**Public Health Division**

Center for Health Protection, Drinking Water Services

Tina Kotek, Governor

March 5, 2026

Christiane Kraemer (christiane@thegrantcompanyinc.com)
Grant Company
135 E. Charles St.
Mt. Angel, OR 97362

Sent by e-mail only

**Re: 2024 Well #1 – YAMH59595, L153823 (PR#22-2026)**
**Austin Sparkling Winery & Tasting Room (PWS ID# 95782)**
**Conditional Approval**

Dear Ms. Kraemer:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the 2024 Well (YAMH59595), tanks and secondary treatment for the Austin Sparkling Winery and Tasting Room (PWS ID #95782). On February 12, 2026, our office received plans, land use documentation, site maps, well log (YAMH55595), water quality test results (including nitrate, arsenic, and coliform bacteria), and photographs of the water system. A plan review fee payment in the amount of $825 was also received on February 12, 2026, at which time plan id #22-2026 was assigned.

The facilities included under this plan review include:

- A single well drilled 10/23/24 (SRC-AA - Well #1 - YAMH59595 (L153823)
- One 46,000-Gallon Corrugated Steel "Fire Tank" (CorGal Model# 2105-WT-CHR)
- One ___-Gallon NSF-61 Pressure Tank (FlexCon P2Pro Model #FL2___)
- Secondary treatment consisting of:
  - One NSF-44 certified water softener (Water-Right Impression Plus Model #___) w/NSF-60 SureSoft® salt.
  - One Luminor® NSF-55 Class A UV Unit (18-GPM Blackcomb-HO Model #LBH6-40XA) – not approved for 4.0-log viral disinfection.
  - One NSF-42 certified cartridge filter (DGD Series Model #___)
- NSF-372 certified horizontal multi-stage pump (MH Series Model #___)

(Please provide model numbers where missing as highlighted above)

The water system serves a winery and tasting room located at 11050 NE Worden Hill Rd, Dundee, OR 97115. The system is classified as a transient non-community (TNC) system licensed by the Oregon Dept. of Agriculture based on an average daily population of 25 users or more.

**Well Evaluation Results (YAMH59595)**

An evaluation for the well log (YAMH59595) completed on March 4, 2026 by OHA-DWS geologist, Tom Pattee, showed that the well was adequately constructed into a confined aquifer having a low susceptibility to contamination from nearby land use practices. Further details regarding this evaluation are enclosed.

The plans are approved subject to the following conditions:

Conditions remaining to be met for the well according to OAR 333-061-0050(2):

1) ☐ Unless the well is fitted with a pitless adapter, a reinforced concrete slab must be poured around the well casing and sloped to shed water away from the casing.
2) ☐ Unless the well is fitted with a pitless adapter, the wellhead must be enclosed in a well house or otherwise protected from the elements. The well house must allow for future removal of the well pump (e.g., a removable roof, roof hatch, etc.).

Conditions remaining to be met for the 46,000-gallon corrugated steel tank according to OAR 333-061-0050(6):

3) ☐ If the interior of the tank is coated or lined, the coating or lining must be NSF-61 certified for potable use.
4) ☐ The outlet end of the drain/overflow for the storage tank must be fitted with angle-flap valve or equivalent protection (e.g., insect screen) and must discharge with an airgap to a watercourse or storm drain capable of accommodating the flow.
5) ☐ The roof access hatch for the storage tank must have curbing around the opening and a lockable watertight lid that overlaps the curbing.
6) ☐ Where the hatch is on the roof, an internal ladder must be provided.
7) ☐ A silt stop must be provided at the outlet pipe of the storage tank.
8) ☐ A fence or other method of vandal deterrent must be provided for the tank.

Conditions for disinfection and testing according to OAR 333-061-0050(10):

9) ☐ New facilities are disinfected and tested once construction is complete and coliform sample results are submitted according to OAR 333-061-0050(10). Sampling shall include a sample taken from a sink serving potable water from the tasting room.

- Nitrate, arsenic, and coliform bacteria sample results (enclosed) that were sampled January 15, 2025 from the well prior to any storage tanks and treatment were previously submitted and were all non-detect.

- Note that additional sampling may be required by the Oregon Dept. of Agriculture, depending upon their licensing requirements.

Please refer to our construction standards for wells and tanks available on our website at the links below:

OAR 333-061-0050(2) – Wells:
https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/PLANREVIEW/Documents/OAR-333-061-0050.pdf#page=3

OAR 333-061-0050(6) – Storage Tanks:
https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/PLANREVIEW/Documents/OAR-333-061-0050.pdf#page20

OAR 333-061-0050(10) – Disinfection of New Facilities:
https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/PLANREVIEW/Documents/OAR-333-061-0050.pdf#page25

As provided under OAR 333-061-0055 (end of page 26), Drinking Water Services may grant waivers from construction standards under some conditions (e.g., the absence of an internal tank ladder, silt stop, etc.).

The construction standards waiver application form is available as a fillable MS Word or a PDF document on our plan review page at:
https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/PLANREVIEW/Pages/index.aspx#construction

To close out this project and request final approval, please fill out the Project Final Approval request form and email it me at evan.e.hofeld@oha.oregon.gov along with any supplemental documentation showing how the above conditions have been met (be sure to reference Plan Review #22-2026 and public water system (PWS) ID #95782).

**Until we receive verification that the conditions have been met and final approval has been issued, the drinking water facilities are not approved for use**.

If you have any questions, please feel free to email me at evan.e.hofeld@oha.oregon.gov or call me at 971-200-0288.

Sincerely,

Evan Hofeld, PE
Regional Engineer
Drinking Water Services

CC: Tiffany Austin, Austin Sparkling Winery: gandtsparkling@gmail.com
Kaleb Dark, The Grant Company: kaleb@thegrantcompanyinc.com
Leta Sterner, Taylor Lombardo Architects: leta@taylorlombardo.com
Sarah Schwab, Oregon Dept of Agriculture (ODA): Drinkingwater@oda.oregon.gov
Brian Hawkins, Oregon Dept. of Agriculture: Brian.HAWKINS@oda.oregon.gov
Melissa Wong, Yamhill County Public Health: wongm@yamhillcounty.gov
Tommy Laird, OWRD WCP Inspection Coord.: Tommy.k.laird@water.oregon.gov
Kris Byrd, OWRD WCP Section Manager: kristopher.r.byrd@water.oregon.gov
Joel Plahn, Oregon Water Resources Dept.: Joel.M.PLAHN@water.oregon.gov
Tom Pattee, Oregon Health Authority – DWS: Tom.PATTEE@oha.oregon.gov

Enclosure(s):

- Well evaluation results
- Water system description

## Well Evaluation Results (YAMH59595)

An evaluation for the well (YAMH59595) completed on March 4, 2026 by OHA-DWS geologist, Tom Pattee, showed that the well was adequately constructed into a confined aquifer having a low susceptibility to contamination from nearby land use practices. Further details regarding this evaluation are shown below.

**As Built Well Construction Evaluation for Plan Review and/or Setback Waiver:**

☒ Well/Spring meets current construction standards.
☐ WRD special construction standards, see well log or Comments.
☐ Well/Spring construction does not meet construction standards.
☐ Not sealed to appropriate depth. Recommended depth: _____
☐ Not appropriate seal materials
☐ Open to more than one aquifer
☐ Seal info missing or unknown
☐ Seal not constructed properly (☐ Insufficient sealant volume ☐ Insufficient annular space)
☐ Susceptible construction, but grandfathered source. Consider for reconstruction if nitrate ≥ 5mg/L or confirmed *E. coli* at source.
☐ Susceptible well construction, **not approved for use**.

Comments: This well was drilled to a depth of 701 ft. The casing extends to a depth of 497 ft. The casing seal is a split seal with the upper portion of the casing sealed to a depth of 218 ft. A lower seal was placed around the casing between 475 and 497 ft below ground. The lower casing is completed 45 ft into a 53 ft thick layer of basalt and claystone. A narrow diameter liner extends below the bottom of the casing to the bottom of the hole. The liner contains screens from 501 to 521 ft and 681 to 701 ft below ground. Water can enter the well below the casing and then through the liner perforations. Sensitivity Analysis results suggest that well construction is not sensitive to nearby land use practices.

**Nature of Aquifer Evaluation:**

Aquifer Nature: ☒ Confined aquifer ☐ Semi-confined aquifer ☐ Unconfined aquifer
Comments: This well draws water from a deep confined sedimentary bedrock aquifer. The first water-bearing zone below the casing seal is reported to occur at a depth of 505 ft and is overlain by 53 ft of unfractured sedimentary bedrock and basalt of low permeability that acts as a confining layer. Water in the aquifer is under pressure, rising 173 ft above the top of the reported water-bearing zone to a static water-level depth of 332 ft below ground. Sensitivity Analysis results suggest that the aquifer is not sensitive to nearby land use practices.

