Elevation  Material	From To
Other	<u> </u>	мисти	Tion 10
Backfill placed from ft. to ft. Material			
Filter pack from ft. to ft. Material Size			
Explosives used: Yes Type Amount	= [		
(5a) ABANDONMENT USING UNHYDRATED BENTONIT  Proposed Amount Actual Amount	*  -		
(CACINOTI INTER	-		
Casing Liner Dia + From To Gauge Stl Piste W	/dy Therd		
	4 H 🗀		
	╛┇╟╌		
·	┧ Н I⊏		
Shoe Inside Outside Other Location of shoe(s)	J ⊔ ⊩		<del></del>
Temp casing Yes Dia From To			
(7) PERFORATIONS/SCREENS	— ⊩		
Perforations Method	- Deta	e Started4/17/2014 Comp	lete 5/5/2014
Perf/ Casing/ Screen Scrn/slot Slot # of	Tele/		
Screen Liner Dia From To width length slots	Pape ones	bonded) Water Well Constructor Certification that the work I performed on the con	
	aban	ndonment of this well is in compliance	with Oregon water supply well
		struction standards. Materials used and info best of my knowledge and belief.	numeron reported spove are true to
	<del></del> 1	ense Number 1903 Dat	5/5/2014
(8) WELL TESTS: Minimum testing time is 1 hour	Sign	ned RYAN PILLSBURY (E-filed)	
Pump Bailer Air Flowing Art  Viold column Deputement Drill stem/Pump death Duration (br)	esian		
Yield gal/min Drawdown Drill stem/Pump depth Duration (br)	`	nded) Water Well Constructor Certification cept responsibility for the construction, des	
	work	k performed on this well during the construc	tion dates reported above. All work
Temperature °F Lab analysis Yes By		ormed during this time is in compliance struction standards. This report is true to the	
Water quality concerns? Yes (describe below) TDS amount	Licer	ense Number 1273 Date	
From To Description Amount	Units	ned FLOYD G SIPPEL (E-filed)	· · · · · · · · · · · · · · · · · · ·
		tact Info (optional)	

, ,

RECEIVED

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WATER SUPPLY WELL REPORT	WELL ID# 19819	
WATER SUPPLY WELL REPORT (as required by ORS 637.765) WATER RESOURCES DEPT. Instructions for completing this report of only orthogonal Conference  Well Number 19819	(START CARD) # 113149	
(1) OWNER: Well Number: 19819	(8) LOCATION OF WELL by legal description:	
Name Dale Goarke	Township 8/8 Nor8. Range 3/W EarW. of	
Address P.O. Box 3548  City Salem State OR Zip 97302	Section 28	
	Street Address of Well (or pornet address)	
(2) TYPE OF WORK:     New Well   Desponing   Alteration (repair/recondition)   Abandonment	2348 Delaney Road S Salem, Oregon 97308	
	(10) STATIC WATER LEVEL: 174 1. below land surface.  Data 7/2	mo
(3) DRILL METHOD:  © Robert Air	174 ft. below tend surface. Data 7/2 Artesian pressure	180
	(11) WATER BEARING ZONES:	
(4) PROPOSED USE:	Ought at which water was first found 37	
Domostic	From To Estimated Flow Rate	SWL
	37 95 20	174
(5) BORE HOLE CONSTRUCTION:	177 (187   5 312   328   20	174
Special Construction approval Yes X No Depth of Completed Well 345 ft. Suppositives used Yes X No Type Amount	328 345 60	174
HOLE Diameter From To Material From To secks or pounds 10" 0 75 Bentonite 0 50 19 Sacks	(12) WELL LOG: Ground elevation	
8" 75 110 Cement 90 110 3 Sacks	Meterial Prom To	SWL
6" 110 348	Topsell 0 1 Significant of the Control of the Contr	1
	Clay red & brown 9 12	
How was seel placed: Method A B C D E	Clay tan sticky 12 22	
Casing lowned into cament	Clay brown sandy 22 37 Decomposed baselt brown 37 70	-
Beckfill placed from 50 ft. to 90 ft. Meterial Bent. 20 sks	Beaut black broken 70 75	
Gravel placed fromft. toft. Size of gravel	See next line 75 95 Bisk gry, bik, brn, brkn some yesc, w/red cist sms	<del>                                     </del>
(6) CASING/LINER:	Baselt black broken 95 100	
Dismeter From To Gauge Steel Plastic Welded Threaded Casing: 6" +2 110 250 X	Basett black 100 117 Bee pext line 117 127	<b>  </b>
Cashg: 6" +2   110   250   XI     XI	Bee next fine 117 127 Bessit grey broken wibm & gm seams	<del>                                     </del>
Uner: 4" 5 345 160 0 0 0 0	Baselt weethered broken brwn & blk   127   135	
Uner: 4" 5 345 160	Basait gray wibrown streaks 135 145 Basait gray & black broken 145 155	+
	Besett grey w/seams 155 164	
Final location of shoe(s) 110"	Baselt brwn & bik wasathered broken 184 168 177	
(7) PERFORATIONS/SCREENS:	See next line   168   177   Besalt varig. wiyellow/orange claystone	
Perforations Method Electric Saw	See next line 177 187	
Screens Type SIGTS Meterial SIJFK 20 Slot Tele/plpe	Baselt civeta vilw w/cinders br & yilw interbeds Baselt bik vesicular 187 193	+
From To size Number Diameter size Casing Liner 30.5  3.45   1/8   64   6 1/2   4"	Basatt black fractured 193 207	
305 345 1/8 64 6 1/2 4"	Continued on next page   Date started 7/1/88   Completed 7/1/88	لـــــا
305 345 1/8 64 6 1/2 4"	(unbonded) Water Well Constructor Certification: I certify that the work I performed on the construction, elecation, or shand	onment
	of this well is in compliance with Oragon water supply well construction six	ndurde.
(8) WELL TESTS: Minimum testing time is 1 frour  □ Pump □ Bailer ② Ar □ Flowing Artesian	Misleriels used and information reported above are true to my best knowled belief.	
	Signed So Note Date 7-1	e-95
Yield gal/min Drawdown Drill stem et Time  60   \$45   1 hr.		
	(bonded) Water Well Constructor Certification:	_
	i eccept responsibility for the construction, elianation, or shendonment was performed on this well during the construction dates reported above. All v	rorit vorit
Temperature of Water 52 Depth Artecian Flow found	performed during this time is in compliance with Orogon water supply wall	
Was a yeter enalysis done?  Yes By whom	construction standards. This report is true to the best of systemoviedge and	i belief. 384
Did erry strata contain water not suitable for intended use? Too fittle   Suity   Muddy   Odor   Colored   Other	Stoned Inake W. Markous 7-3-	98
Depth of strets:	Mack Drilling Company, Inc.	

Mari コミンドライド 53156 JUL 1 0 1998 .E OF OREGON WELL ID# **JUPPLY WELL REPORT** WATER RESOURCES DEPT. ed by ORS 537.765) (START CARD) # 113149 and for completing this report are on the less pSALFM_OREGON Page 2 Well Number: (8) LOCATION OF WELL by legal description: .ne Dale Goerke County Nor6. Range 3/W cocitude Tounship 8/8 EarW. of WML City Section <u>28</u> Siete Tax Lat Subdivision Disale (2) TYPE OF WORK: Street Address of Well (or nourse) address) New Well Desponing Alteration (repeir/recondition) Abendomment (3) DRILL METHOD: (10) STATIC WATER LEVEL: ft. below land surface. Rotary Air ☐ Rotary Mud Cable Attger Ariesian pressure b. per equere inch. ☐ Other (11) WATER BEARING ZONES: (4) PROPOSED USE: Depth at which water was first found □ Domestic Community | | Industriel | | Livesiock | krigation Thermal Injection **Estimated Plow Rate** SWL (5) BORE HOLE CONSTRUCTION: Special Construction approval Yes No Depth of Completed Wall Explosives used Yes No Type __ Amount HOLE SEAL Amount Diameter From (12) WELL LOG: Material From To sacks or pounds Ground elevation From To 207 212 212 217 SWL Beself bik broken wigreen seems Basait grey & blk broken wiseams 217 221 Baself blk fractured wipyrite seams 217 Baselt grey & black fractured Baselt grey fractured Baselt black & grey How was seal placed: Method A B Other 250 Backfill placed from £.b 250 277 ee next line Gravel placed from R. to £. Size of gravel 277 inselt gray broken wigm & pyrite somme (8) CASING/LINER: asalt grey fractured 283 287 lee next line Diameter Gauge 287 To Steel 308 Threade Basalt grey broken wigteen & pyrite seam leselt black fractured esalt weathered vesicular by & bik 312 laselt brn & blk very broken Liner: Final location of shoe(s) (7) PERFORATIONS/SCREENS: Perforations
Screens Material Sint Tela/plpe To Number Diameter etto' (unbonded) Water Well Constructor Certification: I certify that the work I performed on the construction, elecation, or ab (8) WELL TESTS: Minimum testing time is 1 hour of this well is in compliance with Oregon water supply well construction standards. Maleriels used and information reported above are true to my best knowledge and Pump Plowing Artesian Baller ☐ Air bolief. WWC Number Yield gai/min Dramadown Drill stem of Time **Signed** Date (bonded) Water Well Constructor Certification: I accept responsibility for the construction, alteretion, or abandonment work performed on this well during the construction dates reported above. All work Temperature of Weder Depth Ariosian Flow found performed during this time is in compliance with Oragon weter supply well Was a water analysis done? Yes By whom construction etandards. This report is true to the best of my knowledge and bolist. Did any strate contain water not suitable for intended use? ☐Saffy ☐Muddy ☐ Odor ☐ Colored ☐Other WWC Number 1394

D. D. D. D.

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Mack Driffing Company, Inc.

D. D. D. D. D. D. D. D.

9. 9. 9. 9. 9. 9. 9. 9. 9.

STATE OF OREGON WATER SUPPLY WELL REPORT (as regarded y ORS 597.765)	WHILLID.#L 42.451	_			
WALER SUFFLI WILLIAM ORI					
Diameter From To Material From To Sacks or posseds		52			
10 0 150 Conest 0 150 059 Seeks		—			
6 158 520 open held		$\dashv$			
	MAN TOPPE TO CO.	لحد			
How was seel placed: Method A B MC D B	(12) WELL LOG: Ground Elevation				
D Other					
Backfill placed fromft Material	Material From To SWI	닉			
Gravel placed from R. to R. Size of gravel	Rep Seil 0 3	$\dashv$			
(6) CASING/LINER:  Discrete: Press To Gauge Steel Flands Webled Thresded	Red Study Clas 37 69	ᅱ			
Disnester Press To Gauge Steel Plants: Welfell Threates	Les of Drown clay Store 69 97				
	Gross Sand stoke 97 128	_			
	broken brown Clay Stone 128 135	_			
	then droken brown dies after 135 146 63	Ч.			
	OGranish Clausters 231 432	$\dashv$			
Final location of shoots 1.59	CRATES WHITE Sealstone 472 520 25	7			
(7) PERFORATIONS/SCREENS:		$\Box$			
Perforations Method	RECEIVED				
Screens Type Material	NEGELATIO				
Proces To size / Strongles   Displanter stim Casing Lintr	SEP 2 9 2000	$\dashv$			
	SEF 6 9 COUR	$\neg$			
	WATER RESOURCES DECT				
	WATER RESOURCES DEPT SALEM, OREGON	_			
	<del> </del>	-			
(8) WELLTESTS: Miniarum testing time is 1 hour	Date started 9/11/00 Completed 9/16/00				
Flowing	(unbonded) Water Well Constructor Certification:				
Pump Bailer BAir Artesian	I certify that the work I performed on the construction, alteration, or abundons of this well is in compliance with Oregon water supply well construction standard	nent`			
Yield gathein Drawdown Drill demail Time 2.0 520 1 bc.	Waterials used and information reported above are true to the dest of my attorised	lge			
2.0 526 1hr.	and belief.  WWC Number 1733				
	Signed NOV   Bell Date 9/6/6	<b>4</b>			
Temperature of water 53 Depth Artesian Flow Found	(bonded) Wajer Weil Constructor Certification:				
Was a water analysis done? To Yes By whom	I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work				
Did any strata contain water not suitable for intended use? Too little	performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief	<b>7</b> .			
Salty Monday Odor Octored Other \$	MONIC Namedon (A)	-			
LOPE OF THE PARTY	Signed Dallas A Roil Date 9/16/1	77			

					77.0.1
<u></u>	NOTICE TO WATER WELL CONTRACTOR  The original and first copy of this report  are to be filed with the	L REPORT	_ ,	_	801)
	WATER RESOURCES DEPARTMENT, SALEM, OREGON 97810  JUL 2 2 197 Naces type		80/3	<u> </u>	3
	of well completion. WATER RESOURGES: PETE	sor print)	io	***	<del></del>
	(1) OWNER:	(10) LOCATION OF WELL:	-		<del></del>
	Name Terrace Lake Mobile Park c/o Wallace Voig		umber 1	1940	
	Address 5355 River Rd. N	14 14 Section23 T. 8S	R. 3W	ــــــــــــــــــــــــــــــــــــــ	W.M.
_	Salem, Oregon 97303	Bearing and distance from section or subdivist			<b>V7,000.</b>
	(2) TYPE OF WORK (check):  New Well IN Despening I Reconditioning I Abandon I				
	New Well [A] Despening [] Reconditioning [] Ahandon []  If ahandonment, describe material and procedure in Item 12.	(44) 774 777			
	(3) TYPE OF WELL: (4) PROPOSED USE (check);	(11) WATER LEVEL: Completed w	elL		-
-	Rotary M Driven C Domestic C Industrial C Municipal C	Static level 2 ft. below land a		- 5/	<u>tt.</u>
	Dug   Bored   Irrigation in Test Well   Other	Artesian pressure lbs. per squar			31/17
	CASING INSTALLED: Threaded D Welded IN	(12) WELL LOG: Diameter of well b			3
	8 Diam from 2008 7 7 to 58 # Gage 250	Depth drilled 358 ft. Depth of compl		~~~~	- *
		Formation: Describe color, texture, grain size a	rad almosto		eteriola:
		with at least one entry for each change of themse	m and aqu	iller pe	netrated,
	Type of perforator used	position of Static Water Level and indicate prin	cipal water	-bearlu	g strata.
-	Size of perforations in. by in.	. MATSHAL	From	70	SWI.
	parforations from ft. to ft.	Brown Clay	2	17	
	perforations from ft. to ft.	Blue Hard Sticky Clay	17	46	<del></del>
	perforetions fromft. toft	Blue Shale	46	94	
	(7) SCREENS: Well screen installed?   Yes   X No	Bluish brown shale, slightly water bearing			
1	Manufacturer's Name	Blue Shale	94 157	157 230	
	Type Model Nor ft. to ft.	Gray Sandstone	230	316	
	Diam. Slot size Set from ft. to ft.	Water Bearing hard Blue KEKEY SEART Shale			
Ä	(8) WELL TESTS: Drawdown is amount water level is lowered below static level	Blue Shale	316 340	340 358	
À	Was a pump test made? [] Yes [2] No 14 yes, by whom?	this			
	d: gal/min. with drawdown after hrs.				
	mirtest 40 GPM for a period of "4 hours "				
	<i>B B B</i>			-	
	Baller test gal/min. with ft. drawdown after hre.			-	<del></del>
<u>~</u>	Ariesian flow g.p.m.				
	sperature of water Depth artesian flow encountered		a 5/31/7		19
	(9) CONSTRUCTION:	Date well drilling machine moved off of well	.5/31/7	/9	19
	Well sealed from land surface to	Drilling Machine Operator's Certification: This well was constructed under my	 Simont o		ونر • •
-	Diameter of well bore to bottom of seal 12 in.	Materials used and information reported a best knowledge and belief.	spone are	rbera	to my
· .	Diameter of well bare bolow scal 8 m.	[Signed] Sillar Lovers	oate <u>5/31</u>	<u>L/79</u> ,	19
	How was coment grout placed? 4 sacks pumped to bottom of	Orilling Machine Operator's License No	752		<del></del>
	annulus. Drill cuttings filled to 20 feet	Water Well Contractor's Certification:			
~	then top 20 feet filled with 8 sacks pumped in to fill to current ground level	This well was drilled under my jurisdic	tion and	ihis re	port is
<b>A</b>	Was a drive shoe used? □ Yes ⊠No Plugs Size: location	true to the best of my knowledge and belie	st.		<b>-</b> <del>-</del>
Ă	Date and Street courses research materia 17' xes 15' No	Name Willamette Drilling Co. (Person, from or composition)		or print	
~	Type of water? depth of strata	Address 7365 O'Neill Rd. NE Sales	n. Oreg	DEL (	<u>97303</u>
	Method of sealing strata off	[Signed] Dallas L. Bars			<del></del>
	Was well gravel packed? [] Yes E No Size of gravel:  Gravel placed from ft.	(Water Well Contractor's License No. 561 Date 5/2			
	Gravel placed from	Contractor's License No. 561 Date 5/3	(+/ /7		19

		<u> </u>	CHASSECUL TI STATE	RR TVENLLIGHT END)
3961	01-17	406 Date	Contractor's License 1	Gravel placed from
		(Weiter Well Contrac	manufacture (Dangle)	Sizes to eath of the same of the same is well are eath
		becook	[bamal2]	tto starts galless to berifold
5-00 W1		······································	Address 27/0/1/2	Type of water? depth of strata
30 N37	n odke)	17 HELLON W 12 ca carbanettan)	) WOE	Did any circle contain unusable water? [] Yes PNo
(10,000		1000	NAME 17.7	Wes a days shoo used? Nacs D No
			true to the best of sur	Worse any loose strata communication off? I Yes Sino Dopin
at troops and	fore mothet	led under my jurisd		Distributed of well bore to bettem of seel
		- implicabilities) at	otosatmoO flaW rotaW	
	181		Drilling Machine Ope	(19) CONSTRUCTION:
Ball of - 101-14 state [bengla]				Artesian flower arter a chemical analysis medical and a Saio
and von or s	nn eme en	nation reported abov	riolni bas bear sisis Islied has exbelworsi	l
		b var raban baburita		Beller test and solven at the diswlove site.
00RI	· · · · · · · · · · · · · · · · · · ·	· HOM 20 THE PRACTICE	Date well drilling machi	
39 ⁵¹ - 01				and \$1 retts newshares at CC ditter alm in 8
89 ⁶¹ -0,	الله هراب ر	O- 1968 Complet	Dotrota #10W	Was a pump test made? A Yes E No M yes, by whom? AROS
				(9) WELL TESTS: Drawdown is amount water lovel is provided principles.
			···	chall thank enauga veq sell enauserq naleseric
				87.01-12 oracle continue hand wolled in CA Govern
				(8) WATER LEVEL. Completed well.
	061 a			Dlam. Glot dies Set from At. to At. mond.
200 N			HO SWIHLON	Diam. Elet ates — Set from — ft. to — ft.
	J.A. S.	156 46 BELLEVILLE		TypeModel No.
	4	1-81 02-77/80	A JUSU SINT	Manufacturer's Manne.
<del> </del>	<del>  </del>	<del></del>	· · · · · · · · · · · · · · · · · · ·	(7) SCHKENS: Mell seroom matellicut 🗆 Xee 🕏 Ko
	<del>  </del>	1	<del></del>	H of H mort entitled
151 08	1 851	פעקל אטנס	SHOLSONUS	A month and an
· E/s		CERY FIRM	CLAUSTONE	A mort exolisions of A
2.			PHOTZALAZ	# of A mont such such such such such such such such
<u> </u>			פרעלבאים פ	A dr
,9,			BUZULL MEGI	Size of perferations in by the
- 18		7070		Type of perforator used
. 6			7/05801	PERFORATIONS: Perforated   Ves & No.
<u> 12.</u>		11463		" Diem from A to A Gegge
ZAS QI	From		ELVR .	" Diam. from A to A Gego
and show thickness and nature of each stratum and aquiter penchrated, with at least one early for each change of formation. Report each change in position of Statio Weber Level as drilling proceeds. Note drilling rates.				CASING INSTALLED: Threaded Welded [
			Formation: Describe co	
: .061	How batel	at Depth of comp	Depth dellied	Discontinuo Discon
(12) WHIL I.C. Dismeter of well below eaches 6".				Rotary Of Driven
				(3) TYPE OF WELL: (4) PROPOSED USE (check):
<del> </del>			<del></del>	it shanderment, describe material and procedure in item 18.
			•	☐ mobrade ☐ Sminntibuccost 🔏 Sminoqoffi . ☐ How wolf
Bearing and distance from section or subdivision corner				(2) TYPE OF WORK (check):
R'AL (	*F = 5	S. T. D. cottons	1 1 Colo 24	180 LIBORTY SE, SALON DRA
	19quin		(II) FOCULION	(1) OWNER.
		on New otals A three stats	e or print) 	STATE ENGINEER, SALER, ORGON, STORES TO BE SEEN TO BE S
- 42 -	12/8		The second secon	MOTICE TO WATER WELL CONTRACTORMY  The critical and fine copy  AND THE CONTRACTORMY  AND
シ	.80	CTH	SIT	C1/18   Manage 12 12 12 12 12 12 12 12 12 12 12 12 12

E)

STATE OF OREGON WATER SUPPLY WELL REPORT (as required by ORS 537.765)

1: 1. 1. 1.