Reviewed by: Tom Pattee, R. G. Date: 03/04/2026

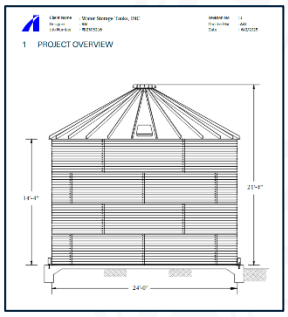
## Water System Description

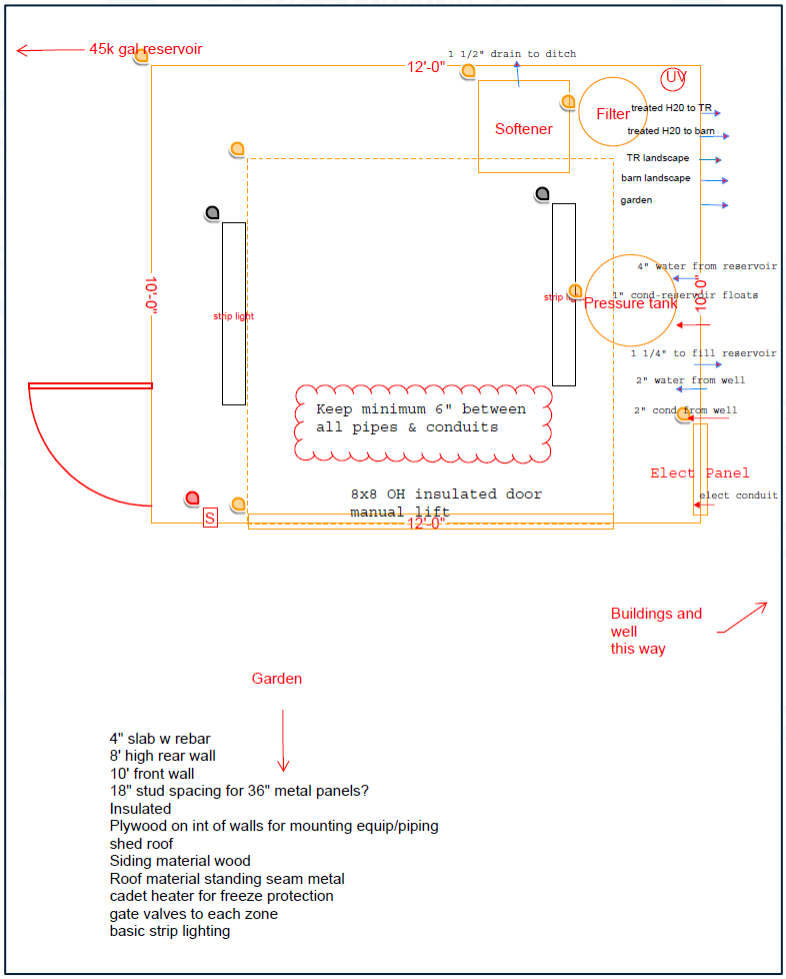
The water system serves a winery and tasting room located at 11050 NE Worden Hill Rd, Dundee, OR 97115. The system is classified as a transient non-community (TNC) system licensed by the Oregon Dept. of Agriculture based on an average daily population of 25 users or more. The well was found to be adequately constructed into a confined aquifer by our geologist, Tom Patte (see enclosed well evaluation results).

https://rocowinery.com/tasting-room/


The water system consists of:

- A single well drilled 10/23/24 (SRC-AA - Well #1 - YAMH59595 (L153823)
- One 46,000-Gallon Corrugated Steel “Fire Tank” (CorGal Model# 2105-WT-CHR)
- One [redacted]-Gallon NSF-61 Pressure Tank (FlexCon P2Pro Model #FL2[redacted])
- Secondary treatment consisting of:
  - One NSF-44 certified water softener (Water-Right Impression Plus Model #[redacted]) w/NSF-60 SureSoft® salt.
  - One Luminor® NSF-55 Class A UV Unit (18-GPM Blackcomb-HO Model #LBH6-40XA) – not approved for 4.0-log viral disinfection.
  - One NSF-42 certified cartridge filter (DGD Series Model #[redacted])
- NSF-372 certified horizontal multi-stage pump (MH Series Model #[redacted])





Cartridge Filter ←
UV Unit ↓
Water Softener
Salt Tank
Pressure Tank
Treated Water to Tasting Room (hidden by salt tank) →
Treated Water to Barn →
To Tasting Room Landscape →
To Barn Landscape →
To Garden (hidden by pressure tank) →
Pressure Tank →
4" Waterline from 26,000-GAL Tank →
1" Elec. Conduit (floats for tank) →
1-1/4" Waterline to 26,000-GAL Tank →
2" Waterline from Well →
2" Elec. Conduit from Well →

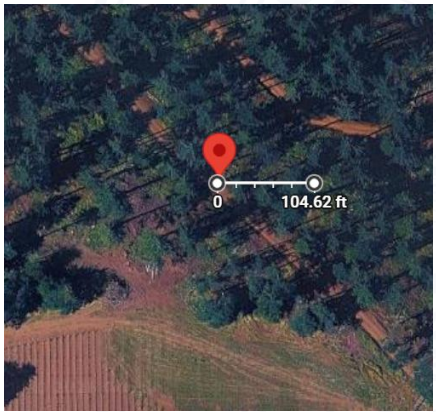
**SRC-AA - 2024 Well #1 - YAMH59595 (L153823)**

Link to WRD Well Map:
https://apps.wrd.state.or.us/apps/gw/well_log/wl_details.aspx?wl_id=614596

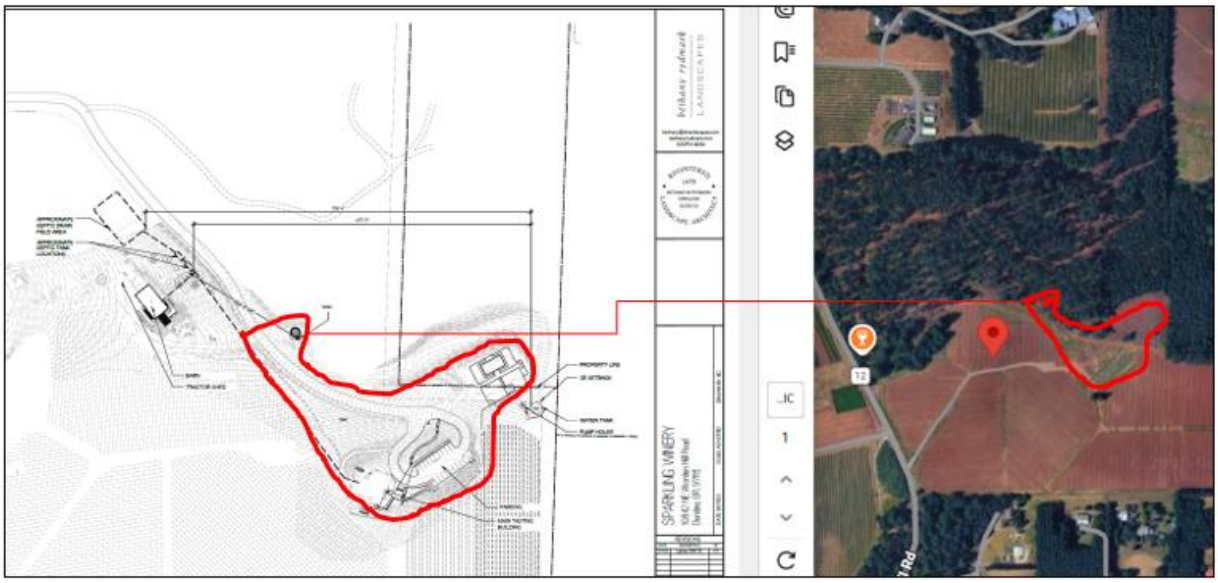
Google Maps to address:
11050 NE Worden Hill Rd, Dundee, OR 97115
https://maps.app.goo.gl/fnFSrJc7H6xe3cad9

Google Maps to well GPS Coordinates: 45.298544, -123.06378
https://maps.app.goo.gl/WwEYj6FjGFYPVPgA8

**LOCATION OF WELL**
Latitude: 45.29854400 Datum: WGS84
Longitude: -123.06378000
Township/Range/Section/Quarter-Quarter Section:
WM3.00S3.00W21SENW
Address of Well:
NYA WORDEN HILL RD NEWBERG, OR 97132

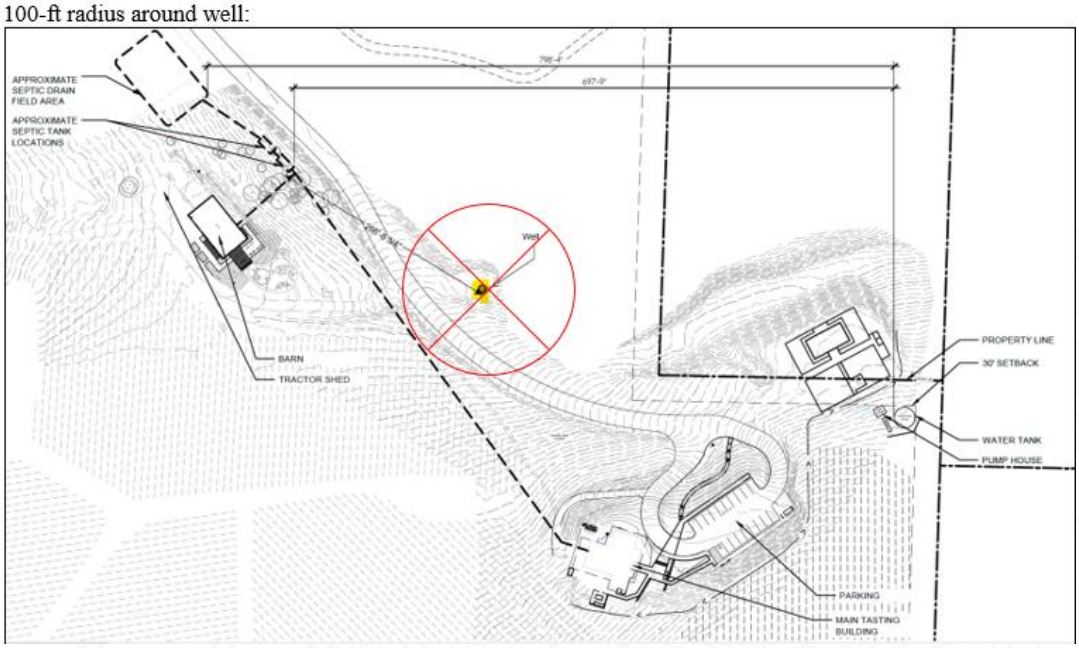




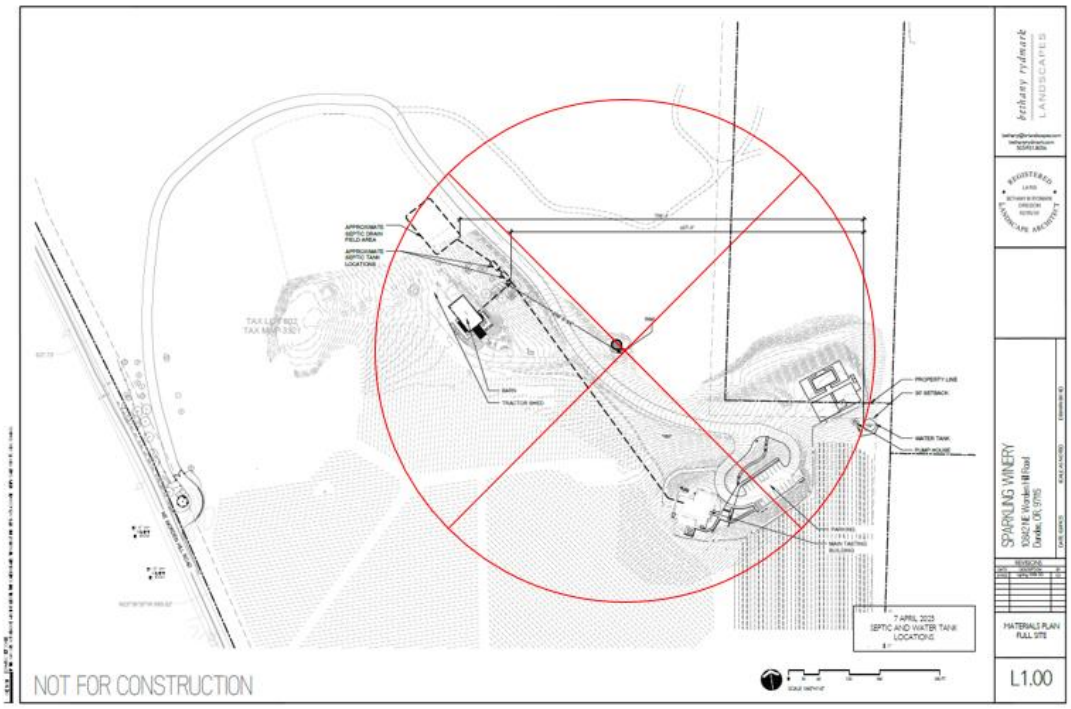


Approximate 100- and 500-ft radii around the well:

100-ft radius around well:




500-ft radius



## Well Log

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.545 & 537.765 and OAR 690-205-0210)

YAMH 59595
10/24/2024

WELL I.D. LABEL# L 153823
START CARD # 1075572
ORIGINAL LOG #

**(1) LAND OWNER** Owner Well I.D. 24-34
First Name GRANT & TIFFANY Last Name AUSTIN
Company
Address 3113 E. CRESTVIEW DR.
City NEWBERG, State OR Zip 97132

**(2) TYPE OF WORK** [X] New Well [ ] Deepening [ ] Conversion [ ] Alteration (complete 2a & 10) [ ] Abandonment(complete 5a)

**(2a) PRE-ALTERATION**

| | Dia | + | From | To | Gauge | Stl | Plstc | Wld | Thrd |
|---|---|---|---|---|---|---|---|---|---|
| Casing: | | | | | | | | | |

| | Material | From | To | Amt | sacks/lbs |
|---|---|---|---|---|---|
| Seal: | | | | | |

**(3) DRILL METHOD**
[X] Rotary Air [ ] Rotary Mud [ ] Cable [ ] Auger [ ] Cable Mud
[ ] Reverse Rotary [ ] Other

**(4) PROPOSED USE** [X] Domestic [ ] Irrigation [ ] Community
[X] Industrial/ Commericial [ ] Livestock [ ] Dewatering
[ ] Thermal [ ] Injection [X] Other WINE TASTING ROOM

**(5) BORE HOLE CONSTRUCTION** Special Standard [ ] (Attach copy)
Depth of Completed Well 701.00 ft.

BORE HOLE

| Dia | From | To |
|---|---|---|
| 10 | 0 | 218 |
| 8 | 218 | 497 |
| 6 | 497 | 701 |

SEAL

| Material | From | To | Amt | sacks/lbs |
|---|---|---|---|---|
| Bentonite Chips | 0 | 80 | 41 | S |
| | | Calculated | 36.51 | |
| Cement with 2% Bento | 80 | 218 | 70 | S |
| | | Calculated | 31.93 | |

Seal placement method: [ ] A [ ] B [X] C [ ] D [ ] E [X] Other: BENT POURED-PROBE
Backfill placed from ft. to ft. Material
Filter pack from ft. to ft. Material Size
Explosives used: [ ] Type Amount
Seal Placement Begin Date 10/22/2024 Begin Time 12 00

**(5a) ABANDONMENT USING UNHYDRATED BENTONITE**
Proposed Amount Actual Amount

**(6) CASING/LINER**

| C/L | Dia | + | From | To | Gauge | Mat. Type | Wld | Thrd | Shoe | Shoe Location |
|---|---|---|---|---|---|---|---|---|---|---|
| C | 6 | X | 2 | 497 | 0.250 | ST | X | | DN. | 497 |
| L | 4.5 | | 401 | 701 | Sch40 | PL | | X | | |

Temp casing [X] Yes Dia 10 From+ [ ] 0 To 7

**(7) PERFORATIONS/SCREENS**
Perforations Method
Screens Type slotted Material PVC

| Perf/ Screen | Casing/ Liner | Screen Dia | From | To | Scrn/slot width | Slot length | # of slots | Tele/ Pipe size |
|---|---|---|---|---|---|---|---|---|
| Screen | Liner | 4.5 | 501 | 521 | .032 | | | Pipe Size |
| Screen | Liner | 4.5 | 681 | 701 | .032 | | | Pipe Size |

**(8) WELL TESTS: Minimum testing time is 1 hour**

| Type of Test | Yield (gal/min) | Drawdown | Drill Stem/ Pump Depth | Duration (hr) |
|---|---|---|---|---|
| Air | 16 | | 700 | 3 |

Temperature 54 °F Lab analysis [ ] Yes By
Water quality concerns? [X] Yes (describe below) TDS amount 281 ppm

| From | To | Description | Amount | Units |
|---|---|---|---|---|
| 438 | 452 | mineralized orange water | | |