Mack Drilling Company, Inc. PO Box 12067 Salom, OR 97309

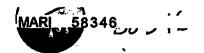
WELL LD. # L 72881 (page one)

Instructions for completing this report are on the last page of this form. MA	2158340	ARI CARD	# 100210	
(1) LAND OWNER Well Number 72881	(9) LOCATION OF W	ELL (legal d	lescription)	
Name Paul Meyers	_ County Marion			
Address 5955 Barcelona Dr SE City Salem State OR Zip 97301	Tex Lot 100		Lot	
City Salem State OR 2ip 97301	Township 8 Scotion 25 D		ango <u>3</u> 1/4 SE	_W WM 1/4
(2) TYPE OF WORK New Well				
Deepening Alteration (repair/recondition) Abandonment Conversion	Let	" or	«	legroes or decimal)
(3) DRILL METHOD	Long			
Ø Rotzry Air □ Rotzry Mud □ Cable □ Auger □ Cable Mud	Street Address of Well (or : (next door to Walt Well			
_ Cons	40.00.00.00.00			
(4) PROPOSED USE Dementic Community Lindustrial Direction	(10) STATIC WATER	ow land surface		04
☐ Thermal ☐ Injection ☐ Livestock ☐ Other		ow land surface		<del></del>
(5) BORE HOLE CONSTRUCTION Special Construction: Yes No	Artesian pressure	_ lb. per squan	e inch Date	
Depth of Completed Well 523 ft. Explosives used: Yes 2 No Type Amount	(11) WATER BEARIN Depth at which water was fi			
BORE HOLE SEAL	From	To	Estimated Flow Rat	z SWL
Diameter From To Material From To Sacks or Pounds	94 108		4	<u> 57</u>
10 0 168 Bentonite 0 37 13 sacks 8 158 159 Coment 37 158 35 sks w/bent	296 323		2	195
6 159 523	428 429 429 440		<u>1</u> .5	195
How was seed placed: Method	(12) WELL LOG	C4	Elevation	
Other Poured and Probed Bentonite	Material	Cionn	From To	SWL
Backfill placed fromft. toft. Materialft. toft. Size of gravel	Top Soil br	10		
Gravel placed fromft. toft. Size of gravel	Clay red & br some firm			
(6) CASING/LINER	Clay red & br & vellow of Clay stone br & red to y			<del></del>
Diameter From To Gange Steel Flastic Welded Threaded Caring: 6   +1   160   250   2   2   2	Clay stone br Frx & wes			
Caring: 6   +1   160   250   2   2   2   2   2   2   2   2   2	Clay stone br to gray se			
	m-hard some weather		7 47	<del></del>
Line; 4 -3 523 160 - 2 2	soft clay		57	
	Clay light br sticky	5		
Drive Shoe used I Inside  Outside  None	Clay grey sticky Clay stone br seamy m-	7 hard 7		<del></del>
Fixal location of shoo(s) 160	Basait br & grey m-hard			
(7) PERFORATIONS/SCREENS	Basait bik & grey Frx	194		57
Perforations Method Electric Saw	Basalt grey hard		OB 110	<del>-  </del>
Screens Type Slots Material PVC	Date Started 08-31-04		pleted 09-07-04	
From To Slot Number Diameter Telespipe Casing Liner			<del> </del>	
Size	(unbonded) Water Well Co I ocrtify that the work I p	omeranar Ca performed on t	rumennon he construction, deene	ning, alteration, or
482   522   1/8   40   6	ebandonment of this well is	in compliance	with Oregon water sur	oply well
	occustruction standards. Met the best of my knowledge, as		information reported	above are true to
			211/1	0-9-14
	WWC Number 1394		<i>~##</i>	1201
(8) WELL TESTS: Minimum testing time is 1 hour  Pump Bailer Air   Flowing Artesian	Signoy Myland	[. [s	loff	
Yield gal/min Drawdown Drill stam at Time 3 1 1 HR	(bonder) Water Well Com Paccept responsibility for	structor Certif	Seation ion, despening, alterat	iau, ar
	abandonment work performs	ed on this well	during the construction	a dates reported
	abovo. All work performed supply well construction star			
Temperature of water 58 Depth Artesian Flow Form	and belief.		/ /	,
Was a water enalyzis done? Yes By whom RECEIVED Did any strata contain water not suitable for intended use?	WWC Number 1394		And II	9-9-04
Salty District common water not sumant for microsco uter	7_	1		
Depth of ECEIVED	Signey	4-14	were .	<del></del>
AND A MARIE MARIE DESCRIBE PARTY		Eugene	Mack I	

OCT 01 2004

WATER RESOURCES DE SALEM, OREGON 06/16/2004

WATER RESOURCE JEPT SALEM, OREGON



RECEIVED

203

SEP 1 0 2004

### Mack Drilling Company, Inc.

Domestic + Commercial + Environmental + Geotechnical Drilling & Well Services

A R R R R R R R

À

(1) OWNER:

**Paul Meyers** 

WATER RESOURCES DEPT SALEM, OREGON

RECEIVED

Well Number: Start Card # 72861 169276 OCT 01 2004

	Site	_	WA
Address:		AME	
5955 Barcelona Dr SE			
City:			
Salem, OR 97301	Pag	ge two of t	wo
(12) WELL LOG:			0140
Material Material	From	То	SWL
******continued from page one******		- 446	<del></del>
Basalt w/Clay stone green	110	118	
Basalt grey m-hard few seams	118	/ 130	
Basait blk hard	130	136	
Clay blue	136	147	
Clay blue sendy	147	149	
Clay stone blue m-hard	149	152	
Clay stone grey silty	152	158	
Silt stone blue green	158	162	
Sand stone grey	162	165	
Clay stone green & br	165	168	·
Sandstone green & br	168	173	
Sandstone green & bik	173	176	
Sandstone grey	176	187	
Sandstone greyish br	187	198	
Sanstone grey hard	198	207	
Sandstone grey m-hard	207	212	
Sandstone silty hard	212	223	
Sandstone grey hard layers	223	240	
Sandstone dark grey sandy blk	240	253	
Silt stone grey	253	266	
Silt stone Sand stone fine grained	266	275	
Silt stone grey	275	296	
Sand stone light grey soft	296	323	19
Sand stone light grey coarse soft	323	334	19
Clay stone br & grey silty	334	338	199
Silt stone grey hard to m-hard	338	_ 347	19
Silt stone dark grey m-hard to hard	347	445	199
Clay stone maroon & green w/gravel	445	- 448	·
Silt stone grey sandy	448	449	
Mud stone light br	449	491	
Silt stone grey	491	504	_;
Silt stone blk & grey w/hard layers	504	523	

1345 20TH STREET SE + P.O. BOX 12067 + SALEM, OREGON 97309-0067 + (503) 371-4399 + FAX (503) 375-0961

# STATE OF OREGON WATER WELL REPORT | 7775 APR 13 1992 (as required by OBS 55(765) OWNER: Well Number SALEM, OREGONOC AMERICAN SELECK Zip 9730 Z Section O TYPE OF WORK: Now Well | Deepen | Recondition | Abandon Street

TO THE PROPERTY OF THE PARTY OF

88/3w	125	•
(START CARD) # W - 3912	o Ro	4

(1) OWNER: Well Number SALEM, ORE	County Marian Latitude Longitude	
Address 7642 Bottle Cr. Rd. SE	Township 8-S N or S. Range 3-W B or W	
City Solem State OR Zip 97302		. WM.
(2) TYPE OF WORK:		
		7
X Now Well Deepen Recondition Abandon  (3) DRILL METHOD:	Street Address of Well (or nearest address) Same as	<u> </u>
	MON CHIAPPIC WIAPPIN Y MICRO	-
Rotary Air Rotary Mad Cable	(10) STATIC WATER LEVEL:	lan
Other	89 8 below land surface. Date 3/28	77.5
(4) PROPOSED USE:	Artesian pressure lb., per square inch. Data (11) WATER BEARING ZONES:	<del></del> ·
Domestic Community Industrial Irrigation	(11) WATER BEARING ZONES:	. :
Thermal Dijection Other		•••
(5) BORE HOLE CONSTRUCTION:	Depth at which water was first found 25	<del></del> .
Special Construction approval Yes No Depth of Completed Well 62. ft.		
Explosives used Yes X No Type . Amount	From To Estimated Flow Rate	SWL
. HOLE SEAL Amount	25 29 Trace	<b>23</b> .
Diameter From 'In   Material From To sacks or pounds		
10 0 39 Cement 0 38 30 Sects	132 162 24	89
	<u>                                   </u>	
6   39   162	(12) WELL LOG:	-
	Ground elevation	
How was seal placed: Method A B BC D B		
Other	Material From To	SWL
Backfill placed from 38 ft. to 39 ft. Menerial Hele plug	Top Soil 0 2	
Gravel placed from ft. to ft. Size of gravel	Red clay 2 10	
(6) CASING/LINER:	Yellow Shady along 10 25	
Diameter , From , To Gauge Steel Plastic Welded Threaded	Broken Basalt 25 29	23
Casing: 6 in #1.5 39 250 K 0 19 0	Black hard beselt 29 182	
	Broken brown basalt 132 134	89
	Hard black basalt 134 138	
	Broken black baselt 138 144	89
	Broken black basalt with	
	black shale seams 144 154	89
Final location of shocks) 39	Hard black base 1+ 154 162	
Final location of shoe(s)	THE THE PARTY OF T	
Perforations Method	·	
Slot Thielpipe From To size Number Diameter size Casing Lines		
<del></del>	.	
<del></del>		
	·	
(8) WELL TESTS: Minimum testing time is 1 hour	Date started 3-25-92 Completed 5-28-92	<u> </u>
Flowing -		
☐ Pump ☐ Bailer ☑ Air ☐ Artesian	(unbonded) Water Well Constructor Certification:  I certify that the work I performed on the construction, alteration, or	shandon-
Yield gel/min . Drawdown Drill stem at Time	ment of this well is in compliance with Oregon well construction standards.	Materials
	used and information reported/above are true to my best knowledge and I	cijof.
24 /62 lbr.	MW D WWC Number!	
		92
		<del>/</del> -
	(bonded) Water Well Constructor Certification:	
Temperature of Water 57 Depth Artesian Flow Found	I accept responsibility for the construction, alteration, or abandonment formed on this well during the construction dates reported above. All work	wate per-
Was a water analysis done?  Yes By whom	during this time is in compliance with Oregon well construction standards. T	his report
Did any strata contain water not suitable for intended use!   Too little	is true to the best of my knowledge and belief.	17 P
Salty Muddy Odor Colored Other	WWC Number	42
Depth of strate:	Signed The Signed Date 3/30/	7.6
ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECO	AND COPY - CONSTRUCTOR WHIRD COPY - CUSTOMER 9	809C 10/91

Well ID Tag # L Received Date:

Start Card

by legal description

Dethe:

(10) Static Water Level Fest below land surface:

Rotary Mud Cable

X Rotary Air

(4) Proposed Use

X Domestio

Livestock

(5) Bore Hol Special Sta

STATE OF OREGON Water Supply Well Report	MAR!
(es required by ORS 637.765) Instructors for completing this recort are on the lest page of this form,	S.
(7) OWNET Well Number: 1 Name: LLOYD KLASSEN	(9) Location of Hole by legal d
Street, 3733 ECHO DRIMIN, State: OR Zip Code: 97304	Township: 8.00 S Section: 28 SESE
(2) Type of Work	
New X Abs (Recondition) After (Repair)	
1	MAP, with location identified, must be attached.
bomes min h	1401 CA-15- 115-1-1

(44) Water Bandan	Depth of which waser free found.	From To est Flow and			(12) Well Log Ground Elevation:	Material Firm To and	1	RECEIVED		WATER RESULPICES UEPT SALEM OBEGON	NOTE
d Use	Commissity   Industrial   Intestion   Injection	Themal Other.	e Construction	infands: Dapth of completed well: 165,00 ft.	Jeed: Amount: Type:	Sec. 1	To Muth From To Seckettes	? Other: Meteriet: Size:	iner	form To Gauge Mit Weld That at used	

8) Casing / L

trck fill placed from

Mer pack from:

WATER RESOURCES DEPT. SALEM, OREGON RECEIVED SEP 0 9 2002 To Width Height #Stota Dia, UpSize Lin Method S Sim #Sids Dia, UpSize Type Gauge (Athibitum testing time is one hour) (7) Perforation / Screens
Pertoations:
Mid From To Width Height #

(8) Well Tests

31d eny strata contain water unsuitable for use?

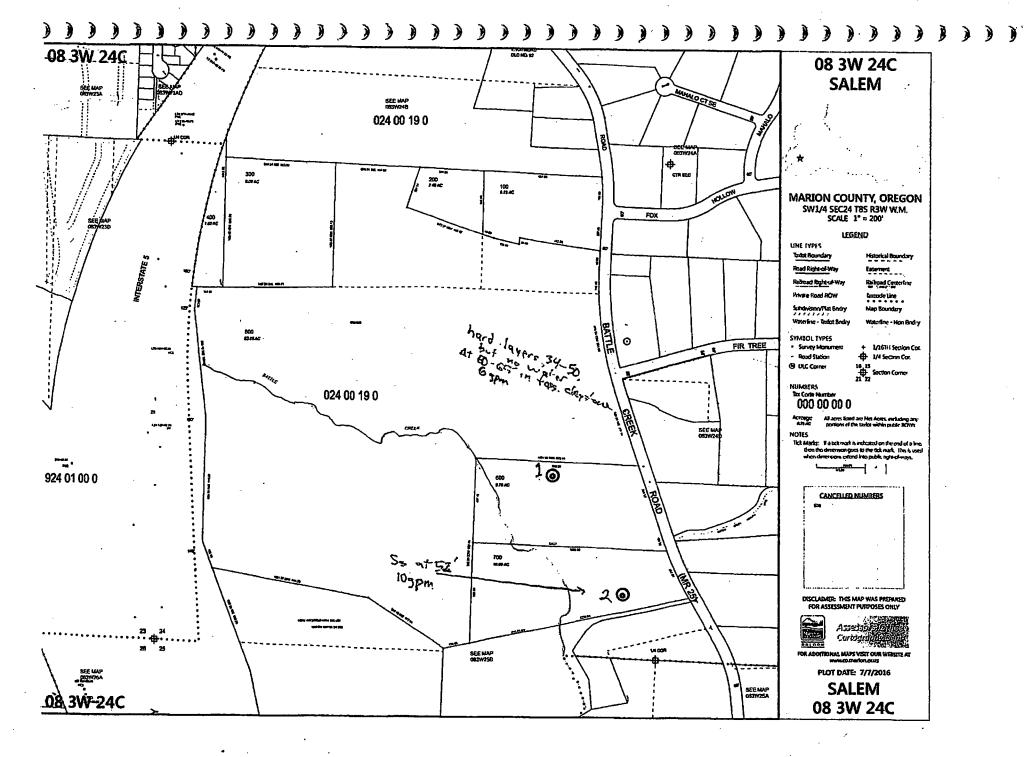
Temperature of Water:

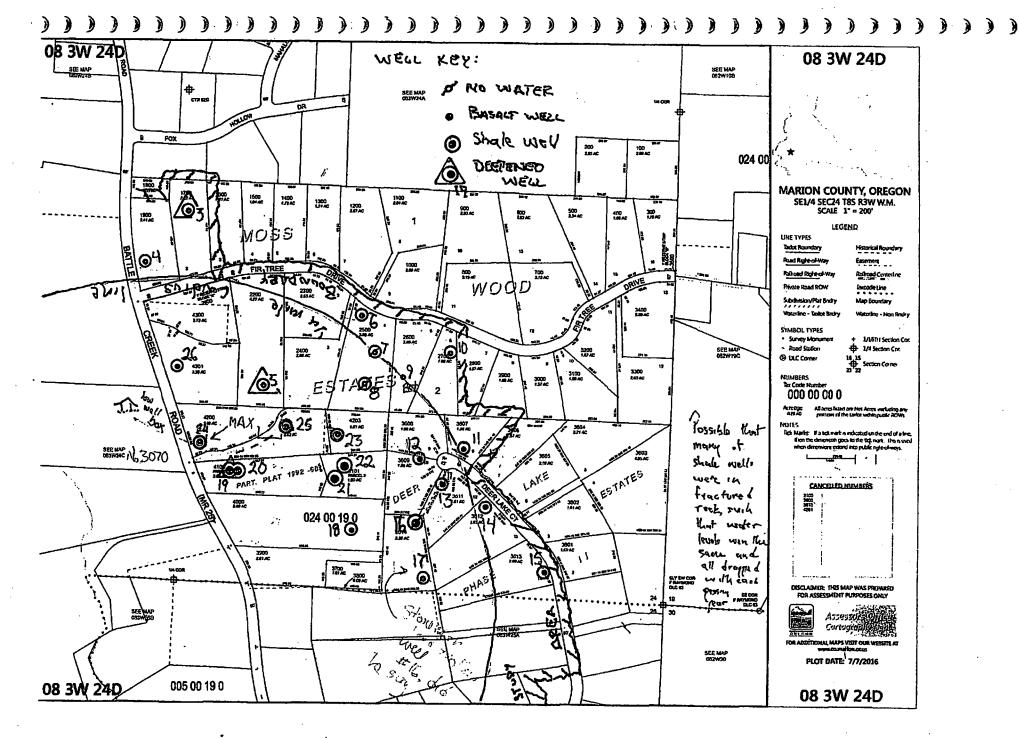
Colored

Munday Octor

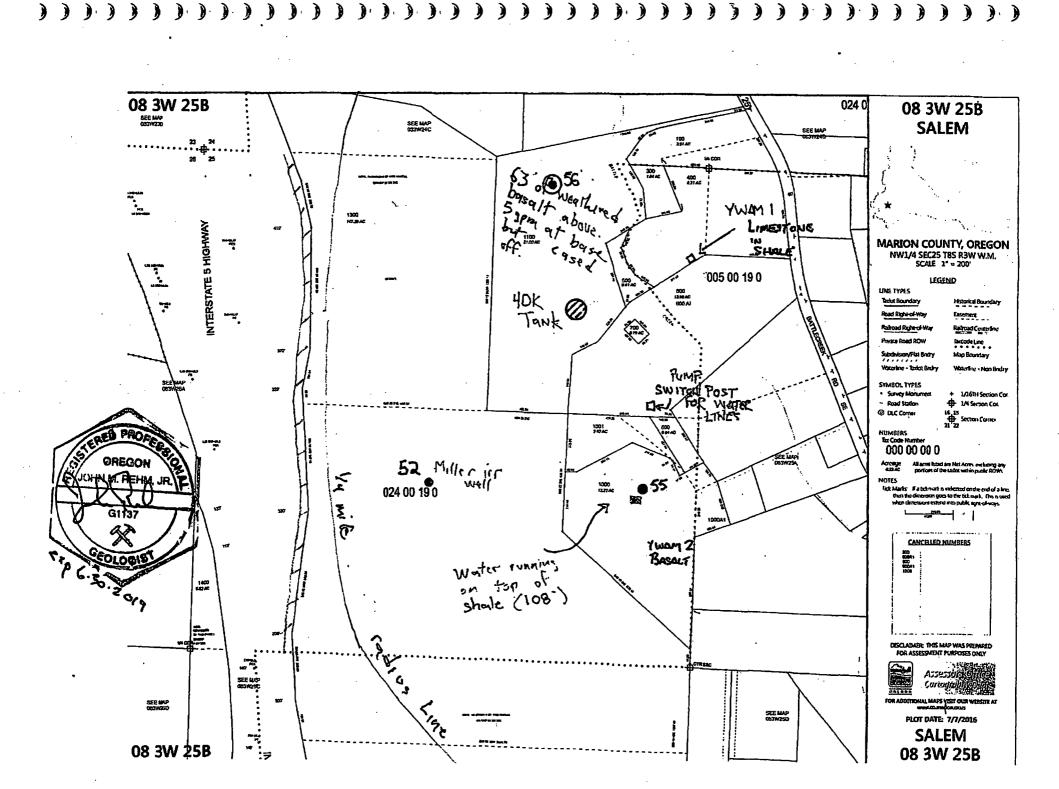
Appth of estrator

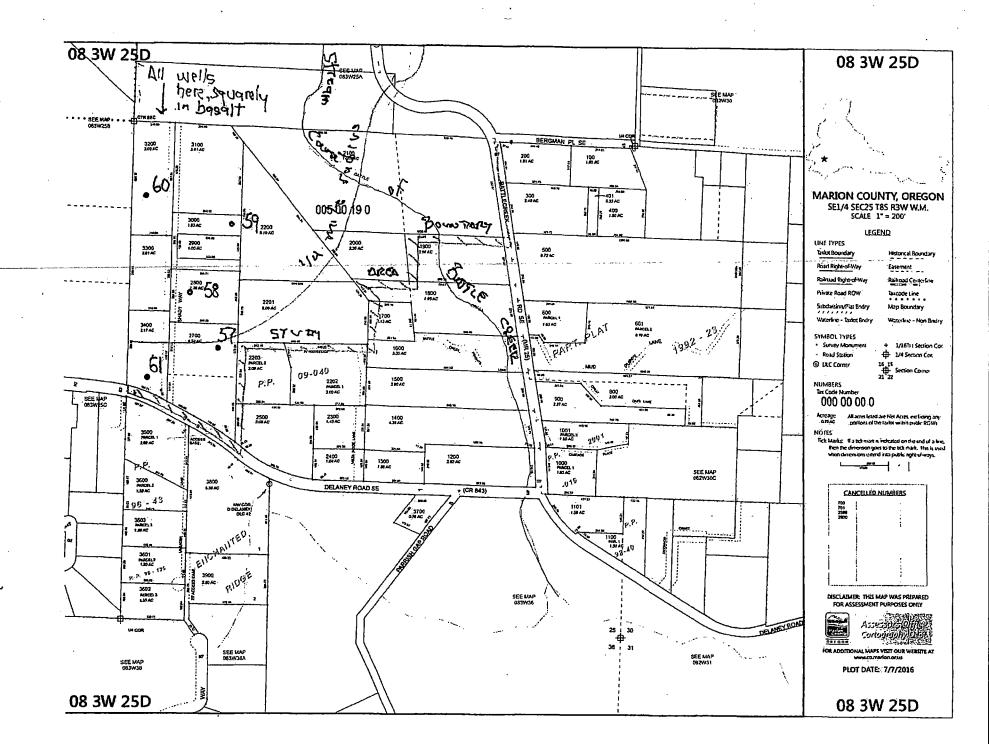
## APPENDIX II MARION COUNTY TAX LOT MAPS





08 3W 25A 08 3W 25A 024 00 19 0 SEE MAP 082W19C DANK torre PROVINCE DUC ES Creek MARION COUNTY, OREGON NE1/4 SEC25 T8S R3W W.M. SCALE 1" = 200" 43 WELL **©45** 35 **©**# LEGEND LINE TYPES 005 00 10 0 SHORE Waterfale - Textos Bo SYMBOL TYPES SEE MAP VISITE Section Con Road Station @ DLC Comer 16,15 Section Contact 21, 22 7900 L3940 NUMBERS 600 4404C Tex Code Humber 000 00 00 0 SHOLE BOWL well key BASOUT Basalt @ SHALE Will Shale 005 00 19 0 Pasar @53 BOOLT OUTCO. well move well 52 from 5800,00 wells in hore Found FOR ADDITIONAL WAPS YEST OUR WESSITE AT PLOT DATE: 7/7/2016 10/1 SEE WP 08 3W 25A 08 3W 25A





08 2W 30 SEE MAP OSZW19 SEE MAP *?* 024 00 19 0 FROMOS MECON FROMOS MECON DUCES FROMOSO 10 FROMOSO MARION COUNTY, OREGON SEC 30 T85 R2W W.M. SCALE 1" = 400" LEGEND LINE TYPES bristandary Historical Roundary 2007-127 Road Right-of-Way Raircud Right of Way Railyood Controller Subdivision/Plat Bodry Map Boundary Waterline - Todas Bruky SYMBOL TYPES 1/16111 Section Cor 662 # 1/4 Serven Cox. - Road Station @ ULC Corner 005 00 19 0 NUMBERS Tex Code Number 000 00 00 0 All acres inted are Not Arres, excluding any participant of the tables within realize REWA NOTES 30C CANCELED NUMBERS 30D DISCLADATER: THIS MAP WAS PREPARED SEE MAP PLOT DATE: 7/7/2016 36E MAP **308 2W 30** 08 2W 30

## APPENDIX III CERT LIST (OWNERS NAMES, ADDRESSES, ACREAGE)

### **YWAM Cert List**

			·	
1	083W24C00600	Janice Reid Family Tr.	6845 Battlecreek Rd., Salem, 97317	9.76 AC
2	083W24C00700	Ray Reid Properties	6915 Battlecreek Rd., Salem, 97317	10.09 AC
3	083W24C00800	Valley Hill Ranch	1665 Liberty St. SE, Salem, 97302	94.53 AC
4	083W24D01700	Charles Redon	3045 Fir Tree Dr. SE, Salem, 97317	2.32 AC
5	083W24D01900	James Gilkinson Tr.	3025 Fir Tree Dr. SE, Salem, 97317	2.41 AC
6	083W24D02000	Marion Co./Finance	P.O.Box 14500, Salem, 97309	0.04AC
7	083W24D02200	Darwin Hagen	3076 Fir Tree Dr. SE, Salem, 97317	4.27AC
8	083W24D02300	Andrew Nelson	3166 Fir Tree Dr. SE, Salem, 97317	2.53AC
9	083W24D02400	Merill Halfman	3186 Fir Tree Dr. SE, Salem, 97317	2.66 AC
10	083W24D02500	Joan Jeffers Trust	3226 Fir Tree Dr. SE, Salem, 97317	3.56AC
11	083W24D02600	Dale Alan Yost Tr.	3256 Fir Tree Dr. SE, Salem, 97317	2.06 AC
12	083W24D02700	John Hammitt	3286 Fir Tree Dr. SE, Salem, 97317	1.88 AC
13	083W24D03607	Steven Nelson	3574 Deer Lake Ct. SE, Salem, 97317	1.36AC
14	083W24D03608	Scott Ross	3594 Deer Lake Ct. SE, Salem, 97317	1.57AC
15	083W24D03609	Duane Cunningham	3585 Deer Lake Ct. SE, Salem, 97317	1.86AC
16	083W24D03611	Steven Marvel Tr.	3555 Deer Lake Ct. SE, Salem, 97317	1.81AC
17	083W24D03612	Luis Martinez	3515 Deer Lake Ct. SE, Salem, 97317	2.92AC
18	083W24D03613	Erik Kokkonen	3455 Deer Lake Ct. SE, Salem, 97317	2.69AC
19	083W24D03614	Kenneth Stoneman	3411 Deer Lake Ct. SE, Salem, 97317	2.67AC
20	083W24D03700	Walter Heinle	6996 Battlecreek Rd. SE, Salem, 97317	1.01AC
21	083W24D03800	Walter Heinle	6996 Battlecreek Rd. SE, Salem, 97317	0.09AC
22 (	083W24D03900	Walter Heinle	6996 Battlecreek Rd. SE, Salem, 97317	2.49AC
23 (	083W24D04000	YWAM Slavic Mins.	6946 Battlecreek Rd. SE, Salem, 97317	5.71AC

00920A25WE80 84	Chris Turrey	7056 Battlecreek Rd. SE, Salem, 97317 2.32AC
47 083W25A02500	Alex A. Kimoff	7026 Battlecreek Rd. SE, Salem, 97317 2.25AC
46 083W25A02404	Suppressed Owner	3395 Deer Lake Ct. SE, Salem, 97317 5.26AC
45 083W25A02403	Spencer Rockwell	3399 Deer Lake Ct. SE, Salem, 97317 4.55AC
A4 083W25A02402	Kelly Conover	3415 Deer Lake Ct. SE, Salem, 97317 2.25AC
43 083W25A02200	Kenneth VanOsdol Lt	3375 Deer Lake Ct. SE, Salem, 97317 3.13AC
42 083W2SA02000	dmooloH bboT	3315 Deer Lake Ct. SE, Salem, 97317 2.41AC
41 083W2SA01900	S. Kent Irving Tr.	3285 Deer Lake Ct. SE, Salem, 97317 3.17AC
40 083W25A01800	James Bausch	3255 Deer Lake Ct. SE, Salem, 97317 2.88AC
00\T0AZ\$WE80	Carl Sanders LT	3225 Deer Lake Ct. SE, Salem, 97317 3.46AC
38 083W2SA01600	byoa sudsol	3205 Deer Lake Ct. SE, Salem, 97317 1.80AC
OSTOASSWESO TE	William Mack Tr.	3175 Deer Lake Ct. 5E, Salem, 97317 1.28AC
36 083W25A01400	eisseM eudeol	3176 Deer Lake Ct. SE, Salem, 97317 2.11AC
00E10A2SWE80 2E	Theodore Micholas	7336 Battlecreek Rd. SE, Salem, 97317 1.67AC
OOSTOAZSWE80 ÞE	David Rosling	3206 Deer Lake Ct. SE, Salem, 97317 2.19AC
00110A2SWE80 EE	Sean Armstrong	3246 Deer Lake Ct. SE, Salem, 97317 2.24AC
00010AZSWE80 SE	Mindy Minarik	3266 Deer Lake Ct. 5E, Salem, 97317 2.69AC
00e00AZZWE80 IE	lgor Foksha	3910 Deer Lake Ct. SE, Salem, 97317 1.43AC
30 OS3WZ4DO4301	Erik Fast	6746 Battlecreek Rd. SE, Salem, 97317 3.37AC
29 083WZ4D04300	smsbA bivsQ	3044 Fir Tree Dr. SE, Salem, 97317 2.72AC
28 083W24D04203	Ella Finnegan Tr.	3117 Battlecreek Rd. SE, Salem, 97317 1.61AC
Z7 083W24D0420Z	Max Chancellor Tr.	3102 Battlecreek Rd. SE, Salem, 97317 2.42AC
26 083W24D04200	Max Chancellor Tr.	3070 Battlecreek Rd. SE, Salem, 97317 2.47AC
SE 083MS4D04T0T	zjirqe¶ eneQ	3137 Battlecreek Rd. SE, Salem, 97317 1.89AC
24 083M24D04700	Robert Pollman	6906 Battlecreek Rd. SE, Salem, 97317 3.03AC

49	083W25A02700	Darlene Godfrey RT	7184 Battlecreek Rd. SE, Salem, 97317 1.57AC
50	083W25A02800	Steven Eiding	7198 Battlecreek Rd. SE, Salem, 97317 1.40AC
51	083W25A02900	William Bledsoe	7250 Battlecreek Rd. SE, Salem, 97317 1.38AC
52	083W25A03000	MaryLynn White	7087 Battlecreek Rd. SE, Salem, 97317 10.73AC
53	083W25A03200	Lucinda Brammer	7099 Battlecreek Rd. SE, Salem, 97317 1.13AC
54	083W25A03300	Roger Banks	7255 Battlecreek Rd. SE, Salem, 97317 2.90AC
55	083W25A03400	Roger Banks	7255 Battlecreek Rd. SE, Salem, 97317 0.74AC
56	083W25A03500	Timothy Garrison	7315 Battlecreek Rd. SE, Salem, 97317 1.42AC
57	083W25A03600	Robert Schmid	7345 Battlecreek Rd. SE, Salem, 97317 11.78AC
58	083W25A03700	Richard Schmid	7355 Battlecreek Rd. SE, Salem, 97317 2.68AC
59	083W25A03800	Robert Schmid	7345 Battlecreek Rd. SE, Salem, 97317 9.69AC
60	083W25A03801	Robert Schmid	7345 Battlecreek Rd. SE, Salem, 97317 0.04AC
61	083W25A04000	Walter B. Wells Lt.	7474 Battlecreek Rd. SE, Salem, 97317 26.75AC
62	083W25B00100	YWAM	7085 Battlecreek Rd. SE, Salem, 97317 3.91 AC
63	083W25B00300	YWAM	6955 Battlecreek Rd. SE, Salem, 97317 1.04AC
64	083W25B00400	YWAM	6955 Battlecreek Rd. SE, Salem, 97317 8.21AC
65	083W25B00500	YWAM	7085 Battlecreek Rd. SE, Salem, 97317 0.81AC
66	083W25B00600	YWAM	7085 Battlecreek Rd. SE, Salem, 97317 13.90AC
67	083W25B00700	YWAM	7085 Battlecreek Rd. SE, Salem, 97317 0.19AC
68	083W25B00800	YWAM	7085 Battlecreek Rd. SE, Salem, 97317 0.84AC
69	083W25B01000	Edward Mingo	7089 Battlecreek Rd. SE, Salem, 97317 12.22AC
70	083W25B01000A1	<b>Edward Mingo</b>	7085 Battlecreek Rd. SE, Salem, 97317 IO
71	083W25B01001	YWAM	7085 Battlecreek Rd. SE, Salem, 97317 2.82AC
72	083W25B01100	Douglas Sproul	6935 Battlecreek Rd. SE, Salem, 97317 21.00AC
73	083W25B01300	WIPBCA	1410 Lakeside Ct., Yakima, WA 98902 147.39AC

74 083W2	:5D02000	David Lawrence Tr.	7595 Battlecreek Rd. SE, Salem, 97317	2.30AC
75 083W2	5D02100	Mark Pollard	7495 Battlecreek Rd. SE, Salem, 97317	14.39AC
76 083W2	5D02200	Marcela Chiappini	P.O.Box 1157, Turner, 97392	5.10AC
77 083W2	5D02201	Marcela Chiappini	P.O.Box 1157, Turner, 97392	5.09AC
78 083W2	5D02700	Joshua Martin	7794 Shady Way SE, Turner, 97392	4.34AC
79 083W2	5D02800	Randall Boese	7744 Shady Way SE, Turner, 97392	2.36AC
80 083W2	5D02900	Donna Canning	7634 Shady Way SE, Turner, 97392	1.00AC
81 083W2	5D03000	Donna Canning	7634 Shady Way SE, Turner, 97392	1.53AC
82 083W2	5D03100	Benjamin Hardwick	7624 Shady Way SE, Turner, 97392	3.91AC
83 083W2	5D03200	Kenneth Souders	7635 Shady Way SE, Turner, 97392	3.02AC
84 083W2	5D03300	Roy L. Simmons Tr.	7725 Shady Way SE, Turner, 97392	2.01AC
85 083W2	5D03400	Raymond Keyzers Tr.	3001 Delaney Rd.SE, Turner, 97392	2.17AC
86 083W36	0 00400	Carl Schmidt	3702 Bergman Pl. SE, Salem, 97317	137.33AC

A

## APPENDIX IV WATER RIGHT PERMIT

### STATE OF OREGON

### COUNTY OF MARION

### PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS PERMIT IS HEREBY ISSUED TO

WINEMAKERS, LLC 1410 LAKESIDE COURT SUITE 109 YAKIMA, WA 98902

The specific limits and conditions of the use are listed below.