**(9) LOCATION OF WELL (legal description)**
County YAMHILL Twp 3.00 S N/S Range 3.00 W E/W WM
Sec 21 SE 1/4 of the NW 1/4 Tax Lot 602
Tax Map Number Lot
Lat ° ' " or 45.29854400 DMS or DD
Long ° ' " or -123.06378000 DMS or DD
(•) Nearest address ( ) Street address of well
NYA WORDEN HILL RD NEWBERG, OR 97132

**(10) STATIC WATER LEVEL**

| | Date | SWL(psi) | + | SWL(ft) |
|---|---|---|---|---|
| Existing Well / Pre-Alteration | | | | |
| Completed Well | 10/23/2024 | | | 322 |

Flowing Artesian? [ ] Dry Hole? [ ]

WATER BEARING ZONES Depth water was first found 438.00

| SWL Date | From | To | Est Flow | SWL(psi) | + | SWL(ft) |
|---|---|---|---|---|---|---|
| 10/17/2024 | 438 | 452 | 22 | | | 261 |
| 10/22/2024 | 505 | 528 | 13 | | | 322 |
| 10/23/2024 | 648 | 651 | 3 | | | 322 |

**(11) WELL LOG** Ground Elevation

| Material | From | To |
|---|---|---|
| gravel fill | 0 | 2 |
| clay red/brwn | 2 | 12 |
| clay brwn w/decomp rock | 12 | 15 |
| rock soft brwn decomp | 15 | 58 |
| basalt gray med fract/bkn | 58 | 94 |
| basalt gray med very fract w/clay seams | 94 | 102 |
| basalt gray med vesic/fract | 102 | 109 |
| basalt gray bkn loose | 109 | 118 |
| basalt gray med-hrd fract | 118 | 125 |
| basalt gray/brwn bkn wthd | 125 | 156 |
| clay tan & gray firm | 156 | 172 |
| basalt decomp brwn wthd occ vesic | 172 | 194 |
| basalt gray fract/bkn | 194 | 200 |
| basalt gray very bkn caving | 200 | 220 |
| basalt gray bkn loose | 220 | 260 |
| basalt gray bkn loose | 260 | 288 |
| basalt gray bkn/fract loose | 288 | 328 |
| basalt gray fract vesic | 328 | 338 |
| basalt decomp tan/brwn vesic | 338 | 342 |

Construction
Begin Date 10/10/2024 Begin Time 09 00 End Date 10/23/2024

**(unbonded) Water Well Constructor Certification**
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.
License Number Date
Signed

**(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 construction standards. This report is true to the best of my knowledge and belief.
License Number 1483 Date 10/24/2024
Signed JOHN STADELI (E-filed)
Drilling Company: Arrow Drilling 503-538-4422

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK Form Version:
New exempt use wells must be submitted with a map and recording fee.

## Well Log (continued)



**WATER SUPPLY WELL REPORT - continuation page**

YAMH 59595

10/24/2024

WELL I.D. LABEL# L 153823
START CARD # 1075572
ORIGINAL LOG #

### (2a) PRE-ALTERATION

| Dia | + | From | To | Gauge | Stl | Plstc | Wld | Thrd |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| Material | From | To | Amt | sacks/lbs |
|---|---|---|---|---|
| | | | | |

### Water Quality Concerns

| From | To | Description | Amount | Units |
|---|---|---|---|---|
| | | | | |

### (5) BORE HOLE CONSTRUCTION

| BORE HOLE Dia | From | To | SEAL Material | From | To | Amt | sacks/lbs |
|---|---|---|---|---|---|---|---|
| | | | Cement | 475 | 497 | 5 | S |
| | | | | | Calculated | 2.22 | |
| | | | | | Calculated | | |
| | | | | | Calculated | | |
| | | | | | Calculated | | |

FILTER PACK

| From | To | Material | Size |
|---|---|---|---|
| | | | |

### (10) STATIC WATER LEVEL

| SWL Date | From | To | Est Flow | SWL(psi) | + | SWL(ft) |
|---|---|---|---|---|---|---|
| | | | | | | |

### (6) CASING/LINER

| C/L | Dia | + | From | To | Gauge | Mat. Type | Wld | Thrd | Shoe | Shoe Location |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |

### (11) WELL LOG

| Material | From | To |
|---|---|---|
| basalt decomp brwn w/clay | 342 | 348 |
| basalt decomp wthd brwn/gray | 348 | 350 |
| basalt gray fract wthd | 350 | 353 |
| basalt gray hrd fract | 353 | 356 |
| basalt gray hrd occ fract | 356 | 378 |
| basalt gray/brwn fract/blkn | 378 | 410 |
| basalt gray very blkn | 410 | 438 |
| basalt gray/brwn vesic | 438 | 452 |
| basalt gray hrd occ fract | 452 | 471 |
| claystone gray firm | 471 | 497 |
| siltstone/sandstone gray med-hrd | 497 | 505 |
| sandstone gray firm | 505 | 528 |
| siltstone gray firm | 528 | 539 |
| sandstone/siltstone gray firm | 539 | 550 |
| siltstone gray firm | 550 | 558 |
| sandstone fine light gray firm | 558 | 571 |
| sandstone gray firm | 571 | 576 |
| claystone/siltstone gray firm | 576 | 615 |
| sandstone gray firm | 615 | 630 |
| sandstone light gray coarse firm | 630 | 648 |
| sandstone gray/blk soft | 648 | 651 |
| sandstone gray fine firm | 651 | 701 |

### (7) PERFORATIONS/SCREENS

| Perf/ Screen | Casing/ Liner | Screen Dia | From | To | Scrn/slot width | Slot length | # of slots | Tele/ Pipe size |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

Name of person(s) who assisted with construction and Trainee License # / Helper #

| Assistant Name | Type | # |
|---|---|---|
| CHASE COUCH | HELPER WATER | 8888970 |

### (8) WELL TESTS: Minimum testing time is 1 hour

| Type of Test | Yield (gal/min) | Drawdown | Drill Stem/ Pump Depth | Duration (hr) |
|---|---|---|---|---|
| | | | | |

### Comments/Remarks

Bottom seal from 475 to 497 placed method b on 10-18-2024. Drilled out and shoe milled out to 6.1" diameter on 10-21-2024. Top seal placed on 10-22-2024. 5" x 4.5" PVC reducer top of liner.

## Well Log (continued)



WATER SUPPLY WELL REPORT - Map with location identified must be attached and shall include an approximate scale and north arrow

**YAMH 59595**

**10/24/2024**

Map of Hole

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: 45.29854400 Datum: WGS84
Longitude: -123.06378000
Township/Range/Section/Quarter-Quarter Section:
WM3.00S3.00W21SENW
Address of Well:
NYA WORDEN HILL RD NEWBERG, OR 97132

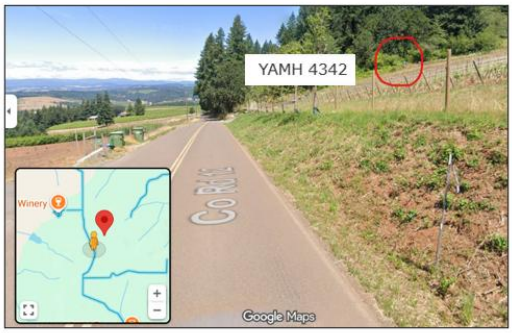
**Well Label: 153823**

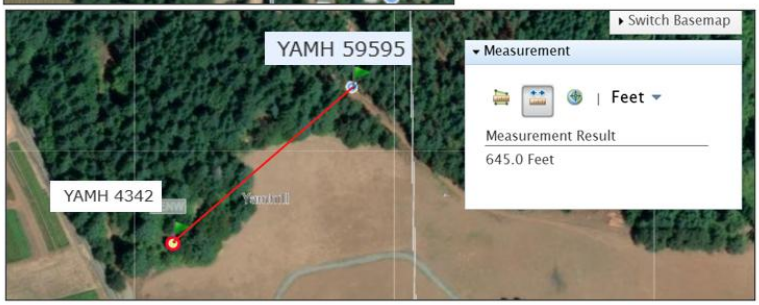
**Printed: October 24, 2024**

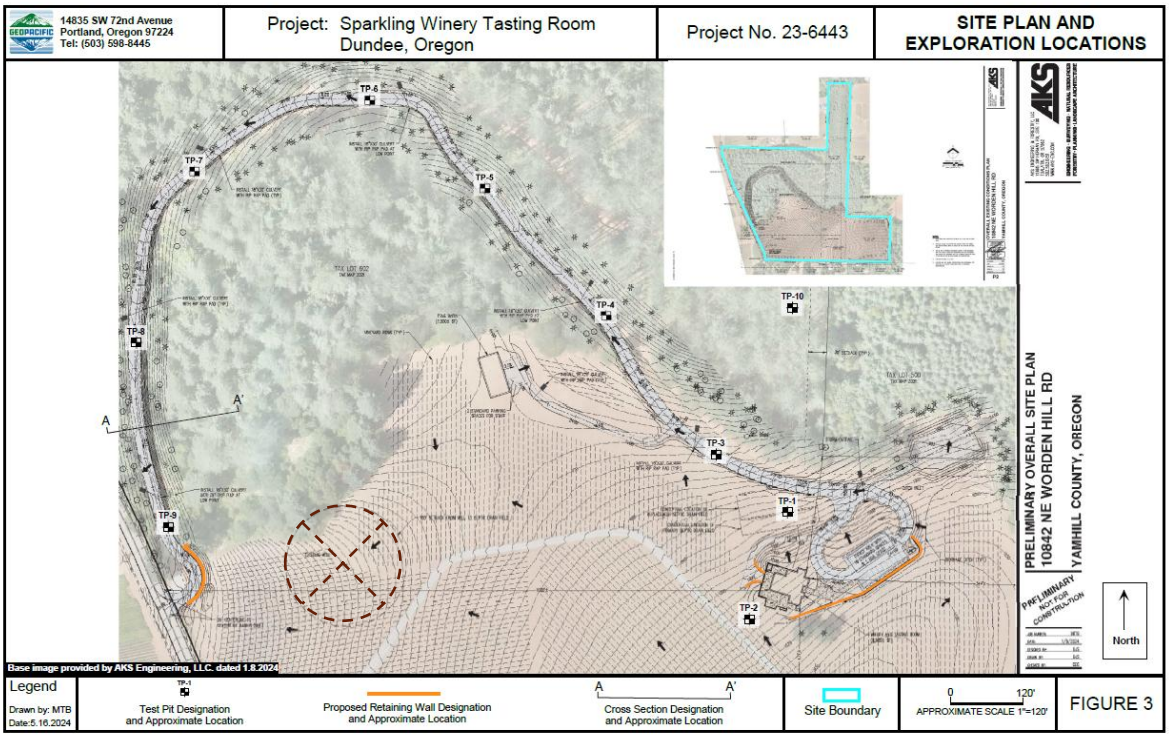
DISCLAIMER: This map is intended to represent the approximate location the well. It is not intended to be construed as survey accurate in any manner.

Provided by well constructor

**Existing 1977 well YAMH4342 (irrigation well only – not approved for drinking water) link to WRD Map:**
https://apps.wrd.state.or.us/apps/gw/well_log/wl_details.aspx?wl_id=284784

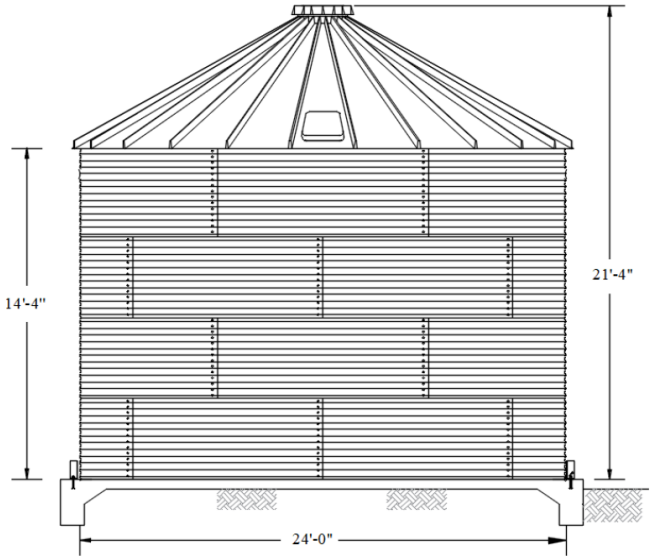



## 46,000-Gallon Corrugated Steel Tank (CorGal Model# 2105-WT-CHR)

Client Name : Water Storage Tanks, INC
Designer : RAL
Job Number : #B2505216

Revision No : 1
Checked By : AAL
Date : 6/2/2025

1 PROJECT OVERVIEW




CORGAL WATER TANKS

**WATER STORAGE TANKS, INC.**
**1-800-463-1898**
**www.corgaltanks.com**

**DOTec Corp.**
Customized Engineering Solutions

STRUCTURAL CALCULATIONS
OF
PROPOSED WATER TANK ~ 24' DIA ; 14'4" EV HEIGHT AND 21'4" OVERALL HEIGHT,

| | |
|---|---|
| PROJECT NO.: | #B2505216 |
| CLIENT: | Water Storage Tanks, INC |
| BILING ADDRESS: | |
| ADDRESS: | |
| CITY: | |
| STATE: | |
| ZIP: | |
| COUNTRY: | |
| CLIENT CONTACT INFO | |
| CONTACT: | Justin Franklin |
| TEL: | 737-242-2421 |
| FAX: | |
| MOBILE: | |
| E-MAIL: | justin@waterstoragetanksinc.com |
| SITE ADDRESS: | |
| ADDRESS: | Dundee |
| CITY: | Yamhill |
| STATE: | Oregon |
| ZIP: | 97115 |
| CONFIRM ZIP: | 97115 |
| COUNTRY: | USA |

SEAL: REGISTERED PROFESSIONAL ENGINEER 85747PE OREGON AUGUST 19, 2015 A. DEFONSO GONZALEZ

06-02-2025

REVISION HISTORY

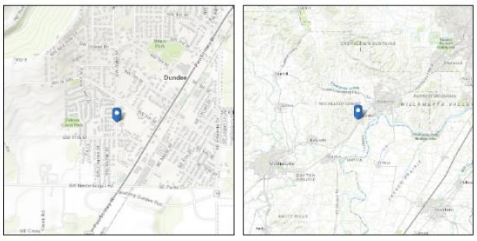
| # | DATE | DESCRIPTION | PREPARED BY | CHECKED BY |
|---|---|---|---|---|
| 01 | 6/2/2025 | First Submittal | RAL | AAL |
| 02 | | | | |
| 03 | | | | |

Acceptance and use of this report by any party constitutes a contractual agreement that the Engineers' total liability arising out of or in any way related to this analysis and report shall not exceed the total sum paid to the Engineer for the services provided. Liability does not exist beyond the analysis contained in this report.


424 Jefferson St., St. Charles, MO 63301. Phone: (636) 724-9872

ASCE Hazards Report

**Address:** 97115 Dundee, Oregon
**Standard:** ASCE/SEI 7-16
**Risk Category:** IV
**Soil Class:** D - Default (see Section 11.4.3)
**Latitude:** 45.276373
**Longitude:** -123.01686
**Elevation:** 207.50120281457896 ft (NAVD 88)




**Wind**

**Results:**

| | |
|---|---|
| Wind Speed | 107 Vmph |
| 10-year MRI | 66 Vmph |
| 25-year MRI | 72 Vmph |
| 50-year MRI | 76 Vmph |
| 100-year MRI | 82 Vmph |

Data Source: ASCE/SEI 7-16, Fig. 26.5-1D and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Wed May 28 2025

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 1.6% probability of exceedance in 50 years (annual exceedance probability = 0.00033, MRI = 3,000 years).

Site is not in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2.



ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS

**Seismic**

**Site Soil Class:** D - Default (see Section 11.4.3)
**Results:**

| | | | |
|---|---|---|---|
| $S_S$ : | 0.862 | $S_{D1}$ : | N/A |
| $S_1$ : | 0.421 | $T_L$ : | 16 |
| $F_a$ : | 1.2 | PGA : | 0.399 |
| $F_v$ : | N/A | $PGA_M$ : | 0.479 |
| $S_{MS}$ : | 1.034 | $F_{PGA}$ : | 1.201 |
| $S_{M1}$ : | N/A | $I_e$ : | 1.5 |
| $S_{DS}$ : | 0.689 | $C_v$ : | 1.231 |

Ground motion hazard analysis may be required. See ASCE/SEI 7-16 Section 11.4.8.
**Data Accessed:** Wed May 28 2025
**Date Source:** USGS Seismic Design Maps