APPLICATION FILE NUMBER: G-15071

SOURCE OF WATER: WELL 1 AND WELL 2 WITHIN THE BATTLE CREEK BASIN

PURPOSE OR USE: IRRIGATION OF 70.0 ACRES + 30ac in Ant. G-17739

MAXIMUM RATE: THE USE OF WATER UNDER THIS PERMIT SHALL BE LIMITED TO A TOTAL COMBINED CUMULATIVE DIVERSION WITH THE WATER RIGHTS ISSUED UNDER PERMITS G-17738 AND G-17739 OF NOT MORE THAN 0.134 CUBIC FOOT PER SECOND AT ANY ONE TIME

PERIOD OF USE: MARCH 1 THROUGH OCTOBER 31

DATE OF PRIORITY: DECEMBER 14, 1999

WELL LOCATIONS:

WELL 1: SE 1/4 NW 1/4; SECTION 25, AGS, R3W, W.M.; 620 FEET SOUTH & 1230 FEET WEST FROM C-N 1/16 CORNER, SECTION 25

WELL 2: SE 1/4 NW/1/4, SECTION 25, TBS, TRSW, W.M.; 620 FEET SOUTH & 615 FEET WEST FROM O'N 1716 CORNER, SECTION 25

Appeal Rights
This is a Final Order in, other than confested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filled within the 60 day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or leaded by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

The use of water under this permit will expire on October 1, 2020. The permit may be renewed for additional periods of time, not to exceed five years each, if the Director finds that the groundwater resource can support the continued use.

The amount of water used for irrigation under this right, together with the amount secured under any other right existing for the same lands, is limited to a diversion of ONE-EIGHTIETH of one cubic foot per second (or its equivalent) and 1.0 acre-foot for each acre irrigated during the irrigation season of each year.

THE PLACE OF USE IS LOCATED AS FOLLOWS:

SW 1/4 NW 1/4 18.4 ACRES SE 1/4 NW 1/4 16.8 ACRES NE 1/4 SW 1/4 20.8 ACRES

NW 1/4 SW 1/4 14.0 ACRES SECTION 25

TOWNSHIP 8 SOUTH, RANGE 3 WEST, W.M.

Measurement devices, and recording/reporting of annual water use conditions:

- A. Before water use may begin under this permit, the permittee shall install a totalizing flow meter at each point of appropriation. The permittee shall maintain the device in good working order.
- B. The permittee shall allow the watermaster access to the device; provided however, where any device is located within a private structure, the watermaster shall request access upon reasonable notice.
- C. The Director may require the permittee to keep and maintain a record of the volume of water diverted, and may require the permittee to report water-use on a periodic schedule as established by the Director. In addition, the Director may require the permittee to report general water-use information, the periods of water use and the place and nature of use of water under the permit.
- D. The Director may provide an opportunity for the permittee to submit alternative measuring and reporting procedures for review and approval.

Failure to provide March static water level measurements will likely result in suspension of water use from the well(s) authorized under this permit, until compliance with the annual measurement requirement is met.

MAR 29 2019 PM 2:17

wood.

Wood Environment & Infrastructure Solutions, Inc.
7376 SW Durham Road
Portland, Oregon
USA 97224
T: 503-639-3400
www.woodpic.com

3/26/2019 Project # 8-61M-112028

Lisa Milliman Associate Planner Marion County Planning Division 5155 Silverton Road Salem, OR 97305

Subject:

Wood Peer Review of "A Hydrogeology Review of Private Property at 7085 Battle Creek Road, Salem, Oregon 97317, Youth with a Mission Campus, T.8S/R3W- Section 25 NW/4 NE/4, Tax Lots 08325B 00100, 00300, 00400, 00500, 00600, 00700, 00800, 01000, Marion County" by Rehm Geological

### Dear Ms. Milliman:

At the request of Marion County, Wood Environment & Infrastructure Solutions, Inc. (Wood) reviewed the referenced report dated June 21, 2018 (received June 27) and supplemental information received on February 4, 20, and 25, 2019 pertaining to estimates of groundwater usage and recharge. The report was submitted by Rehm Geological (Rehm) to Marion County to meet the requirements of the County's sensitive groundwater overlay (SGO) ordinance.

Wood's review of the report was based on the SGO ordinance and on Marion County's October 2005 manual for completing hydrogeology reviews and studies in compliance with the SGO ordinance. Specifically, Wood verified that the report contained the information required by Section 181.100(A) of the SGO ordinance and that it sufficiently demonstrated all items required by Section 181.100(B) in order to conduct an independent peer review.

### **Report Summary**

The proposed Youth with a Mission (YWAM) development is a not a partition of an existing lot, but instead is more intensive use of the existing property comprised of eight tax lots. Usage will intensify due to increased numbers of students living in on-site residences. The report reviewed the geologic and hydrogeologic setting in the study area, previous investigations, long-term water level data, water rights, well deepenings and replacement wells, and provided a water budget.

The facility is served by two wells, MARI 12553 and MARI 12555. Both wells terminate in the marine sediments aquifer (although the upper part of MARI 12555 also penetrated basalt). The report states that MARI 12555 is the main well; the second well is used in summer.

Both wells are part of a Public Water System regulated by the Oregon Health Authority, Drinking Water Services (DWS); however, the DWS well log records do not match the logs in the Rehm report. The DWS records list only one well (MARI 17665) instead of MARI 12553 and 12555.

The planned future usage is 20,000 gallons per day, as allowed as exempt use for a single system as clarified by an email (dated February 14, 2019) from J. Eastman, Oregon Water Resources Department, to J. Matthias, YWAM. Exempt usage cannot be increased by adding wells.





The target aquifer for the proposed development is the marine sediments aquifer. The revised water balance estimated that 22 percent of the available groundwater recharge would be used after the proposed development is completed, below the County cut-off threshold of 90 percent.

The report found no evidence of presently declining water level trends over time or excessive and recent numbers of well deepenings or replacements in the aquifer within the study area.

### **Peer Review Findings**

The above-referenced report included the sufficient elements required by Marion County's Chapter 181 SGO ordinance in order for peer independent review to be conducted by Wood.

Considering all the information submitted in the original report, Rehm's conclusions are supported by the report. If, however, additional information not available at the time this peer review was completed should become available later, the findings of this peer review may need to be updated. Procedures and assumptions used in the report are consistent with generally accepted professional consulting practices and principles in effect at the time and location the work was completed.

Finally, the mismatch in well log records between the information submitted to the County and that on record with DWS should be reconciled.

Please contact the undersigned at (503) 639-3400 if you have any questions.

Sincerely,

Wood Environment & Infrastructure Solutions. Inc.

Russ Bunker, RG

**Associate Senior Geologist** 



3511 Pacific Boulevard SW Albany, OR 97321-7727 USA P: 541.926.7737 | cascade-earth.com

January 12, 2021

Joe Fennimore Marion County Planning Director 3180 Center ST NE, #1106 Salem, Oregon 97301

SUBJECT: Sewage Treatment at Youth with a Mission

Dear Mr. Fennimore:

Doc:

Cascade Earth Sciences (CES) has been retained to assist Youth with a Mission (YWAM) with an assessment of their existing sewage treatment system infrastructure and work with their team on a master plan to accommodate a phased expansion of facilities at their campus on Battle Creek Road south of Salem, Oregon (Site).

The existing septic tank and drainfield systems for sanitary waste at the Site were installed under permits issued by Marion County. The proposed expansion of the facilities will require a Water Pollution Controls Facilities (WPCF) permit issued by the Oregon Department of Environmental Quality (DEQ). In October of 2020, DEQ personnel performed a site evaluation and found the soils suitable for the installation of an onsite wastewater treatment system with projected flows of up to 24,400 gallons per day based on 461 occupants and 90 day-users. A site evaluation report was issued by DEQ on December 7, 2020 outlining the findings and design considerations for the onsite wastewater treatment system. Design of such a system must provide for a minimum septic tank volume that is twice the projected daily sewage flow. Large systems (systems or facilities with design flows greater than 2,500 gallons per day) are required to follow the design requirements in OAR 340-071-0520, which include a written assessment of the impact of the proposed system on the quality of public waters and public health, prepared by a registered geologist, or a certified engineering geologist qualified as a hydrogeologist.

CES worked with YWAM to develop a conceptual design to serve the proposed facilities. The size of system is based on the maximum design flow of 24,400 gallons per day submitted to the DEQ for the site evaluation and reflected in their approval. The type of system is based on a preliminary assessment of groundwater impacts and includes advanced treatment with features to enhance nitrogen removal for better protection of water quality. The area evaluated during the DEQ site evaluation appears large enough to accommodate the design flow at full build-out. CES anticipates working with YWAM (after receipt of the conditional use permit) to refine the conceptual design and develop detailed plans and specifications, a formal groundwater impact assessment, and the WPCF permit application for submission to the DEQ for their review and approval. CES will be required by the WPCF permit to inspect the system as it is installed and certify to the DEQ that it is





Joe Fennimore – Marion County Planning Director Sewage Treatment at Youth with a Mission (YWAM) January 12, 2021 Page 2

installed in accordance with the permit and the approved plans. Upon completion, the system will be required to be operated by a certified operations and maintenance service provider with annual reporting to the DEQ regarding system performance. Based on the preliminary data gathered to date, the sewage treatment system is not expected to have a significant adverse impact on watersheds, groundwater, fish and wildlife habitat, soil and slope stability, air and water quality.

If you have any questions, please do not hesitate to contact me by e-mail (<u>brian.rabe@valmont.com</u>) or phone at (541) 812-6639.

Certified Professional Soil Scientist

BRIAN T. RABE 15239 Exp. 31DEC20 Registered Wastewater Specialist No. EH-W-448430 Exp. 305EP21

Sincerely,

CASCADE EARTH SCIENCES

Brian T. Rabe, CPSS, WWS Managing Soil Scientist

BTR/mjb

c:

Doc:

Donavan Wadsworth - YWAM

Margaret Y. Gander-Vo – Saafeld Griggs, PC

2020240082 YWAM Sewage Treatment Ltr Jan 2021.docx



1155 13th Street SE Salem, Oregon 97302 (503) 363-9227

### Youth With a Mission

### Facility Impacts Assessment

January 20th, 2021

The proposed expansion of the current facility at the Battle Creek Road Campus of Youth With a Mission (YWAM) will involve the expansion of some of the existing facilities on site along with the creation of some new facilities. As part of those expansion efforts, the current wastewater disposal system will be modified and upgraded. A new wastewater disposal system will be created on the project site to accommodate the additional facilities.

In addition, improved and new hard surface areas will be created that will generate surface water runoff that will be treated and subsequently directed to Battle Creek.

The project site has been evaluated by DEQ personnel just this last October. That evaluation found that the site was suitable for the installation of a new onsite wastewater treatment and disposal system. The facilities will include an advanced treatment system that will discharge the effluent into the disposal area through a drip system.

The proposed disposal area is located in the northeast portion of the site that is more than 400 feet away and up gradient from Battle Creek. There are two proposed future replacement areas: one in the north portion of the site, still over 300 feet from Battle Creek and one in the southeast portion of the site, also over 300 feet from Battle Creek, in excess of the required 50 feet.

The DEQ site assessment and approval for the new disposal system was based on the review of the soils present in the areas of the proposed drip facilities. The soils were identified as Silty Clay Loam material, with depths that ranged from 42 to 72 inches. Below that, was a dense hard clay above fractured weathered basalt.



The purpose of the wastewater disposal system is to make sure that the effluent can be treated sufficiently before it moves away from the treatment zone of the system. There two points of concern for negative effects from the waste facility discharge: (1) the impact on the ground water source and (2) the effectiveness of the surface water conveyance facilities.

The proposed wastewater disposal system is a drip discharge system. This type of facility discharges the effluent flow over a large treatment area at a slow rate. Such a system provides a longer time-period for the effluent to be treated before it moves into the adjoining soils. The hard, dense layer that exists below the loam soils is a barrier that blocks the ability for the wastewater to make its way into the ground water supply.

The proposed facilities are going to be located well away from Battle Creek, such that lateral movement of the treated wastewater will not be able to make its way to the surface source without having to travel through a substantial distance of soils. This greatly enhances the cleaning effects that naturally occurs via soil filtration.

The site test pits demonstrated that while there is water present in the soil approximately 46 to 48 inches below the ground surface near Battle Creek, that water is not part of the groundwater supply. The water present comes from the flows within Battle Creek. Again, the design has the facilities located several hundred feet away from this area and the water table and is not anticipated to impact the groundwater.

The proposed wastewater disposal system will be permitted by the Oregon Department of Environmental Quality. The system will be required to maintain detailed records of the facilities and monitor the wastewater to make sure that the treatment required is achieved.

It is our professional opinion that the proposed system, constructed and operated as the design intends will not have any negative impact on the water quality of both the ground water and surface water supplies.



A site Geological and Geotechnical Assessment has been completed for the project site and no slope stability or landside hazards have been identified. The proposed locations for the wastewater disposal facilities are within areas that are flatter than 10% slopes and will not have a negative impact on the stability of these areas or those adjacent to the systems.

The second area of concern is with the surface runoff from the existing and proposed new hard surface areas. Concerns have been raised by neighbors in the past regarding the impacts of stormwater generated from the YWAM project on both the environment and during periods of flooding. In an effort to mitigate any impacts from stormwater generated as part of the YWAM development, the project will be designed to provide both water quality treatment and water quantity control.

Water quality treatment will use green stormwater infrastructure to remove pollutants traditionally associated with this type of development, such as hydrocarbons, heavy metals, suspended solids, and nutrients (largely nitrogen and phosphorus). Stormwater is routed to special vegetated facilities located onsite that will allow the water to filter through growing media, which will remove the pollutants through filtration, sedimentation, and biological uptake from vegetation. The stormwater will then be picked up through an underdrain and taken to a permitted outlet location. These facilities would also work to provide stormwater detention and flow control.

Water quality control will also be provided for the entire YWAM development. It is our assumption that detention systems are not currently in place for the existing YWAM property. In an effort to provide more extensive water quantity control, detention and flow control would be proposed for the entire development. To achieve the best flood-control protection, stormwater would be released at the predeveloped rate for the ½ the projected 2, 10, and 100-year storm events. This would likely provide improved flood protection than what currently exists and mitigate any downstream impacts from the proposed development. Detention could be provided through the use of one or more of the following options: underground pipe storage, surface storage in parking areas, detention ponds, etc. Due to the size of the project, there would likely be more than one facility to achieve the stormwater flow control goals.

Again, it is our professional opinion that the facilities and systems that collect and treat both the surface water and wastewater generated, will be adequate to mitigate any potential adverse impacts on the surrounding area. As the project moves forward, detailed designs and analysis will be prepared and reviewed by Marion County and DEQ to insure that intended standards have been met. The YWAM site



ENGINEERING SERVICES, INC.

will have full-time management and maintenance staff on site at all times. The Wastewater Permit will set out requirements for certified operations and maintenance personal to be involved in the ongoing system operations.



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### **Geotechnical Investigation**

and

**Geologic Hazard Evaluation Services** 

Youth With a Mission Site

Tax Lot No's. 100, 300, 400, 500, 600, 700, 800 and 1001

7085 Battle Creek Road SE

Salem (Marion County), Oregon

for

Youth With a Mission

Project No. 1842.001.G September 11, 2020



September 11, 2020

Mr. Rob Simpson Youth With a Mission 7085 Battle Creek Road SE Salem, Oregon 97317

Dear Mr. Simpson:

Re: Geotechnical Investigation and Geologic Hazard Evaluation Services,
Existing Youth With a Mission Site, Tax Lot No's. 100/300/400/500/600/700/800, & 1001.
Battle Creek Road SE, Salem (Marion County), Oregon

Submitted herewith is our report entitled "Geotechnical Investigation and Geologic Hazard Evaluation Services, Existing Youth With a Mission Site, Tax Lot No's. 100/300/400/500/600/800 & 1001, 7085 Battle Creek Road SE, Salem (Marion County), Oregon". The scope of our services was outlined in our formal proposal to Mr. Rob Simpson of Youth With a Mission dated July 6, 2020. Written authorization of our services was provided by Mr. Donovan Wadsworth of Youth With a Mission on July 16, 2020.

During the course of our investigation, we have kept you and/or others advised of our schedule and preliminary findings. We appreciate the opportunity to assist you with this phase of the project. Should you have any questions regarding this report, please do not hesitate to call.