**E. DESIGN CRITERIA - SEISMIC LOADING**

Seismic Design Information Input ASCE 7-16 Section 15.7 and AWWA D103-19 Section 14

| | | | |
|---|---|---|---|
| * | Location: | Dundee , Oregon | |
| * | Zip Code: | 97115 | |
| * | Risk Category: | IV | |
| * | Seismic Use Group: | 4 | Section 14.1 Table 2 page 46 AWWA D103-19 |
| * | Site Class: | D | Section 11.4.2 Page 65 |
| * | $I_E := 1.5$ | | |
| * | $S_S := 0.862$ | | For 5% Damped at 0.2 sec Period |
| * | $S_1 := 0.421$ | | For 5% Damped at 1.0 sec Period |
| * | $F_a := 1.2$ | | Table 11.4-1 |
| * | $F_v := 1.8$ | | Table 11.4-2 |
| * | $S_{MS} := F_a \cdot S_S = 1.034$ | | |
| * | $S_{M1} := F_v \cdot S_1 = 0.758$ | | |
| * | $S_{DS} := \left(\frac{2}{3}\right) \cdot S_{MS} = 0.69$ | | EQ 11.4-1 |
| * | $S_{D1} := \left(\frac{2}{3}\right) \cdot S_{M1} = 0.505$ | | EQ 11.4-2 |
| * | SDC: C | | Section 11.6 |

Tank Design Information Input

| | | |
|---|---|---|
| * | Tank Diameter, | $Di := D = 24\ ft$ |
| * | Tank Shell Height, | $Ht := TEH = 14.33\ ft$ |
| * | Freeboard, | $FB := 0.5\ ft$ |
| | Maximum Liquid height, | $H_L := Ht - FB = 13.83\ ft$ |

| | | |
|---|---|---|
| * | Fluid Density, | $\gamma := 62.4\ pcf$ |
| * | Volume of Tank, | $V := \frac{\pi \cdot D^2}{4} \cdot TEH = 48494.257\ gal$ |
| | Total weight of Tank Contents, | $W_T := \gamma \cdot V = 404.523\ kip$ |

Sloshing/Freeboard Design 14.3.4.4 AWWA D103-19

$T_c = 2.864\ s$ * $Seismic\_Risk\_Category := 4$

As per EQ 14-46, 14-47, 14-48, 14-49

$A_f = 0.265\ \frac{1}{s}$

Height of Sloshing Wave $\delta_{S2} := 0.42 \cdot Di \cdot A_f \cdot s = 2.667\ ft$ EQ 14-45

* Minimum Free Board Required $FB_{min} := 0.42 \cdot Di \cdot A_f \cdot s = 2.667\ ft$ Table 6 on pg 65

Anchor Bolt Design Based on Seismic Loads

| | | | |
|---|---|---|---|
| * | Anchor Bolt Diameter | $d_{anc} := da = 0.75\ in$ | Minimum Diameter per Section 5.9.4 |
| | Tank Circumference, | $C := \pi \cdot Di = 75.398\ ft$ | |
| * | Number of Anchor Bolts | $N := Na = 16$ | Enter number of bolts used |

GENERAL NOTES

CODES

| | |
|---|---|
| INTERNATIONAL BUILDING CODES | 2022 |
| ASCE 7 | 2016 |
| HOT ROLLED SECTION | AISC 15TH (360-16): ASD |
| CONCRETE | ACI 318-99 |

GENERAL DESIGN CRITERIA

| | |
|---|---|
| OCCUPANCY RISK FACTOR | IV |

DESIGN LOADS

ROOF LOADS

| | |
|---|---|
| DEAD LOADS | OWT. OF THE TANK |
| LIVE LOAD | 20 PSF |
| GROUND SNOW LOAD : (Internal Area) | 75 PSF |

WIND DESIGN DATA

| | |
|---|---|
| WIND SPEED : (Internal Area) | 107 MPH , EXP. C |

EARTHQUAKE DESIGN DATA

SEISMIC FORCE RESISTING SYSTEM :

STEEL INTERMEDIATE MOMENT FRAME : R = 3.0

IEQ = 1.5 ; Ss = 0.862 g ; S1 = 0.421 g

Site Class is D

SDS = 0.689 ; SD1 = 0.565; SDC "C"

DESIGN BASE SHEAR:

Cs = 0.45

1 S.0 SITE MAP N.T.S

Dundee, Yamhill, Oregon, 97115

CORGAL WATER TANKS

**WATER STORAGE TANKS, INC.**
**1-800-463-1898**
**www.corgaltanks.com**

Dr. Al Gonzalez P.E.
DOTec Engineering
118N 2nd St,
St. Charles, MO 63301
Ph 636-218-7264
Fx 573-639-3334
WWW.DOTECENGINEERING.COM
ALG@DOTECENGINEERING.COM

REGISTERED PROFESSIONAL ENGINEER 85747PE OREGON AUGUST 19, 2011 ALDEFONSO GONZALEZ

PROFESSIONAL SEAL

05-30-2025

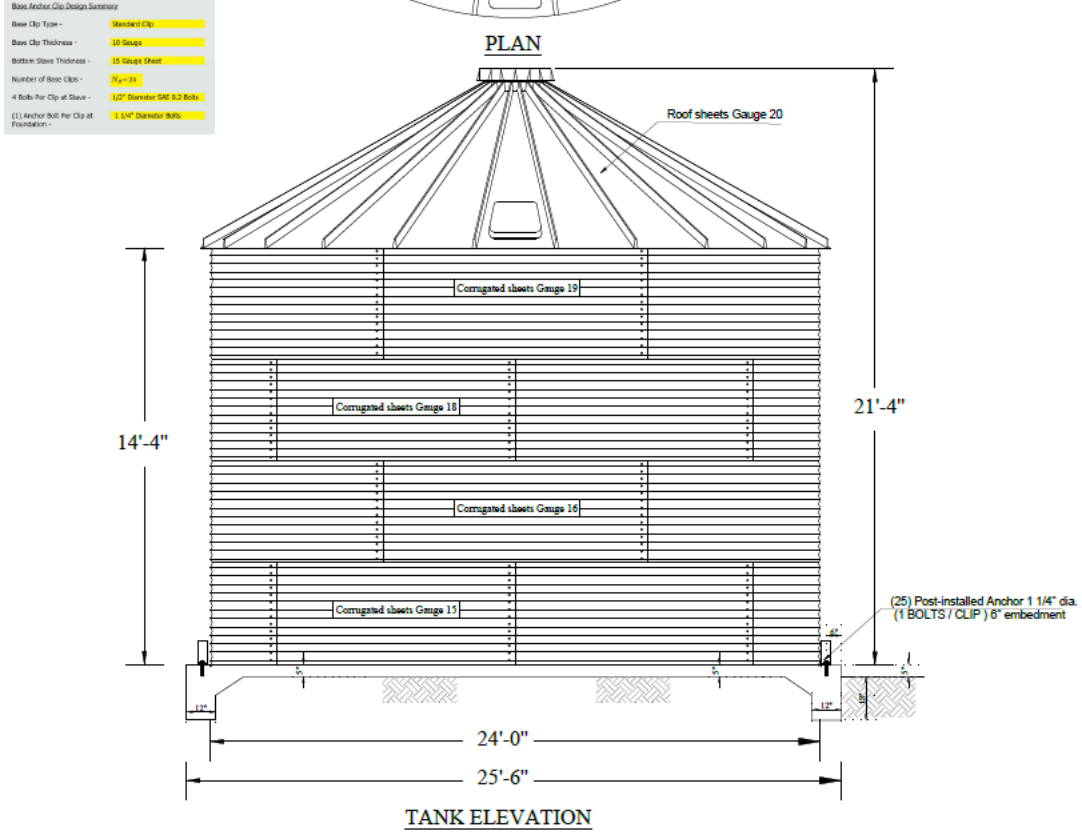
SHEET INDEX

| SHEET | DESCRIPTION |
|---|---|
| G0.0 | COVER PAGE |
| S1 | TANK FOUNDATION |
| S2 | ANCHOR DETAILS |

G0.0 COVER

CLIENT: WATER STORAGE TANKS, INC.
ADDRESS: Dundee, Yamhill, Oregon, 97115

Dr. Al Gonzalez P.E.
DOTec Engineering
118N 2nd St,
St. Charles, MO 63301
Ph 636-218-7264
Fx 573-639-3334




| | | BY | DATE |
|---|---|---|---|
| CORGAL WATER TANKS | DWN | IU | 2/18/2013 |
| WATER STORAGE TANKS, INC. 1-800-463-1898 www.corgaltanks.com | CKD | JH | 2/18/2013 |
| | ENG | JH | 2/18/2013 |

TITLE: MODEL2105-WT-CHR
CORGAL STEELWATER STORAGE TANK
NOMINAL CAPACITY - 46,000 GALLONS (U.S)

DWG. NO. 2404-WT-CHR | REV. NO. B

SIZE A | SCALE 1/8"=1'-0" | SHEET 1 OF 1

PROJECT NAME: OVS - Austin Sparkling Fire Tank

**TANK SPECIFICATION DATA**

| | |
|---|---|
| TANK MODEL NUMBER: | 2404 WT-CHR |
| TANK DIAMETER: | 24' |
| TANK EAVE HEIGHT: | 14'-4" |
| TANK OVERALL HEIGHT: | 21'-4" |
| ROOF STYLE: | CHR |
| ROOF SLOPE: | 30 Degree |
| ROOF OUTSIDE DIAMETER | NA |
| IS TANK TO BE INSTALLED AT GROUND LEVEL | Yes |
| TANK CONTENTS | Water |
| CONTENTS TEMPERATURE RANGE | Ambient |
| SITE COORDINATES | Lat: 45.2978222 Long: -123.0661131 |
| SOIL SITE CLASS | See Geotech Report |
| SEISMIC S(1) | .39 S(S) .96 |

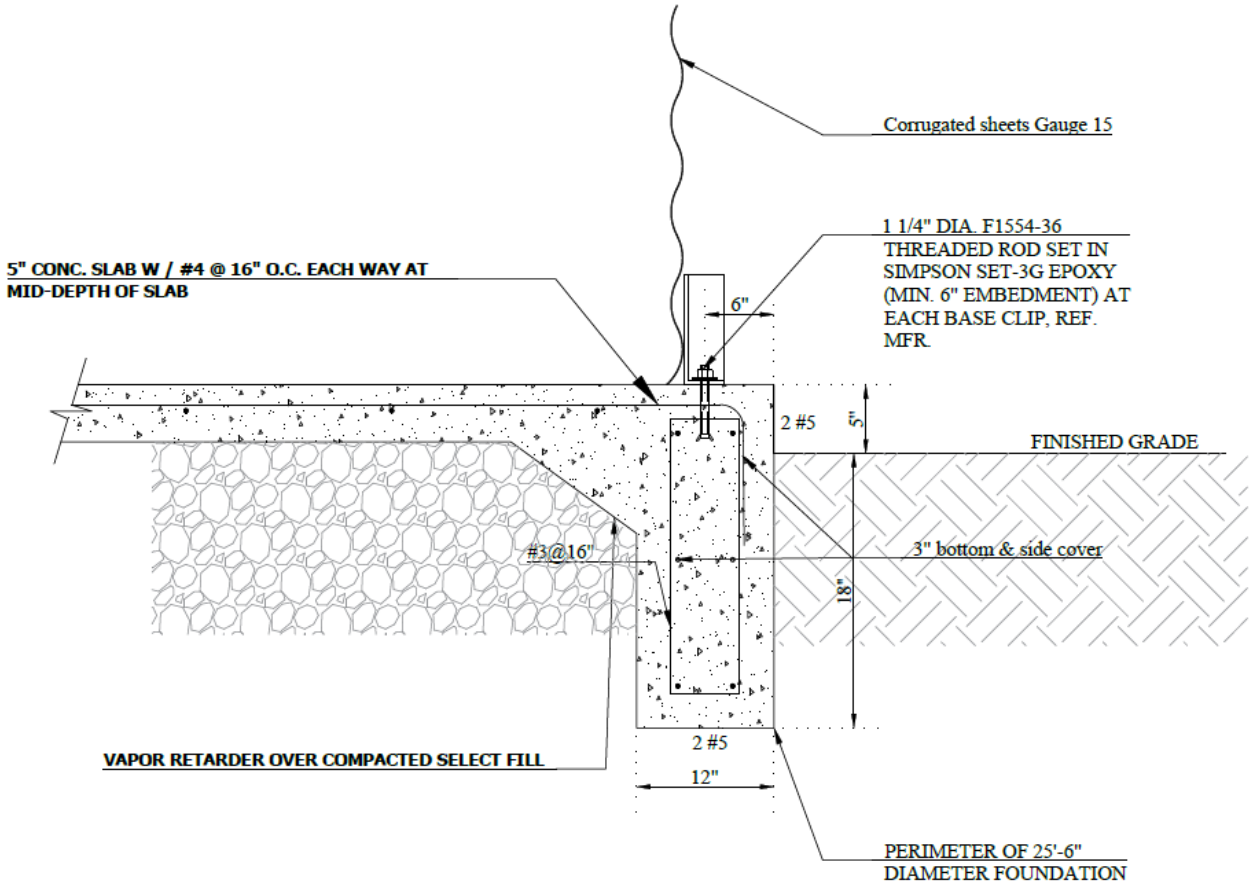
**PROJECT SITE DATA**

| | |
|---|---|
| DESIGN TO WHAT NATIONAL BUILDING CODE: | NFPA-22 |
| CITY: | Dundee |
| COUNTY OR PARISH: | Yamhill |
| STATE OR PROVINCE: | OR |
| COUNTRY: | USA |
| ZIP OR POSTAL CODE: | 97115 |
| RISK CATEGORY (select one): | I ○ II ○ III ○ IV ◉ |
| ULTIMATE WIND SPEED | 107 Vmph |
| WIND EXPOSURE CLASS | C |
| GROUND SNOW LOAD | 75 lb/ft2 |
| IS SNOW LOAD REDUCIBLE | Y ○ N ◉ |
| DESIGN TO NFPA-22 | Y ◉ N ○ |

ANY BELOW GROUND OR ABOVE GROUND ISSUES:
Seismic Design Category - D

**Base Anchor Clip Design Summary**

| | |
|---|---|
| Base Clip Type - | Standard Clip |
| Base Clip Thickness - | 10 Gauge |
| Bottom Stave Thickness - | 15 Gauge Sheet |
| Number of Base Clips - | $N_B = 25$ |
| 4 Bolts Per Clip at Stave - | 1/2" Diameter SAE 8.2 Bolts |
| (1) Anchor Bolt Per Clip at Foundation - | 1 1/4" Diameter Bolts |



## Geotechnical Report for Other Structures - Not for Tank

(The GeoPacific report uses Site Class C and the tank design uses Site Class D)



Typically, no permanent slopes steeper than 2H:1V are allowed. However, since the proposed cuts for the roadway will not affect adjacent properties or structures, and since there are not existing structures within the influence zone above the proposed cuts, permanent grades steeper than 2H:1V are being considered. It is our understanding that the main reason why steep, permanent cutslopes are being considered is to minimize the volume of soil to be exported from the site, minimize the expense of construction, and to preserve as much of the existing natural vegetation and cultivated plants as feasible.

### 8.0 SEISMIC DESIGN

The Oregon Department of Geology and Mineral Industries (DOGAMI), Oregon HazVu: 2023 Statewide GeoHazards Viewer indicates that the site is in an area where *severe* ground shaking is anticipated during an earthquake. Structures should be designed to resist earthquake loading in accordance with the methodology described in the 2021 International Building Code (IBC) with applicable Oregon Structural Specialty Code (OSSC) revisions (current 2022). We recommend Site Class C be used for design as defined in ASCE 7-16, Chapter 20, and Table 20.3-1. Design values determined for the site using the ATC Hazards by Location 2023 Seismic Design Maps Summary Report are summarized in Table 7 and are based upon observed existing soil conditions.

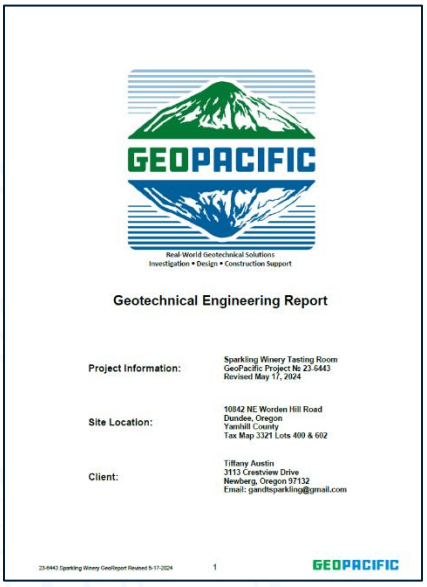
Table 7 - Recommended Earthquake Ground Motion Parameters (ASCE-7-16)

| Parameter | Value |
|---|---|
| Location (Lat, Long), degrees | 45.2934291, -123.0650582 |
| Probabilistic Ground Motion Values, 2% Probability of Exceedance in 50 yrs | |
| Site Modified Peak Ground Acceleration $PGA_M$ | 0.488 g |
| Short Period, $S_s$ | 0.876 g |
| 1.0 Sec Period, $S_1$ | 0.431 g |
| Soil Factors for Site Class C: | |
| $F_a$ | 1.2 |
| $F_v$ | 1.5 |
| $SD_s = 2/3 \times F_a \times S_s$ | 0.701 g |
| $SD_1 = 2/3 \times F_v \times S_1$ | 0.431 g |
| Seismic Design Category | D |

### 8.1 Soil Liquefaction

The Oregon Department of Geology and Mineral Industries (DOGAMI), Oregon HazVu: 2023 Statewide GeoHazards Viewer indicates that the site is not mapped as being at risk of soil liquefaction during an earthquake. Soil liquefaction is a phenomenon wherein saturated soil deposits temporarily lose strength and behave as a liquid in response to ground shaking caused by strong earthquakes. Soil liquefaction is generally limited to loose sands and granular soils located below the water table, and fine-grained soils with a plasticity index less than 15.