Sincerely,

Daniel M. Redmond, P.E., G.E. President/Principal Engineer

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### TABLE OF CONTENTS

	Page No.
INTRODUCTION	1
PROJECT DESCRIPTION	1
SCOPE OF WORK	2
SITE CONDITIONS	3
Site Geology	3
Surface Conditions	3
Subsurface Soil Conditions	4
Groundwater	. 4
INFILTRATION TESTING	5
LABORATORY TESTING	5
SEISMICITY AND EARTHQUAKE SOURCES	5
Liquefaction	6
Landslides	7
Surface Rupture	7
Tsunami and Seiche	7
Flooding and Erosion	7
CONCLUSIONS AND RECOMMENDATIONS	8
General	8
Site Preparation	8
Foundation Support	10
Shallow Foundations	10
Large (Spread) and Mat Foundations	11

### Table of Contents (continued)

Floor Slab Support	11
Retaining/Below Grade Walls	11
Pavements	12
Private Parking and Drive Areas	13
Pavement Subgrade, Base Course & Asphalt Materials	13
Wet Weather Grading and Soft Spot Mitigation	13
Shrink-Swell and Frost Heave	14
Excavations/Slopes	14
Surface Drainage/Groundwater	14
Design Infiltration Rates	15
Seismic Design Considerations	15
CONSTRUCTION MONITORING AND TESTING	16
CLOSURE AND LIMITATIONS	16
LEVEL OF CARE	17
REFERENCES	18
ATTACHMENTS	
Figure No. 1 - Site Vicinity Map Figure No. 2 - Site Exploration Plan Figure No. 3 - Typical Fill Slope Grading Detail Figure No. 4 - Perimeter Footing/Retaining Wall Drain Detail	
APPENDIX A	
Test Pit Logs and Laboratory Data	
APPENDIX B	

Geologic Hazard Study

Page No. 1

### GEOTECHNICAL INVESTIGATION AND GEOLOGIC HAZARD EVALUATION EXISTING YOUTH WITH A MISSION SITE TAX LOT NO'S. 100/300/400/500/600/700/800 AND 1001 7085 BATTLE CREEK ROAD SE SALEM (MARION COUNTY) OREGON

### INTRODUCTION

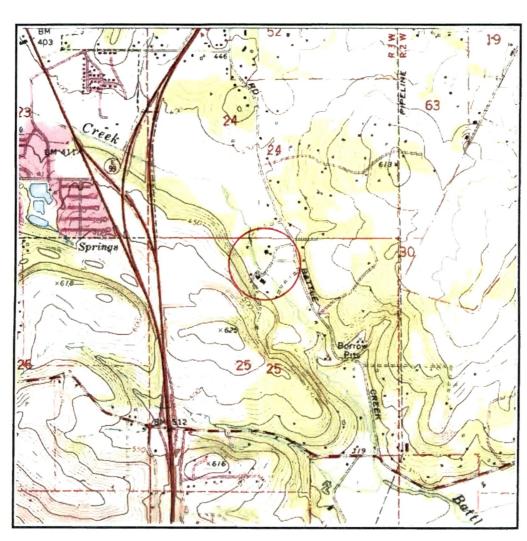
Redmond Geotechnical Services, LLC is please to submit to you the results of our Geotechnical Investigation and Geologic Hazard Evaluation at the site of the existing Youth With a Mission property located to the west of Battle Creek Road SE and to the north of the intersection with Deer Lake Court SE in Salem (Marion County), Oregon. The general location of the subject site is shown on the Site Vicinity Map, Figure No. 1. The purpose of our geotechnical investigation and geologic hazard study services at this time was to explore the existing subsurface soils and/or groundwater conditions across the subject site and to evaluate any potential concerns with regard to potential slope failure at the site as well as to develop and/or provide appropriate geotechnical design and construction recommendations for various proposed new site improvements.

### PROJECT DESCRIPTION

We understand that present plans for the existing Youth With a Mission property is to construct a new above ground water tank and/or reservoir at the site. Additionally, we understand that the construction of various new dorm buildings and/or staff housing as well as new classrooms and a new assembly hall are also planned for the existing Youth With a Mission property.

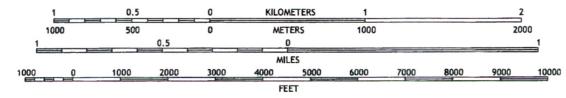
Whole specific building plans and/or materials are unknown at this time, we envision that the new dorm, housing, classrooms and assemble hall structures will be one- and/or two-story buildings constructed with wood framing and will likely include concrete slab-on-grade floors. Support of the new structures is anticipated to consist primarily of conventional shallow strip (continuous) footings although some individual (column) footings may also be required. Structural loading information, although unavailable at this time, is anticipated to be fairly typical and light for these types of single-and/or two-story wood-frame structures and is expected to result in maximum dead plus live continuous (strip) and individual (column) footing loads on the order of about 1.5 to 4.0 kips per lineal foot (klf) and 10 to 50 kips, respectively.

Although a site grading plan is not available at this time, we understand that both cuts and fills are possible for the residential project. In general, cuts and/or fills of less than five (5) feet are generally anticipated for the project. In this regard, due to the existing and/or finish grade sloping site conditions, some of the proposed new structures may also include the construction of a partial below grade floor(s) and/or the use of concrete retaining walls.



### TURNER QUADRANGLE OREGON 7.5-MINUTE SERIES

SCALE 1:24 000



CONTOUR INTERVAL 10 FEET NORTH AMERICAN VERTICAL DATUM OF 1988

### SITE VICINITY MAP

YOUTH WITH A MISSION 7085 BATTLE CREEK ROAD SE

Figure No. 1

Project No. 1842.001.G

Other associated site improvements for the project will include construction of new paved parking lots and drive areas. Additionally, the project will include the construction of new underground utility services as well as new concrete curbs and sidewalks.

### **SCOPE OF WORK**

The purpose of our geotechnical and/or geologic studies was to evaluate the overall subsurface soil and/or groundwater conditions underlying the subject site with regard to the proposed new development and construction at the site and any associated impacts or concerns with respect to potential slope failure at the site as well as provide appropriate geotechnical design and construction recommendations for the project. Specifically, our geotechnical investigation and landslide hazard study performed as a collaboration with Northwest Geological Services, Inc. (NWGS, Inc.) included the following scope of work items:

- 1. Review of available and relevant geologic and/or geotechnical investigation reports for the subject site and/or area.
- 2. A detailed field reconnaissance and subsurface exploration program of the soil and ground water conditions underlying the site by means of eight (8) exploratory test pit excavations. The exploratory test pits were excavated to depths ranging from about six (6) to seven (7) feet beneath existing site grades at the approximate locations as shown on the Site Exploration Plan, Figure No. 2. Additionally, field infiltration testing was also performed within various test pits excavated across the subject site.
- 3. Laboratory testing to evaluate and identify pertinent physical and engineering properties of the subsurface soils encountered relative to the planned site development and construction at the site. The laboratory testing program included tests to help evaluate the natural (field) moisture content and dry density, maximum dry density and optimum moisture content, Atterberg Limits and gradational characteristics, consolidation and direct shear strength tests as well as "R"-value tests.
- 4. A literature review and engineering evaluation and assessment of the regional seismicity to evaluate the potential ground motion hazard(s) at the subject site. The evaluation and assessment included a review of the regional earthquake history and sources such as potential seismic sources, maximum credible earthquakes, and reoccurrence intervals as well as a discussion of the possible ground response to the selected design earthquake(s), fault rupture, landsliding, liquefaction, and tsunami and seiche flooding.

- 5. Engineering analyses utilizing the field and laboratory data as a basis for furnishing recommendations for foundation support of the proposed new structures. Recommendations include maximum design allowable contact bearing pressure(s), depth of footing embedment, estimates of foundation settlement, lateral soil resistance, and foundation subgrade preparation. Additionally, construction and/or permanent subsurface water drainage considerations have also been prepared. Further, our report includes recommendations regarding site preparation, placement and compaction of structural fill materials, suitability of the on-site soils for use as structural fill, criteria for import fill materials, and preparation of foundation, pavement and/or floor slab subgrades.
- 6. Flexible pavement design and construction recommendations for the proposed new parking lot and drive area improvements.

### **SITE CONDITIONS**

### **Site Geology**

The subject site and/or area is underlain by highly weathered Basalt bedrock deposits and/or residual soils of the Columbia River Basalt formation. A more detailed description of the site geology across and/or beneath the site is presented in the Geologic Hazard Study in Appendix B.

### **Surface Conditions**

The subject existing Youth With a Mission property consists of eight (8) rectangular to irregular shaped tax lots (TL's 100, 300, 400, 500, 600, 700, 800, and 1001) which encompass a total plan area of approximately 31.72 acres. The subject Youth With a Mission property is roughly located to the west of Battle Creek Road SE and north of the intersection with Deer Lake Court SE. The subject site is presently improved and contains several existing single- and/or two-story wood-frame structures as well as existing paved parking and drive areas. Surface vegetation across the improved portions of the site generally consists of existing landscaping composed of surface grass, shrubs and trees while the unimproved areas generally consist of a moderate growth of grass, weeds and brush as well as numerous small to large sized trees. Additionally, the easterly portion of the subject property is generally low lying and contains the existing Battle Creek drainage basin.

Topographically, the low lying easterly portion of the site is characterized as relatively flat-lying terrain (i.e., less than 5 percent) while the westerly portion of the site is characterized as gently to moderately sloping terrain (10 to 50 percent) descending upward towards the west/southwest with overall topographic relief estimated at about one hundred and twenty-five (125) feet and ranges from a low about Elevation 370 feet along Battle Creek to a high of about Elevation 500 near the southwesterly portion of the site.

### **Subsurface Soil Conditions**

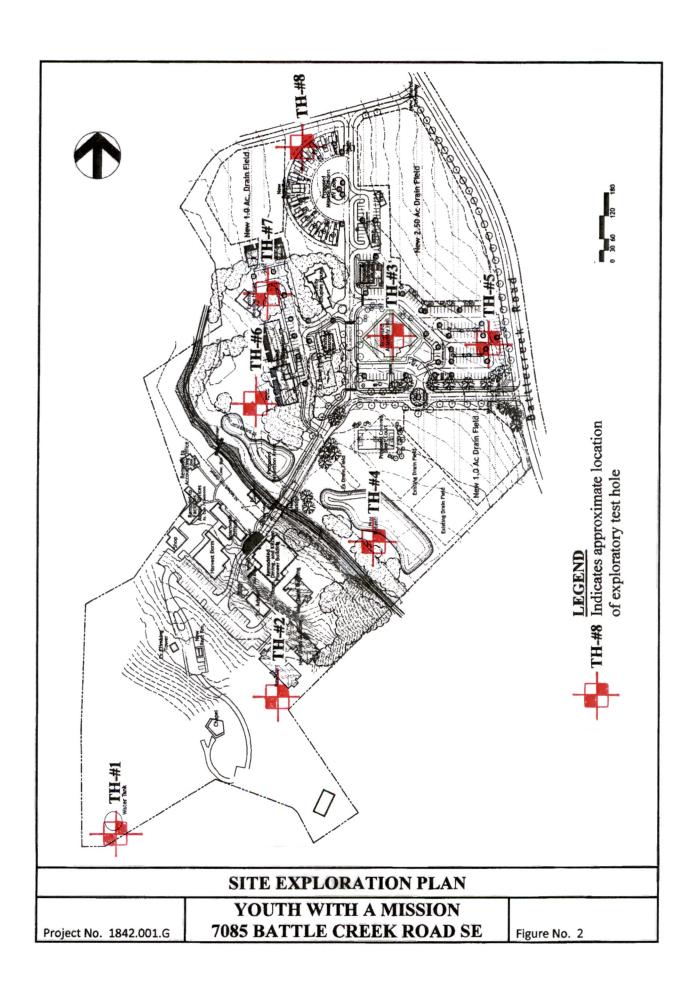
Our understanding of the subsurface soil conditions underlying the site was developed by means of eight (8) exploratory test pits excavated to depths ranging from about six (6) to seven (7) feet beneath existing site grades on July 24, 2020 with a John Deere 200C track-mounted excavator. The location of the exploratory test pits were located in the field by marking off distances from existing and/or known site features and are shown in relation to the proposed new residential structures and/or site improvements on the Site Exploration Plan, Figure No. 2. Detailed logs of the test pit explorations, presenting conditions encountered at each location explored, are presented in the Appendix, Figure No's. A-5 through A-8.

The exploratory test pit excavations were observed by staff from Redmond Geotechnical Services, LLC who logged each of the test pit explorations and obtained representative samples of the subsurface soils encountered across the site. Additionally, the elevation of the exploratory test pit excavations were referenced from the proposed Site Development Plan prepared by Project Delivery Group. and should be considered as approximate. All subsurface soils encountered at the site and/or within the exploratory test pit excavations were logged and classified in general conformance with the Unified Soil Classification System (USCS) which is outlined on Figure No. A-4.

The test pit explorations revealed that the subject site is underlain by native soil deposits. Specifically, the upper westerly portion of the site is comprise of highly weathered bedrock and/or residual soils composed of a surficial layer of dark brown, moist to very moist, soft to very soft, organic to highly organic, sandy, clayey silt topsoil materials to depths of about 8 to 12 inches. These surficial topsoil materials were inturn underlain by medium to reddish-brown, very moist, medium stiff to stiff and/or medium dense, sandy, clayey silt ) residual soil) to clayey, silty sand (highly weathered bedrock deposits) to a depth of at least seven (7) feet beneath the existing site and/or surface grades. These sandy, clayey silt (residual) subgrade soils and/or clayey, silty sand (highly weathered bedrock deposits) are best characterized by relatively low to moderate strength and moderate compressibility. In addition, the lower easterly portion of the site was found to be underlain by aan approximate 8- to 12-inch layer of topsoil materials inturn by alternating layers of multi-colored and/or dark gray brown, very moist, medium stiff to medium dense, clayey, sandy silt to clayey, silty sand with occasional gravel to the maximum depth explored of seven (7) feet beneath the existing site and/or surface grades. These clayey, sandy silt to clayey, silty sand subgrade soil deposits are generally alluvial in nature and are best characterized by relatively low to moderate strength and moderate compressibility.

### Groundwater

Groundwater was not encountered within any of the exploratory test pit explorations (TH-#1 through TH-#8) at the time of excavation to depths of at least seven (7) feet beneath existing surface grades except. However, Battle Creek traverses the central portion of the subject property. In this regard, groundwater elevations at the site may fluctuate seasonally in accordance with rainfall conditions and/or flows within Battle Creek as well as changes in site utilization and may temporarily pond and/or perch near the ground surface during periods of heavy rainfall.



### **INFILTRATION TESTING**

We performed two (2) field infiltration tests at the site on July 24, 2020. The infiltration tests were performed in test holes TH-#4 and TH-#6 at depths of between three (3) and four (4) feet beneath the existing site and/or surface grades. The subgrade soils encountered in the infiltration test hole consisted of clayey, sandy silt. The infiltration testing was performed in general conformance with current EPA and/or the City of Salem Encased Falling Head test method which consisted of advancing a 6-inch diameter PVC pipe approximately 6 inches into the exposed soil horizon at each test location. Using a steady water flow, water was discharged into the pipe and allowed to penetrate and saturate the subgrade soils. The water level was adjusted over a two (2) hour period and allowed to achieve a saturated subgrade soil condition consistent with the bottom elevation of the surrounding test pit excavation. Following the required saturating period, water was again added into the PVC pipe and the time and/or rate at which the water level dropped was monitored and recorded. Each measurable drop in the water level was recorded until a consistent infiltration rate was observed and/or repeated.

Based on the results of the field infiltration testing at the site, we have found that the native sandy, clayey silt subgrade soil deposits posses an ultimate infiltration rate on the order of about 0.8 to 1.2 inches per hour (in/hr).

### **LABORATORY TESTING**

Representative samples of the on-site subsurface soils were collected at selected depths and intervals from various test pit excavations and returned to our laboratory for further examination and testing and/or to aid in the classification of the subsurface soils as well as to help evaluate and identify their engineering strength and compressibility characteristics. The laboratory testing consisted of visual and textural sample inspection, moisture content and dry density determinations, maximum dry density and optimum moisture content, Atterberg Limits and gradation analyses as well as consolidation, direct shear strength and "R"-value tests. Results of the various laboratory tests are presented in the Appendix, Figure No's. A-9 through A-14.

### SEISMICITY AND EARTHQUAKE SOURCES

The seismicity of the southwest Washington and northwest Oregon area, and hence the potential for ground shaking, is controlled by three separate fault mechanisms. These include the Cascadia Subduction Zone (CSZ), the mid-depth intraplate zone, and the relatively shallow crustal zone. Descriptions of these potential earthquake sources are presented below.

The CSZ is located offshore and extends from northern California to British Columbia. Within this zone, the oceanic Juan de Fuca Plate is being subducted beneath the continental North American Plate to the east. The interface between these two plates is located at a depth of approximately 15 to 20 kilometers (km). The seismicity of the CSZ is subject to several uncertainties, including the maximum earthquake magnitude and the recurrence intervals associated with various magnitude earthquakes.

Anecdotal evidence of previous CSZ earthquakes has been observed within coastal marshes along the Washington and Oregon coastlines. Sequences of interlayered peat and sands have been interpreted to be the result of large Subduction zone earthquakes occurring at intervals on the order of 300 to 500 years, with the most recent event taking place approximately 300 years ago. A study by Geomatrix (1995) and/or USGS (2008) suggests that the maximum earthquake associated with the CSZ is moment magnitude (Mw) 8 to 9. This is based on an empirical expression relating moment magnitude to the area of fault rupture derived from earthquakes that have occurred within Subduction zones in other parts of the world. An Mw 9 earthquake would involve a rupture of the entire CSZ. As discussed by Geomatrix (1995) this has not occurred in other subduction zones that have exhibited much higher levels of historical seismicity than the CSZ. However, the 2008 USGS report has assigned a probability of 0.67 for a Mw 9 earthquake and a probability of 0.33 for a Mw 8.3 earthquake. For the purpose of this study an earthquake of Mw 9.0 was assumed to occur within the CSZ.

The intraplate zone encompasses the portion of the subducting Juan de Fuca Plate located at a depth of approximately 30 to 50 km below western Washington and western Oregon. Very low levels of seismicity have been observed within the intraplate zone in western Oregon and western Washington. However, much higher levels of seismicity within this zone have been recorded in Washington and California. Several reasons for this seismic quiescence were suggested in the Geomatrix (1995) study and include changes in the direction of Subduction between Oregon, Washington, and British Columbia as well as the effects of volcanic activity along the Cascade Range. Historical activity associated with the intraplate zone includes the 1949 Olympia magnitude 7.1 and the 1965 Puget Sound magnitude 6.5 earthquakes. Based on the data presented within the Geomatrix (1995) report, an earthquake of magnitude 7.25 has been chosen to represent the seismic potential of the intraplate zone.

The third source of seismicity that can result in ground shaking within the Vancouver and southwest Washington area is near-surface crustal earthquakes occurring within the North American Plate. The historical seismicity of crustal earthquakes in this area is higher than the seismicity associated with the CSZ and the intraplate zone. The 1993 Scotts Mills (magnitude 5.6) and Klamath Falls (magnitude 6.0), Oregon earthquakes were crustal earthquakes.

### **Liquefaction**

Seismic induced soil liquefaction is a phenomenon in which lose, granular soils and some silty soils, located below the water table, develop high pore water pressures and lose strength due to ground vibrations induced by earthquakes. Soil liquefaction can result in lateral flow of material into river channels, ground settlements and increased lateral and uplift pressures on underground structures. Buildings supported on soils that have liquefied often settle and tilt and may displace laterally. Soils located above the ground water table cannot liquefy, but granular soils located above the water table may settle during the earthquake shaking.

Our review of the subsurface soil test pit logs from our exploratory field explorations (TH-#1 through TH-#8) and laboratory test results indicate that the upper westerly portion of the site is generally underlain by medium stiff to stiff and/or medium dense, sandy, clayey silt soils and/or highly weathered bedrock deposits to depths of at least 7.0 feet beneath existing site grades. Additionally, the lower easterly portion of the site is generally underlain by soft to medium stiff and/or loose, clayey, sandy silt to clayey, silty sand. Further, groundwater was generally not encountered within any of the exploratory test pit excavations (TH-#1 through TH-#8) at the site during our field exploration work to depths of at least 7.0 feet. As such, due to the medium stiff and/or cohesive nature of the sandy, clayey silt subgrade soils as well as the relative density of the sandy subgrade soil deposits beneath the site, it is our opinion that the native subgrade soils and/or highly weathered bedrock deposits located beneath the subject site have a low to very low potential for liquefaction during the design earthquake motions previously described.

### Landslides

No ancient and/or active landslides were observed or are known to be present on the subject site. Additionally, development of the subject site with the proposed new dorms, staff housing, classrooms and assembly half does not appear to present a potential geologic and/or landslide hazard provided that the site grading and development activities conform with the recommendations presented within this report. A more detailed assessment of the potential landslide hazard of the subject site is presented in the Geologic Hazard Study in Appendix B.

### **Surface Rupture**

Although the site is generally located within a region of the country known for seismic activity, no known faults exist on and/or immediately adjacent to the subject site. As such, the risk of surface rupture due to faulting is considered negligible.

### Tsunami and Seiche

A tsunami, or seismic sea wave, is produced when a major fault under the ocean floor moves vertically and shifts the water column above it. A seiche is a periodic oscillation of a body of water resulting in changing water levels, sometimes caused by an earthquake. Tsunami and seiche are not considered a potential hazard at this site because the site is not near to the coast and/or there are no adjacent significant bodies of water.

### Flooding and Erosion

Stream flooding is a potential hazard that should be considered in lowland areas of Marion County and Salem. The FEMA (Federal Emergency Management Agency) flood maps should be reviewed as part of the design for the proposed new Youth With a Mission structures and site improvements. Elevations of structures on the site should be designed based upon consultants reports, FEMA (Federal Emergency Management Agency), and Marion County requirements for the 100-year flood levels of any nearby creeks, streams and/or drainage basins such as Battle Creek.

### **CONCLUSIONS AND RECOMMENDATIONS**

### General

Based on the results of our field explorations, laboratory testing, and engineering analyses, it is our opinion that the site is presently stable and suitable for the proposed new Youth With a Mission structures and their associated site improvements provided that the recommendations contained within this report are properly incorporated into the design and construction of the project.

The primary features of concern at the site are 1) the presence of highly moisture sensitive clayey and silty subgrade soils across the site, 2) the presence of gently to moderately sloping site conditions across the westerly portion of the site, and 3) the relatively low infiltration rates anticipated within the low lying easterly near surface clayey and silty subgrade soils.

With regard to the moisture sensitive clayey and silty subgrade soils, we are generally of the opinion that all site grading and earthwork activities be scheduled for the drier summer months which is typically June through September. In regards to the gently to moderately sloping site conditions across the westerly portion of the site, we are of the opinion that site grading and/or structural fill placement should be minimized where possible and should generally limit cuts and/or fills to about five (5) feet. Additionally, where existing site slopes and/or surface grades exceed about 20 percent (1V:5H) and in order to construct the proposed new site improvements, benching and keying of all fills into the natural site slopes may be required. With regard to the relatively low infiltration rates within the low lying easterly near surface clayey and silty subgrade soils beneath the site, storm water infiltration may be feasible within a depth of about four (4) to five (5) feet of the existing surface grades and/or elevations. However, due to the presence of slightly cemented subgrade soils beneath a depth of about four (4) to five (5) feet as well as the presence of Battle Creek, groundwater mounding should be anticipated. In this regard, we recommend that all proposed storm water detention and/or infiltration systems for the project be reviewed and approved by Redmond Geotechnical Services. LLC.

The following sections of this report provide specific recommendations regarding subgrade preparation and grading as well as foundation and floor slab design and construction for the Youth With a Mission project.

### Site Preparation

As an initial step in site preparation, we recommend that the proposed new Youth With a Mission building sites as well as their associated structural and/or site improvement area(s) be stripped and cleared of all existing improvements, any existing unsuitable fill materials, surface debris, existing vegetation, topsoil materials, and/or any other deleterious materials present at the time of construction. In general, we envision that the site stripping to remove existing vegetation and topsoil materials will generally be about 8 to 12 inches.

However, localized areas requiring deeper removals, such as any existing undocumented and/or unsuitable fill materials as well as old foundation remnants, will likely be encountered and should be evaluated at the time of construction by the Geotechnical Engineer. The stripped and cleared materials should be properly disposed of as they are generally considered unsuitable for use/reuse as fill materials.

Following the completion of the site stripping and clearing work and prior to the placement of any required structural fill materials and/or structural improvements, the exposed subgrade soils within the planned structural improvement area(s) should be inspected and approved by the Geotechnical Engineer and possibly proof-rolled with a half and/or fully loaded dump truck. Areas found to be soft or otherwise unsuitable should be over-excavated and removed or scarified and recompacted as structural fill. During wet and/or inclement weather conditions, proof rolling and/or scarification and recompaction as noted above may not be appropriate.

The on-site native sandy, clayey silt and/or clayey, silty sand subgrade soil materials are generally considered suitable for use/reuse as structural fill materials provided that they are free of organic materials, debris, and rock fragments in excess of about 6 inches in dimension. However, if site grading is performed during wet or inclement weather conditions, the use of some of the on-site native soil materials which contain significant silt and clay sized particles will be difficult at best. In this regard, during wet or inclement weather conditions, we recommend that an import structural fill material be utilized which should consist of a free-draining (clean) granular fill (sand & gravel) containing no more than about 5 percent fines. Representative samples of the materials which are to be used as structural fill materials should be submitted to the Geotechnical Engineer and/or laboratory for approval and determination of the maximum dry density and optimum moisture content for compaction.

In general, all site earthwork and grading activities should be scheduled for the drier summer months (June through September) if possible. However, if wet weather site preparation and grading is required, it is generally recommended that the stripping of topsoil materials be accomplished with a tracked excavator utilizing a large smooth-toothed bucket working from areas yet to be excavated. Additionally, the loading of strippings into trucks and/or protection of moisture sensitive subgrade soils will also be required during wet weather grading and construction. In this regard, we recommend that areas in which construction equipment will be traveling be protected by covering the exposed subgrade soils with a woven geotextile fabric such as Mirafi FW404 followed by at least 12 inches or more of crushed aggregate base rock. Further, the geotextile fabric should have a minimum Mullen burst strength of at least 250 pounds per square inch for puncture resistance and an apparent opening size (AOS) between the U.S. Standard No. 70 and No. 100 sieves.

All structural fill materials placed within the new building and/or pavement areas should be moistened or dried as necessary to near (within 3 percent) optimum moisture conditions and compacted by mechanical means to a minimum of 92 percent of the maximum dry density as determined by the ASTM D-1557 (AASHTO T-180) test procedures. Structural fill materials should be placed in lifts (layers) such that when compacted do not exceed about 8 inches.

Additionally, all fill materials placed within about three (3) to five (5) lineal feet of the perimeter (limits) of the proposed structures and/or pavements should be considered structural fill.

Additionally, due to the sloping site conditions, we recommend that all structural fill materials planned in areas where existing surface and/or slope gradients exceed about 20 percent (1V:5H) be properly benched and/or keyed into the native (natural) slope subgrade soils. In general, a bench width of at least eight (8) feet and a keyway depth of at least one (1) foot is recommended. A typical key and bench fill slope detail is presented on Figure No. 3. However, the actual bench width and keyway depth should be determined at the time of construction by the Geotechnical Engineer. Further, all fill slopes should be constructed with a finish slope surface gradient no steeper than about 2H:1V.

### **Foundation Support**

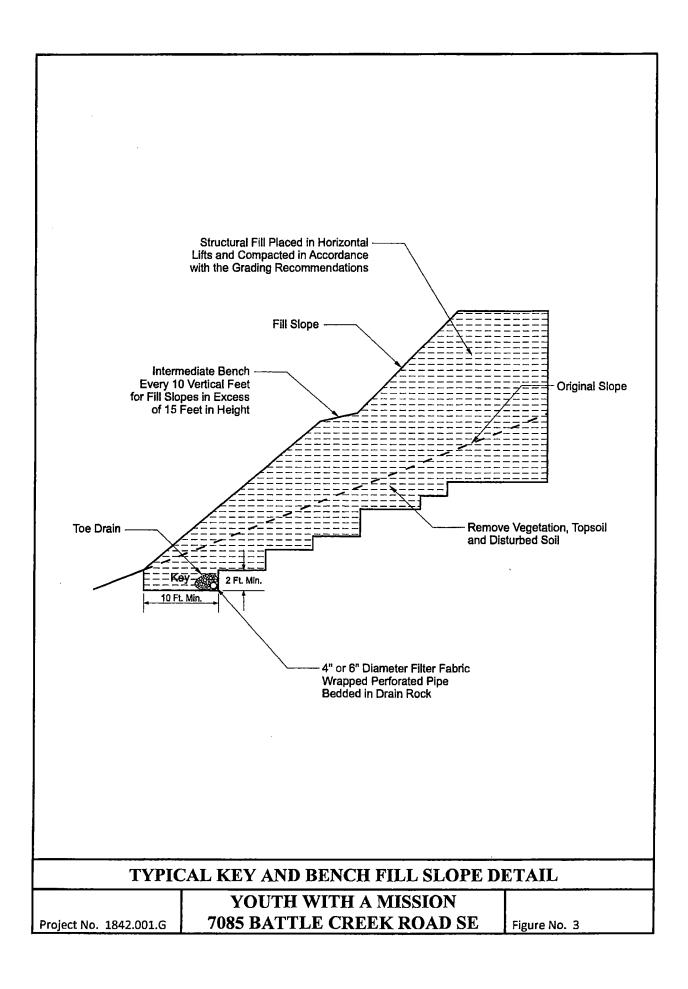
Based on the results of our investigation, it is our opinion that the site of the proposed new Youth With a Mission structures is suitable for support of the proposed new reservoir as well as the proposed new one- and/or two-story wood-frame dorm, staff housing, classroom and assemble hall structures provided that the following foundation design recommendations are followed. The following sections of this report present specific foundation design and construction recommendations for the planned new Youth With a Mission structures.

### **Shallow Foundations**

In general, conventional shallow continuous (strip) footings and individual (spread) column footings may be supported by approved native (untreated) subgrade soil materials and/or silty sand structural fill soils based on an allowable contact bearing pressure of about 2,000 pounds per square foot (psf). This recommended allowable contact bearing pressure is intended for dead loads and sustained live loads and may be increased by one-third for the total of all loads including short-term wind or seismic loads. In general, continuous strip footings should have a minimum width of at least 16 inches and be embedded at least 18 inches below the lowest adjacent finish grade (includes frost protection). Individual column footings (where required) should be embedded at least 18 inches below grade and have a minimum width of at least 24 inches. Additionally, if foundation excavation and construction work is planned to be performed during wet and/or inclement weather conditions, we recommend that a 3- to 4-inch layer of compacted crushed rock be used to help protect the exposed foundation bearing surfaces until the placement of concrete.

Total and differential settlements of foundations constructed as recommended above and supported by approved native subgrade soils or by properly compacted structural fill materials are expected to be well within the tolerable limits for these types of lightly loaded wood-frame structures and should generally be less than about 1-inch and 1/2-inch, respectively.

Allowable lateral frictional resistance between the base of the footing element and the supporting subgrade bearing soil can be expressed as the applied vertical load multiplied by a coefficient of friction of 0.30 and 0.45 for native silty subgrade soils and/or import gravel fill materials, respectively.



In addition, lateral loads may be resisted by passive earth pressures on footings poured "neat" against in-situ (native) subgrade soils or properly backfilled with structural fill materials based on an equivalent fluid density of 300 pounds per cubic foot (pcf). This recommended value includes a factor of safety of approximately 1.5 which is appropriate due to the amount of movement required to develop full passive resistance.

### Large Spread (Pad) and/or Mat Foundations

In general, large concrete mat and/or spread foundations used for support of the proposed new reservoir structure may be supported by approximately 6 inches of well compacted (structural) crushed aggregate base rock placed and compacted directly above approved native (undisturbed) medium stiff to stiff, sandy, clayey silt subgrade soil deposits based on an allowable contact bearing pressure of about 2,500 pounds per square foot (psf). This recommended allowable contact bearing pressure is intended for dead loads and sustained live loads and may be increased by one-third for the total of all loads including short-term wind and/or seismic loads. In general, large spread and/or mat type footings should extend at least two (2) feet beneath existing and/or the lowest adjacent finish grade(s). Additionally, all large spread and/or mat foundations should be constructed no closer than about eight (8) feet from the top of any existing and/or permanent slopes.

### Floor Slab Support

In order to provide uniform subgrade reaction beneath concrete slab-on-grade floors, we recommend that the floor slab area be underlain by a minimum of 6 inches of free-draining (less than 5 percent passing the No. 200 sieve), well-graded, crushed rock. The crushed rock should help provide a capillary break to prevent migration of moisture through the slab. However, additional moisture protection can be provided by using a 10-mil polyolefin geo-membrane sheet such as StegoWrap.

The base course materials should be compacted to at least 95 percent of the maximum dry density as determined by the ASTM D-1557 (AASHTO T-180) test procedures. Where floor slab subgrade materials are undisturbed, firm and stable and where the underslab aggregate base rock section has been prepared and compacted as recommended above, we recommend that a modulus of subgrade reaction of 150 pci be used for design.

### Retaining/Below Grade Walls

Retaining and/or below grade walls should be designed to resist lateral earth pressures imposed by native soils or granular backfill materials as well as any adjacent surcharge loads. For walls which are unrestrained at the top and free to rotate about their base, we recommend that active earth pressures be computed on the basis of the following equivalent fluid densities:

Non-Restrained Retaining Wall Pressure Design Recommendations

Slope Backfill (Horizontal/Vertical)	Equivalent Fluid Density/Silt (pcf)	Equivalent Fluid Density/Gravel (pcf)	
Level	35	. 30	
3H:1V	60	50	
2H:1V	90	80	

For walls which are fully restrained at the top and prevented from rotation about their base, we recommend that at-rest earth pressures be computed on the basis of the following equivalent fluid densities:

Restrained Retaining Wall Pressure Design Recommendations

Slope Backfill (Horizontal/Vertical)	Equivalent Fluid Density/Silt (pcf)	Equivalent Fluid Density/Gravel (pcf)
Level	45	35
3H:1V	65	60
2H:1V	95	90

The above recommended values assume that the walls will be adequately drained to prevent the buildup of hydrostatic pressures. Where wall drainage will not be present and/or if adjacent surcharge loading is present, the above recommended values will be significantly higher. For seismic loading, we recommend an additional uniform pressure of 6H where H is the height of the wall in feet.

Backfill materials behind walls should be compacted to 90 percent of the maximum dry density as determined by the ASTM D-1557 (AASHTO T-180) test procedures. Special care should be taken to avoid over-compaction near the walls which could result in higher lateral earth pressures than those indicated herein. In areas within three (3) to five (5) feet behind walls, we recommend the use of hand-operated compaction equipment.

### **Pavements**

Flexible pavement design for the proposed site improvements associated with the Youth With a Mission project was determined in accordance with the City of Salem Department of Public Works Administrative Rules Chapter 109-006 (Street Design Standards) Section 6 dated January 1, 2014. Flexible pavement design for the project was determined on the basis of projected (anticipated) traffic volume and loading conditions relative to laboratory subgrade soil strength ("R"-value) characteristics. Based on a laboratory subgrade "R"-value of 30 (Resilient Modulus = 5,000 to 10,000) and utilizing the Asphalt Institute Flexible Pavement Design Procedures and/or the American Association of State Highway and Transportation Officials (AASHTO) 1993 "Design of Pavement Structures" manual, we recommend that the asphaltic concrete pavement section(s) for the new Youth With a Mission development areas at the site consist of the following:

•	Asphaltic Concrete Thickness (inches)	Crushed Base Rock Thickness (inches)
Automobile Parking Areas	3.0	8.0
Automobile Drive Areas	3.5	10.0

Note: Where heavy vehicle traffic is anticipated such as those required for fire and/or garbage trucks, we recommend that the automobile drive area pavement section be increased by adding 0.5 inches of asphaltic concrete and 2.0 inches of aggregate base rock. Additionally, the above recommended flexible pavement section(s) assumes a design life of 20 years.

### **Pavement Subgrade, Base Course & Asphalt Materials**

The above recommended pavement section(s) were based on the design assumptions listed herein and on the assumption that construction of the pavement section(s) will be completed during an extended period of reasonably dry weather. All thicknesses given are intended to be the minimum acceptable. Increased base rock sections and the use of a woven geotextile fabric may be required during wet and/or inclement weather conditions and/or in order to adequately support construction traffic and protect the subgrade during construction. Additionally, the above recommended pavement section(s) assume that the subgrade will be prepared as recommended herein, that the exposed subgrade soils will be properly protected from rain and construction traffic, and that the subgrade is firm and unyielding at the time of paving. Further, it assumes that the subgrade is graded to prevent any ponding of water which may tend to accumulate in the base course.

Pavement base course materials should consist of well-graded 1-1/2 inch and/or 3/4-inch minus crushed base rock having less than 5 percent fine materials passing the No. 200 sieve. The base course and asphaltic concrete materials should conform to the requirements set forth in the latest edition of the Oregon Department of Transportation, Standard Specifications for Highway Construction. The base course materials should be compacted to at least 95 percent of the maximum dry density as determined by the ASTM D-1557 (AASHTO T-180) test procedures. The asphaltic concrete paving materials should be compacted to at least 92 percent of the theoretical maximum density as determined by the ASTM D-2041 (Rice Gravity) test method.

### Wet Weather Grading and Soft Spot Mitigation

Construction of the proposed new public street improvements is generally recommended during dry weather. However, during wet weather grading and construction, excavation to subgrade can proceed during periods of light to moderate rainfall provided that the subgrade remains covered with aggregate. A total aggregate thickness of 8-inches may be necessary to protect the subgrade soils from heavy construction traffic. Construction traffic should not be allowed directly on the exposed subgrade but only atop a sufficient compacted base rock thickness to help mitigate subgrade pumping. If the subgrade becomes wet and pumps, no construction traffic shall be allowed on the road alignment. Positive site drainage away from the street shall be maintained if site paving will not occur before the on-set of the wet season.

Page No. 14

Depending on the timing for the project, any soft subgrade found during proof-rolling or by visual observations can either be removed and replaced with properly dried and compacted fill soils or removed and replaced with compacted crushed aggregate. However, and where approved by the Geotechnical Engineer, the soft area may be covered with a bi-axial geogrid and covered with compacted crushed aggregate.

### Soil Shrink-Swell and Frost Heave

The results of the laboratory "R"-value tests indicate that the native subgrade soils possess a low to moderate expansion potential. As such, the exposed subgrade soils should not be allowed to completely dry and should be moistened to near optimum moisture content (plus or minus 3 percent) at the time of the placement of the crushed aggregate base rock materials. Additionally, exposure of the subgrade soils to freezing weather may result in frost heave and softening of the subgrade. As such, all subgrade soils exposed to freezing weather should be evaluated and approved by the Geotechnical Engineer prior to the placement of the crushed aggregate base rock materials.

### Excavation/Slopes

Temporary excavations of up to about four (4) feet in depth may be constructed with near vertical inclinations. Temporary excavations greater than about four (4) feet but less than eight (8) feet should be excavated with inclinations of at least 1 to 1 (horizontal to vertical) or properly braced/shored. Where excavations are planned to exceed about eight (8) feet, this office should be consulted. All shoring systems and/or temporary excavation bracing for the project should be the responsibility of the excavation contractor. Permanent slopes should be constructed no steeper than about 2H to 1V unless approved by the Geotechnical Engineer.

Depending on the time of year in which trench excavations occur, trench dewatering may be required in order to maintain dry working conditions if the invert elevations of the proposed utilities are located at and/or below the groundwater level. If groundwater is encountered during utility excavation work, we recommend placing trench stabilization materials along the base of the excavation.

Trench stabilization materials should consist of 1-foot of well-graded gravel, crushed gravel, or crushed rock with a maximum particle size of 4 inches and less than 5 percent fines passing the No. 200 sieve. The material should be free of organic matter and other deleterious material and placed in a single lift and compacted until well keyed.

### Surface Drainage/Groundwater

We recommend that positive measures be taken to properly finish grade the site so that drainage waters from the structures and landscaping areas as well as adjacent properties or buildings are directed away from the new structures foundations and/or floor slabs. All roof drainage should be directed into conduits that carry runoff water away from the structures to a suitable outfall. Roof downspouts should not be connected to foundation drains.

A minimum ground slope of about 2 percent is generally recommended in unpaved areas around the proposed new structures.

Groundwater was not encountered at the site in any of the exploratory test pits (TH-#1 through TH-#8) at the time of excavation to depths of at least seven (7) feet beneath existing site grades. However, the central portion of the site contains an existing drainage basin feature (Battle Creek). Additionally, groundwater elevations in the area and/or across the subject property may fluctuate seasonally and may temporarily pond/perch near the ground surface during periods of prolonged rainfall.

As such, based on our current understand of the possible site grading required to bring the subject site to finish design grade(s), we are of the opinion that an underslab drainage system is not required for the proposed Youth With a Mission structures. However, a perimeter foundation drain is recommended for any perimeter footings and/or below grade retaining walls. A typical recommended perimeter footing/retaining wall drain detail is shown on Figure No. 4.

### **Design Infiltration Rates**

Based on the results of our field infiltration testing, we recommend using the following infiltration rate to design any on-site near surface storm water infiltration and/or disposal systems for the project:

### **Subgrade Soil Type**

### **Recommended Infiltration Rate**

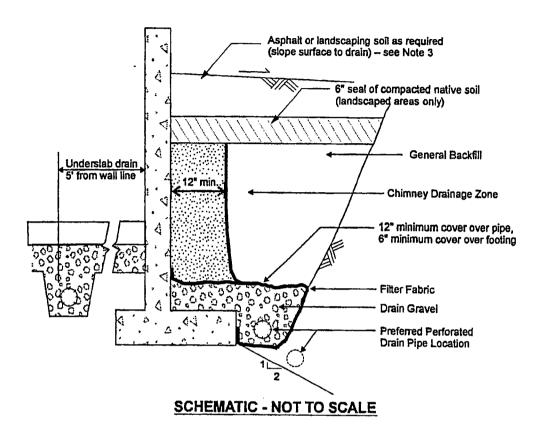
clayey, sandy SILT (ML)

0.4 to 0.6 inches per hour (in/hr)

Note: A safety factor of two (2) was used to calculate the above recommended design infiltration rate. Additionally, given the gradational variability of the on-site clayey, sandy sit subgrade soils beneath the site as well as the anticipation of some site grading for the project, it is generally recommended that field testing be performed during and/or following construction of any on-site storm water infiltration system(s) in order to confirm that the above recommended design infiltration rates are appropriate.

### Seismic Design Considerations

Structures at the site should be designed to resist earthquake loading in accordance with the methodology described in the 2019 and/or latest edition of the State of Oregon Structural Specialty Code (OSSC), ASCE 7-16 and/or Amendments to the 2018 International Building Code (IBC). The maximum considered earthquake ground motion for short period and 1.0 period spectral response may be determined from the 2015 National Earthquake Hazard Reduction Program (NEHRP) "Recommended Provisions for Seismic Regulations for New Buildings and Other Structures" published by the Building Seismic Safety Council. We recommend Site Class "D" be used for design.



### NOTES:

- 1. Filter Fabric to be non-woven geotextile (Amoco 4545, Mirafi 140N, or equivalent)
- Lay perforated drain pipe on minimum 0.5% gradient, widening excavation as required. Maintain pipe above 2:1 slope, as shown.
- All-granular backfill is recommended for support of slabs, pavements, etc. (see text for structural fill).
- 4. Drain gravel to be clean, washed 34" to 11/2" gravel.
- General backfill to be on-site gravels, or ¾""-0 or 1½"-0 crushed rock compacted to 92% Modified Proctor (AASHTO T-180).
- Chimney drainage zone to be 12" wide (minimum) zone of clean washed, medium to coarse sand or drain gravel if protected with filter fabric. Alternatively, prefabricated drainage structures (Miradrain 6000 or similar) may be used.

### PERIMETER FOOTING/RETAINING WALL DRAIN DETAIL

Page No. 16

Using this information, the structural engineer can select the appropriate site coefficient values (Fa and Fv) to determine the maximum considered earthquake spectral response acceleration for the project. However, we have assumed the following response spectrum for the project:

Table 1. Recommended Seismic Design Parameters

Site Class	Ss	<b>S</b> 1	Fa	Fv	SMS	SM1	SDS	S _{D1}
D	0.802	0.406	1.200	1.894	0.962	0.769	0.641	0.513

Notes: 1. Ss and S1 were established based on the USGS 2015 mapped maximum considered earthquake spectral acceleration maps for 2% probability of exceedence in 50 years.

2. Fa and Fv were established from ASCE 7-16 using the selected Ss and S1 values.

### **CONSTRUCTION MONITORING AND TESTING**

We recommend that **Redmond Geotechnical Services**, **LLC** be retained to provide construction monitoring and testing services during all earthwork operations for the proposed new Youth With a Mission development. The purpose of our monitoring services would be to confirm that the site conditions reported herein are as anticipated, provide field recommendations as required based on the actual conditions encountered, document the activities of the grading contractor and assess his/her compliance with the project specifications and recommendations. It is important that our representative meet with the contractor prior to any site grading to help establish a plan that will minimize costly over-excavation and site preparation work. Of primary importance will be observations made during site preparation and stripping, structural fill placement, footing excavations and construction as well as retaining wall backfill.

### **CLOSURE AND LIMITATIONS**

This report is intended for the exclusive use of the addressee and/or their representative(s) to use to design and construct the proposed new Youth With a Mission structures and their associated site improvements described herein as well as to prepare any related construction documents. The conclusions and recommendations contained in this report are based on site conditions as they presently exist and assume that the explorations are representative of the subsurface conditions between the explorations and/or at other locations across the study area. The data, analyses, and recommendations herein may not be appropriate for other structures and/or purposes. We recommend that parties contemplating other structures and/or purposes contact our office. In the absence of our written approval, we make no representation and assume no responsibility to other parties regarding this report.

Additionally, the above recommendations are contingent on Redmond Geotechnical Services, LLC being retained to provide all site inspections and constriction monitoring services for this project. Redmond Geotechnical Services, LLC will not assume any responsibility and/or liability for any engineering judgment, inspection and/or testing services performed by others.

It is the owners/developers responsibility for insuring that the project designers and/or contractors involved with this project implement our recommendations into the final design plans, specifications and/or construction activities for the project. Further, in order to avoid delays during construction, we recommend that the final design plans and specifications for the project be reviewed by our office to evaluate as to whether our recommendations have been properly interpreted and incorporated into the project.

If during any future site grading and construction, subsurface conditions different from those encountered in the explorations are observed or appear to be present beneath excavations, we should be advised immediately so that we may review these conditions and evaluate whether modifications of the design criteria are required. We also should be advised if significant modifications of the proposed site development are anticipated so that we may review our conclusions and recommendations.

### LEVEL OF CARE

The services performed by the Geotechnical Engineer for this project have been conducted with that level of care and skill ordinarily exercised by members of the profession currently practicing in the area under similar budget and time restraints. No warranty or other conditions, either expressed or implied, is made.

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# Appendix "A" Test Pit Logs and Laboratory Test Data

### **APPENDIX**

### FIELD EXPLORATIONS AND LABORATORY TESTING

### FIELD EXPLORATION

Subsurface conditions at the site were explored by excavating eight (8) exploratory test pits (TH-#1 through TH-#8) on July 24, 2020. The approximate location of the test pit explorations are shown in relation to the proposed new residential lots and the associated site improvements on the Site Exploration Plan, Figure No. 2.

The test pits were excavated using track-mounted excavating equipment in general conformance with ASTM Methods in Vol. 4.08, D-1586-94 and D-1587-83. The test pits were excavated to depths ranging from about 6.0 to 7.0 feet beneath existing site grades. Detailed logs of the test pits are presented on the Log of Test Pits, Figure No's. A-5 through A-8. The soils were classified in accordance with the Unified Soil Classification System (USCS), which is outlined on Figure No. A-4.

The exploration program was coordinated by a field engineer who monitored the excavating and exploration activity, obtained representative samples of the subsurface soils encountered, classified the soils by visual and textural examination, and maintained continuous logs of the subsurface conditions. Disturbed and/or undisturbed samples of the subsurface soils were obtained at appropriate depths and/or intervals and placed in plastic bags and/or with a thin walled ring sample.

Groundwater was not encountered in any of the exploratory test pits (TH-#1 through TH-#8) at the time of excavating to depths of at least 7.0 feet beneath existing surface grades.

### LABORATORY TESTING

Pertinent physical and engineering characteristics of the soils encountered during our subsurface investigation were evaluated by a laboratory testing program to be used as a basis for selection of soil design parameters and for correlation purposes. Selected tests were conducted on representative soil samples. The program consisted of tests to evaluate the existing (in-situ) moisture-density, maximum dry density and optimum moisture content, Atterberg Limits and gradational characteristics as well as consolidation, direct shear strength and "R"-value tests.

### **Dry Density and Moisture Content Determinations**

Density and moisture content determinations were performed on both disturbed and relatively undisturbed samples from the test pit explorations in general conformance with ASTM Vol. 4.08 Part D-216. The results of these tests were used to calculate existing overburden pressures and to correlate strength and compressibility characteristics of the soils. Test results are shown on the test pit logs at the appropriate sample depths.

### **Maximum Dry Density**

Two (2) Maximum Dry Density and Optimum Moisture Content tests were performed on representative samples of the on-site sandy, clayey silt subgrade soils in accordance with ASTM Vol. 4.08 Part D-1557. This test was conducted to help establish various engineering properties for use as structural fill. The test results are presented on Figure No. A-9.

### **Atterberg Limits**

Two (2) Liquid Limit (LL) and Plastic Limit (PL) tests were performed on representative samples of the sandy, clayey silt subgrade soils in accordance with ASTM Vol. 4.08 Part D-4318-85. These tests were conducted to facilitate classification of the soils and for correlation purposes. The test results appear on Figure No. A-10.

### **Gradation Analysis**

Two (2) Gradation analyses were performed on representative samples of the sandy, clayey silt subsurface soils in accordance with ASTM Vol. 4.08 Part D-422. The test results were used to classify the soil in accordance with the Unified Soil Classification System (USCS). The test results are shown graphically on Figure No. A-11.

### **Consolidation Test**

One (1) Consolidation test was performed on a representative sample of the sandy, clayey silt subgrade soil to assess the compressibility characteristics of the underlying subgrade soils in accordance with ASTM Vol. 4.08 Part D-2435-80.

Conventional loading increments of 100, 200, 400, ... 12,800 psf were applied after the 100 percent time of primary consolidation was identified for each loading increment. The samples were unloaded and allowed to rebound after the completion of the loading sequence. Deflection versus time readings were recorded for all load increments from 100 through 12,800 psf. The deflection corresponding to 100 percent primary consolidation was plotted on the consolidation strain versus consolidation pressure curve, which is presented on Figure No. A-12.

### **Direct Shear Strength Test**

One (1) Direct Shear Strength test was performed on undisturbed and/or remolded sample of the sandy, clayey silt subgrade soils at a continuous rate of shearing deflection (0.02 inches per minute) in accordance with ASTM Vol. 4.08 Part D-3080-79. The test results were used to determine engineering strength properties and are shown graphically on Figure No. A-13.

### "R"-Value Tests

One (1) "R"-value tests were performed on a remolded subgrade soil sample of the sandy, clayey silt subgrade soils in accordance with ASTM Vol. 4.08 Part D-2844. The test results were used to help evaluate the subgrade soils supporting and performance capabilities when subjected to traffic loading. The test results are shown on Figure No. A-14.

The following figures are attached and complete the Appendix:

Figure No. A-4	Key To Exploratory Test Pit Logs
Figure No's. A-5 through A-8	Log of Test Pits/Dynamic Cone
Figure No. A-9	Maximum Dry Density
Figure No. A-10	Atterberg Limits Test Results
Figure No. A-11	<b>Gradation Test Results</b>
Figure No. A-12	Consolidation Test Results
Figure No. A-13	Direct Shear Strength Test Results
Figure No. A-14	Results of "R"-Value Tests
Figure No's. A-15 and A-16	Field Infiltration Test Results

	PR	IMARY DIVISION	18	GROUP SYMBOL	SECONDARY DIVISIONS
	ب	GRAVELS	CLEAN GRAVELS	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
SOILS	MATERIAL D. 200	MORE THAN HALF OF COARSE	(LESS THAN 5% FINES)	GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
1	MO.	FRACTION IS	GRAVEL WITH	GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines.
INE	ALF OF M THAN NO. /E SIZE	LARGER THAN NO. 4 SIEVE	FINES	GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines.
GR4	T / 1	SANDS	CLEAN SANDS	sw	Well graded sands, gravelly sands, little or no fines.
COARSE GRAINED	ARSE G THAN P LARGER SIE	MORE THAN HALF OF COARSE	(LESS THAN 5% FINES)	SP	Poorly graded sands or gravelly sands, little or no fines.
8	MORE IS L	FRACTION IS SMALLER THAN	SANDS	SM	Silty sands, sand-silt mixtures, non-plastic fines.
	ž	NO. 4 SIEVE	WITH FINES	sc	Clayey sands, sand-clay mixtures, plastic fines.
S	OF LER SIZE	SILTS AND	CLAYS	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
SOILS			LIQUID LIMIT IS LESS THAN 50%		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
Ð	- 1	LESS THAN			Organic silts and organic silty clays of low plasticity.
GRAINED		SILTS AND	CLAYS	МН	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
	ш #: В I	LIQUID LIM	LIQUID LIMIT IS		Inorganic clays of high plasticity, fat clays.
FINE MOR MATE THAN		GREATER TH	AN 50%	он	Organic clays of medium to high plasticity, organic silts.
	HIG	GHLY ORGANIC SOIL	S	Pt	Peat and other highly organic soils.

### **DEFINITION OF TERMS**

	U.S. S	TANDARD SERIES	SIEVE	CLE	AR SQUARE	SIEVE OPE	NINGS
20	00 4	10 10	) 4	4 3.	/4 ¹¹ 3	B ^{II} 1	2"
SILTS AND CLAYS		SAND		GRA	VEL	COPPLEC	BOULDERS
SILIS AND CLAYS	FINE	MEDIÚM	COARSE	FINE	COARSE	COBBLES	DOOLDERS

### GRAIN SIZES

SANDS, GRAVELS AND NON-PLASTIC SILTS	BLOWS/FOOT †
VERY LOOSE	0 - 4
LOOSE	4 - 10
MEDIUM DENSE	10 ~ 30
DENSE	30 - 50
VERY DENSE	OVER 50
Į l	

CLAYS AND PLASTIC SILTS	STRENGTH ‡	BLOWS/FOOT †
VERY SOFT SOFT FIRM STIFF VERY STIFF HARD	0 - 1/4 1/4 - 1/2 1/2 - 1 1 - 2 2 - 4 OVER 4	0 - 2 2 - 4 4 - 8 8 - 16 16 - 32 OVER 32

### RELATIVE DENSITY

### CONSISTENCY

Number of blows of 140 pound hammer falling 30 inches to drive a 2 inch 0.D. (1-3/8 inch I.D.) split spoon (ASTM D-1586).

split spoon (ASTM D-1586).

†Unconfined compressive strength in tons/sq. ft. as determined by laboratory testing or approximated by the standard penetration test (ASTM D-1586), pocket penetrometer, torvane, or visual observation.

# REDMOND GEOTECHNICAL SERVICES PO BOX 20547 • PORTLAND, OREGON 97294

# KEY TO EXPLORATORY TEST PIT LOGS Unified Soil Classification System (ASTM D-2487)

PROJECT NO.	DATE	<b>c</b> :		
1842.001.G	9/11/20	Figure	A – 4	

BACKHO	COM	PANY	, Gene	S. Mo	Muı	rin BUCKET SIZE: 24 inches DATE: 7/24/20	
DEPTH (FEET)	BAG SAMPLE	DENSITY TEST	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	SOIL CLASS.	SOIL DESCRIPTION  TEST PIT NO. TH-#1 ELEVATION	
-0					ML	Dark brown, moist to very moist, soft, organic, sandy, clayey SILT (Topsoil)	
- - 5	x		•	29.9	ML	Reddish-brown, very moist, medium stiff to stiff, sandy, clayey SILT (Residual Soil)	
- 10 - - -						Total Depth = 7.0 feet No groundwater encountered at time of exploration	
.5				•	_	TEST PIT NO. TH-#2 ELEVATION	
					ML	Dark brown, moist to very moist, soft, organic, sandy, clayey SILT (Topsoil)	
-	x			30.4	ML MH	Medium to reddish-brown, very moist, medium stiff sandy, clayey SILT (Residual Soil)	
5	х			26.8	ML	Orangish-brown, very moist, medium stiff to medium dense, clayey, sandy SILT to clayey, silty SAND (Highly Weathered Bedrock)	
10						Total Depth = 7.0 feet  No groundwater encountered at time of exploration	
15							
				1	.0	G OF TEST PITS	
ROJECT NO. 1842_001_G YOUTH WITH A MISSION FIGURE NO. A-5							

ВАСКНО	BACKHOE COMPANY: Gene S. McMurrin BUCKET SIZE: 24 inches DATE: 7/24/20								
OEPTH (FEET)	BAG SAMPLE	DENSITY TEST	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	SOIL CLASS.	SOIL DESCRIPTION  TEST PIT NO. TH-#3 ELEVATION			
					ML	Dark brown, moist, soft, organic, sandy,			
	X			16.6		clayey SILT (Topsoil)			
-	x			22.5	ML	Dark gray to olive-brown, moist to very moist, soft, slightly organic, sandy, clayey SILT			
5	· .				ML	Medium to orangish-brown, very moist, soft to medium stiff, clayey, sandy SILT			
					,	Total Depth = 6.0 feet No groundwater encountered at time of exploration			
-									
-	İ								
15 —	1	l		···	ll				
•			·			TEST PIT NO. TH-#4 ELEVATION			
7					ML	Dark brown, very moist, soft, organic, sandy, clayey SILT (Topsoil)			
†	х			23.4	ML	Multi-colored, very moist, soft, slightly organic, clayey, sandy SILT			
5 —	Х			22.1	ML SM	Orangish-brown, very moist, soft to loose, clayey, sandy SILT to clayey, silty SAND			
1					SM	Dark gray-brown with bluish-mottling, very moist, medium dense to dense, clayey, silty SAND with occasional small gravel and slightly cemented			
10 —						Total Depth = 7.0 feet  No groundwater encountered at time of exploration			
4		}							
4						1			
15	15								
					-0	G OF TEST PITS			
		104	2 001						
HOJECT N	OJECT NO. 1842.001.G YOUTH WITH A MISSION FIGURE NO. A-6								

BACKHOE (	СОМР	ANY	Gene	e S. M	cMuı	crin BUCKET SIZE: 24 inches DATE: 7/24/20			
DEPTH (FEET)	SAMPLE	DENSITY TEST	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	SOIL CLASS. (U.S.C.S.)	SOIL DESCRIPTION TEST PIT NO. TH-#5 ELEVATION			
`	x.			14.4	ML	Dark brown, moist, soft, organic, sandy, clayey SILT (Topsoil)			
Ţ	×.			21.7	ML	Dark gray to olive-brown, moist to very moist, soft, slightly organic, sandy, clayey SILT			
5 —					ML	Medium to orangish-brown, very moist, soft to medium stiff, clayey, sandy SILT			
10 —						Total Depth = 6.0 feet No groundwater encountered at time of exploration			
1 1									
15						TEST PIT NO. TH-#6 ELEVATION			
° <del> </del>	-				ML	Dark brown, moist to very moist, soft, organic, sandy, clayey SILT (Topsoil)			
1		+			MT	Multi-colored, very moist, soft, slightly organic, clayey, sandy SILT			
5 —	+	_			ML	Orangish-brown, very moist soft to loose, clayey, sandy SILT to clayey, silty SAND			
					SM	Dark gray-brown with bluish-mottling, very moist, medium dense to dense, clayey, silty SAND with occasional small gravel and slightly cemented			
10						Total Depth = 6.0 feet No groundwater encountered at time of exploration			
15									
				l	-0	G OF TEST PITS			
ROJECT NO	. 1	842	2.001.	G	<u> </u>	OUTH WITH A MISSION FIGURE NO. A-7			

ВАСКНО	E COM	PANY	Gene	e S. 1	McMu	rrin BUCKET SIZE: 24 inches DATE: 7/24/20		
DEPTH (FEET)	BAG SAMPLE	DENSITY TEST	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	SOIL CLASS. (U.S.C.S.)	SOIL DESCRIPTION TEST PIT NO. TH-#7 ELEVATION		
_		_			/ F	Dark brown, moist to very moist, soft, organic, sandy, clayey SILT (Topsoil)		
_					ML	Multi-colored, very moist, soft, slightly organic, clayey, sandy SILT		
5	,				ML SM	Orangish-brown, very moist, soft to loose, clayey, sandy SILT to clayey, silty SAND		
1					SM	Dark gray-brown with bluish-mottling, very moist, medium dense to dense, clayey, silty SAND with occasional small gravel and slightly cemented		
10						Total Depth = 6.0 feet No groundwater encountered at time of exploration		
15								
0						TEST PIT NO. TH-#8 ELEVATION		
					ML	Dark brown, moist to very moist, soft, organic, sandy, clayey SILT (Topsoil)		
					ML	Dark gray to olive-brown, moist to very moist, soft, slightly organic, sandy, clayey SILT		
5 —		_		· · · · · · · · · · · · · · · · · · ·	ML	Medium to orangish-brown, very moist, soft to medium stiff, clayey, sandy SILT		
						Total Depth = 6.0 feet No groundwater encountered at time of exploration		
10 —						·		
15								
	LOG OF TEST PITS							
ROJECT N	10.	1	842.00	$\overline{}$		OUTH WITH A MISSION FIGURE NO. A-8		

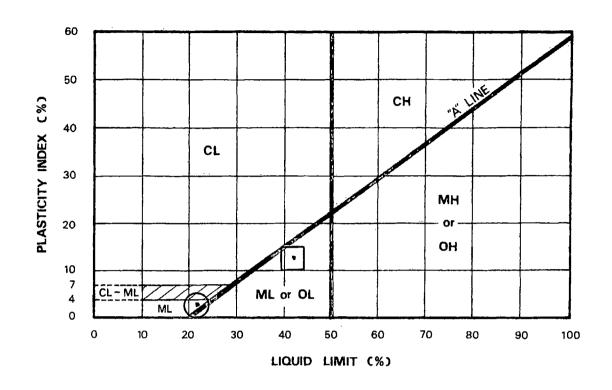
### MAXIMUM DENSITY TEST RESULTS

28.0
18.0

### **EXPANSION INDEX TEST RESULTS**

SAMPLE LOCATION	INITIAL MOISTURE (%)	COMPACTED DRY DENSITY (pcf)	FINAL MOISTURE (%)	VOLUMETRIC SWELL (%)	EXPANSION INDEX	EXPANSIVE CLASS.
	:					

MIXAM	MU	DENS	ITY&EXPANSION INC	EX TEST	RESULTS
PROJECT NO.:	1842.	001 G	YOUTH WITH A MISSION	FIGURE NO.:	A-9



KEY SYMBOL	BORING NO.	SAMPLE DEPTH (feet)	NATURAL WATER CONTENT %	LIQUID LIMIT %	PLASTICITY INDEX %	PASSING NO. 200 SIEVE %	LIQUIDITY INDEX	UNIFIED SOIL CLASSIFICATION SYMBOL
	TH-#1	4.0	29.9	42.3	12.6	90.3		MC
$\odot$	тн-#3	1.5	16.6	21.8	3.6	80.1		ML
	į							
					,			



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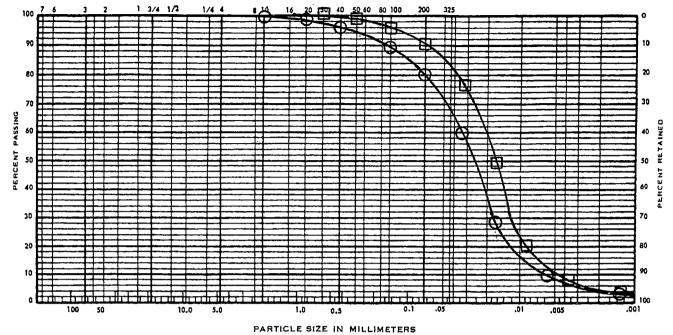
PL	ASTI	CITY	CHART	AND	DATA

PROJECT NO.	DATE	F:		_
1842.001.G	9/11/20	Figure	A-10	

### UNIFIED SOIL CLASSIFICATION SYSTEM

(ASTM D 422-72)

U. S. STANDARD SIEVE SIZES



COBBLES	GRA	VEL		. SAND		
COBBLES	COARSE	FINE	COARSE	MEDIUM	FINE	SILT AND CLAY

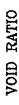
KEY SYMBOL	BORING NO.	SAMPLE DEPTH (feet)	ELEV. (feet)	UNIFIED SOIL CLASSIFICATION SYMBOL	SAMPLE DESCRIPTION
-	TH-#1	4.0		ML	Reddish-brown, sandy, clayey SILT
Φ	TH-#3	1.5		ML	Dark gray-brown to olive- brown, sandy, clayey SILT

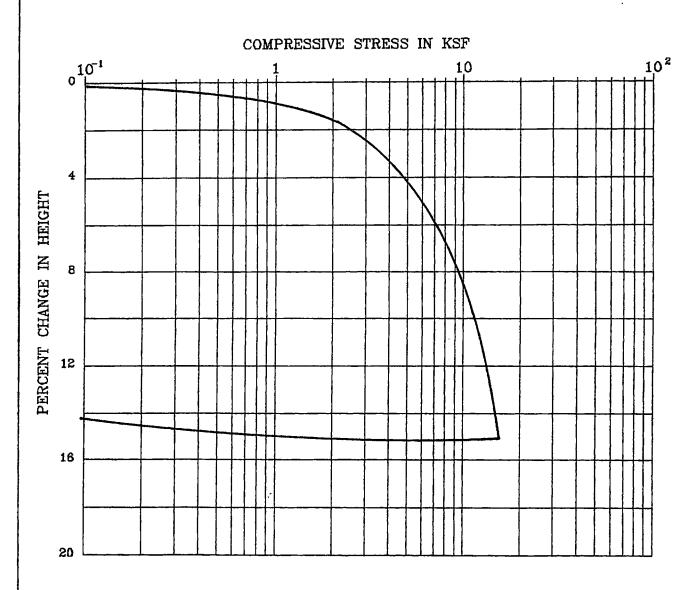


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**GRADATION TEST DATA** 

PROJECT NO.	DATE	FIGURE	
1842.001.G	9/11/20	FIGURE	A-11





BORING : TH-#3 DESCRIPTION : sandy, clayey SILT (ML)
DEPTH (ft) : 1 5 LIQUID LIMIT : 21.8

DEPTH (ft) : 1.5 LIQUID LIMIT : 21.8 SPEC. GRAVITY : 2.5 (assumed) PLASTIC LIMIT : 18.2

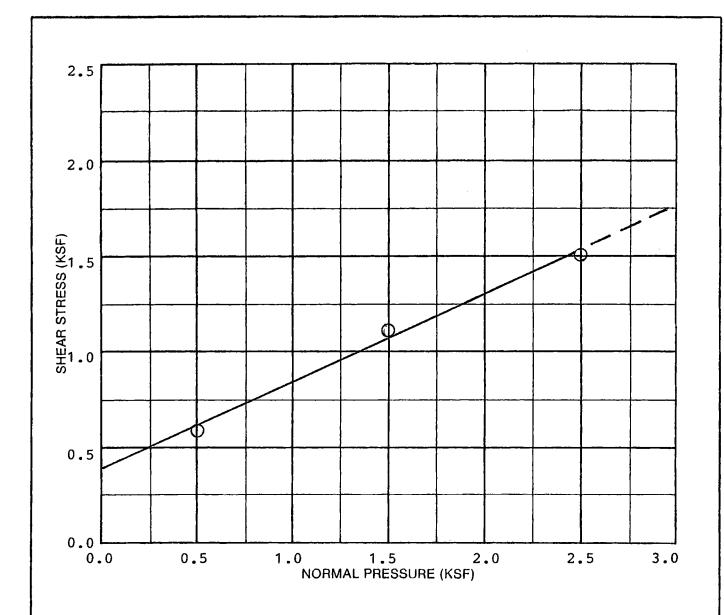
	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	PERCENT SATURATION	VOID RATIO
INITIAL	16.6	89.9	84.4	
FINAL	8.8	97.4	93.7	



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### **CONSOLIDATION TEST DATA**

	······································			
PROJECT NO.	DATE	F: 3	4.0	
1842.001.G	9/11/20	Figure A	1-12	



SAMPLE DATA						
DESCRIPTION: Redilist clayey SILT (M	sh-brown, sandy, L)(Remolded)					
BORING NO.: TH-#1						
DEPTH (ft.): 4.0 ELEVATION (ft):						
TEST R	ESULTS					
APPARENT COHESION (C):	APPARENT COHESION (C): 400 psf					
APPARENT ANGLE OF INTERNA	L FRICTION (Φ): 240					

TEST DATA						
TEST NUMBER	1	2	3	4		
NORMAL PRESSURE (KSF)	0.5	1.5	2.5			
SHEAR STRENGTH (KSF)	0.6	1.1	1.5			
INITIAL H2O CONTENT (%)	28.0	28.0	28.0			
FINAL H20 CONTENT (%)	28.7	20.2	14.3			
INITIAL DRY DENSITY (PCF)	92.0	92.0	92.0			
FINAL DRY DENSITY (PCF) 92.8 671 103.3						
STRAIN RATE: 0.02 inches per minute						



DIRECT SHEAR TEST DATA						
77.7	TH WITH A MIS					
7085 BATTLE CREEK ROAD SE						
PROJECT NO.	DATE	Figure A-13				
1842.001.G	9/11/20	rigure	A-13			

### **RESULTS OF R (RESISTANCE) VALUE TESTS**

**SAMPLE LOCATION: TH-#5** 

SAMPLE DEPTH: 1.5 feet bgs

Specimen	* : < <b>A</b> > .	By	* C-
Exudation Pressure (psi)	221	328	429
Expansion Dial (0.0001")	0	0	1
Expansion Pressure (psf)	0	0	2
Moisture Content (%)	20.6	17.4	13.1
Dry Density (pcf)	99.4	104.2	109.6
Resistance Value, "R"	18	31	43
"R"-Value at 300 psi Exudation Pressure = 3	30		· · · · · · · · · · · · · · · · · · ·

### **SAMPLE LOCATION:**

### SAMPLE DEPTH:

Specimen	A.	· B3	: C
Exudation Pressure (psi)			
Expansion Dial (0.0001")			
Expansion Pressure (psf)			
Moisture Content (%)			
Dry Density (pcf)			
Resistance Value "R"			
"R"-Value at 300 psi Exudation Pressure =	·		

### **Division 004 Appendix C - Infiltration Testing**

Date: July 24, 2020	Test Hole: TH-#4	
Hole Diameter: 6 inches	Test Method: Encased Falling Head	
, G.E.		
al Services, LLC Test	er's Contact Number: 503-285-0598	
Soil Characteristics		
Dark brown Topsoil		
Multi-colored, clayey, sandy SILT (ML)		
Orangish-brown, clayey, sandy SILT (ML)		
	Hole Diameter: 6 inches  G.E. al Services, LLC  Soi  Dar  Multi-colore	

Time         (Minutes)         (inches)         (inches)         (inches/hour)           11:00         0         24.00          Filled w/12" water           11:20         20         24.50         0.50         1.50           11:40         20         24.95         0.45         1.35           12:00         20         25.38         0.43         1.29           12:20         20         25.80         0.42         1.26           12:40         20         26.21         0.41         1.23           1:00         20         26.62         0.41         1.23           1:20         20         27.02         0.40         1.20           1:40         20         27.42         0.40         1.20		Time Interval	Measurement	Drop in Water	Infiltration Rate	Remarks
11:20     20     24.50     0.50     1.50       11:40     20     24.95     0.45     1.35       12:00     20     25.38     0.43     1.29       12:20     20     25.80     0.42     1.26       12:40     20     26.21     0.41     1.23       1:00     20     26.62     0.41     1.23       1:20     20     27.02     0.40     1.20	Time	(Minutes)	(inches)	(inches)	(inches/hour)	
11:40     20     24.95     0.45     1.35       12:00     20     25.38     0.43     1.29       12:20     20     25.80     0.42     1.26       12:40     20     26.21     0.41     1.23       1:00     20     26.62     0.41     1.23       1:20     20     27.02     0.40     1.20	11:00	0	24.00			Filled w/12" water
12:00     20     25.38     0.43     1.29       12:20     20     25.80     0.42     1.26       12:40     20     26.21     0.41     1.23       1:00     20     26.62     0.41     1.23       1:20     20     27.02     0.40     1.20	11:20	20	24.50	0.50	1.50	
12:20     20     25.80     0.42     1.26       12:40     20     26.21     0.41     1.23       1:00     20     26.62     0.41     1.23       1:20     20     27.02     0.40     1.20	11:40	20	24.95	0.45	1.35	
12:40     20     26.21     0.41     1.23       1:00     20     26.62     0.41     1.23       1:20     20     27.02     0.40     1.20	12:00	20	25.38	0.43	1.29	
1:00     20     26.62     0.41     1.23       1:20     20     27.02     0.40     1.20	12:20	20	25.80	0.42	1.26	
1:20 20 27.02 0.40 1.20	12:40	20	26.21	0.41	1.23	
	1:00	20	26.62	0.41	1.23	
1:40 20 27.42 0.40 1.20	1:20	20	27.02	0.40	1.20	
	1:40	20	27.42	0.40	1.20	

Infiltration Test Data Table

## **Division 004 Appendix C - Infiltration Testing**

Location: Youth With a Mission	Date: July 24, 2020	Test Hole: TH-#6	
Depth to Bottom of Hole: 4.0 feet	Hole Diameter: 6 inches	Test Method: Encased Falling Head	
Tester's Name: Daniel M. Redmond, P.E.,	, G.E.		
Tester's Company: Redmond Geotechnic	al Services, LLC Test	er's Contact Number: 503-285-0598	
Depth (feet)	Soil Characteristics		
0-1.0	Dark brown Topsoil		
1.0-2.5	Multi-colored, clayey, sandy SILT (ML)		
2.5-4.0	Orangish-brown, clayey, sandy SILT (ML)		

	Time Interval	Measurement	Drop in Water	Infiltration Rate	Remarks
Time	(Minutes)	(inches)	(inches)	(inches/hour)	
11:10	0	36.00			Filled w/12" water
11:30	20	36.34	0.34	1.02	
11:50	. 20	36.65	0.31	0.93	, , , , , , , , , , , ,
12:10	20	36.94	0.29	0.87	
12:30	20	37.22	0.28	0.84	
12:50	20	37.49	0.27	0.81	
1:10	20	37.76	0.27	0.81	
1:30	20	38.02	0.26	0.78	
1:50	20	38.28	0.26	0.78	
				Ì	

Infiltration Test Data Table

Appendix "B"

Geologic Hazard Assessment