GEOPACIFIC
Real-World Geotechnical Solutions
Investigation • Design • Construction Support

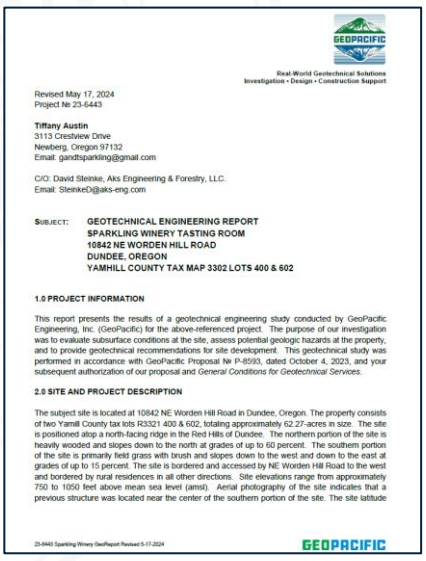
Geotechnical Engineering Report

Project Information: Sparkling Winery Tasting Room
GeoPacific Project № 23-6443
Revised May 17, 2024

Site Location: 10842 NE Worden Hill Road
Dundee, Oregon
Yamhill County
Tax Map 3321 Lots 400 & 602

Client: Tiffany Austin
3113 Crestview Drive
Newberg, Oregon 97132
Email: gandtsparkling@gmail.com





GEOPACIFIC
Real-World Geotechnical Solutions
Investigation • Design • Construction Support

Revised May 17, 2024
Project № 23-6443

Tiffany Austin
3113 Crestview Drive
Newberg, Oregon 97132
Email: gandtsparkling@gmail.com

C/O: David Steinke, Aks Engineering & Forestry, LLC.
Email: SteinkeD@aks-eng.com

SUBJECT: GEOTECHNICAL ENGINEERING REPORT
SPARKLING WINERY TASTING ROOM
10842 NE WORDEN HILL ROAD
DUNDEE, OREGON
YAMHILL COUNTY TAX MAP 3302 LOTS 400 & 602

1.0 PROJECT INFORMATION

This report presents the results of a geotechnical engineering study conducted by GeoPacific Engineering, Inc. (GeoPacific) for the above-referenced project. The purpose of our investigation was to evaluate subsurface conditions at the site, assess potential geologic hazards at the property, and to provide geotechnical recommendations for site development. This geotechnical study was performed in accordance with GeoPacific Proposal № P-8593, dated October 4, 2023, and your subsequent authorization of our proposal and *General Conditions for Geotechnical Services*.

2.0 SITE AND PROJECT DESCRIPTION

The subject site is located at 10842 NE Worden Hill Road in Dundee, Oregon. The property consists of two Yamill County tax lots R3321 400 & 602, totaling approximately 62.27-acres in size. The site is positioned atop a north-facing ridge in the Red Hills of Dundee. The northern portion of the site is heavily wooded and slopes down to the north at grades of up to 60 percent. The southern portion of the site is primarily field grass with brush and slopes down to the west and down to the east at grades of up to 15 percent. The site is bordered and accessed by NE Worden Hill Road to the west and bordered by rural residences in all other directions. Site elevations range from approximately 750 to 1050 feet above mean sea level (amsl). Aerial photography of the site indicates that a previous structure was located near the center of the southern portion of the site. The site latitude

## Luminor® NSF-55 Class A UV Unit (18-GPM Blackcomb-HO Model #LBH6-40XA)


**BLACKCOMB NSF STANDARD 55, CLASS A - EQUIPMENT SPECIFICATIONS**

| | BLACKCOMB (Standard-output) | | | | | BLACKCOMB-HO (High-output, compact design) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MODEL | LB6-02XA LB6-02A-12V | LB6-03XA LB6-03A-12V | LB6-06XA LB6-06A-12V | LB6-10XA | LB6-15XA | LBH6-05XA | LBH6-10XA | LBH6-15XA | LBH6-25XA | LBH6-40XA |
| NSF Class A Flow Rate (40mJ/cm² @ 70% UVT) | 1.6 GPM | 2.2 GPM | 3.4 GPM | 6.3 GPM | 7.9 GPM | 2.2 GPM | 4.0 GPM | 5.4 GPM | 7.9 GPM | 18.0 GPM |
| | 6.1 lpm | 8.3 lpm | 12.9 lpm | 23.8 lpm | 29.9 lpm | 8.3 lpm | 15.1 lpm | 20.4 lpm | 29.9 lpm | 68.1 lpm |
| | 0.36 m³/hr | 0.5 m³/hr | 0.77 m³/hr | 1.43 m³/hr | 1.79 m³/hr | 0.5 m³/hr | 0.91 m³/hr | 1.23 m³/hr | 1.79 m³/hr | 4.08 m³/hr. |
| Flow Restrictor | Integral | | | | | | | | | |
| Port Size | ½"FNPT | ½"MNPT | ¾"MNPT | ¾"MNPT | 1"MNPT | ½"MNPT | ¾"MNPT | 1"MNPT | 1"MNPT | 1 ½"MNPT |
| Electrical | 90-265V/50-60Hz. / 12VDC as indicated | | | | | | | | | |
| Plug Type | American, Nema 5/15, 3 wire for all 110V systems, replace "X" with "1" suffix (i.e. LB6-101A)<br>European, CEE 7/7, 3 wire for all 230V systems, replace "X" with "2" suffix (i.e. LB6-102A)<br>British Standard, BS 1363, 3 wire for all 230V systems, replace "X" with "3" suffix (i.e. LB6-103A)<br>Australian/New Zealand, AS/NZ 3112, 3 wire for all 230V systems, replace "X" with "4" suffix (i.e. LB6-104A) | | | | | | | | | |
| Lamp Watts | 8 | 15 | 22 | 39 | 50 | 18 | 34 | 45 | 67 | 101 |
| Power (Watts) | 14 | 20 | 30 | 49 | 62 | 20 (19 @ 230V.) | 38 (36 @ 230V.) | 57 (48 @ 230V.) | 73 (72 @ 230V.) | 115 (108 @ 230V.) |
| Maximum Current (amps) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Replacement Lamp | RL-210 | RL-290 | RL-470 | RL-820 | RL-999 | RL-210HO | RL-330HO | RL-420HO | RL-600HO | RL-950HO |
| Replacement Sleeve | RQ-210 | RQ-290 | RQ-470 | RQ-820 | RQ-999 | RQ-210 | RQ-330 | RQ-420 | RQ-600 | RQ-950 |
| Replacement UV Sensor | RS-B2.5V | RS-B2.5V | RS-B2.5V | RS-B2.5V | RS-B2.5V | RSHO-B3.5V | RSHO-B3.5V | RSHO-B3.5V | RSHO-B3.5V | RSHO-B3.5V |
| Chamber Material | Polished 304 stainless steel, A249 pressure rated tubing | | | | | Polished 316L stainless steel, A249 pressure rated tubing | | | | |
| Reactor Dimensions | 2.5 x 10.3" (6.4 x 26.2cm) | 2.5 x 14.3" (6.4 x 36.4cm) | 2.5 x 21.3" (6.4 x 54.2cm) | 2.5 x 35.2" (6.4 x 89.5cm) | 2.5 x 40.0" (6.4 x 101.6cm) | 3.5 x 11.7" (8.9 x 29.8cm) | 3.5 x 16.5" (8.9 x 41.8cm) | 3.5 x 20.0" (8.9 x 50.8cm) | 3.5 x 26.9" (8.9 x 68.3cm) | 3.5 x 40.7" (8.9 x 103.4cm) |
| Controller Dimensions | 6.8 x 3.6 x 4" (17.2 x 9.2 x 10.2 cm) | | | | | 8.6 x 4.2 x 4" (21.8 x 10.7 x 10.2 cm) | | | | |
| Operating Pressure | 0.7-10.3 bar (10-150 psi) | | | | | | | | | |
| Operating Water Temp. | 2-40° C (36 - 104°F) | | | | | | | | | |
| UV Monitor | YES | | | | | | | | | |
| Solenoid Output | YES (but requires optional solenoid module) (MOD-SOL) | | | | | | | | | |
| Dry Contacts | YES (but requires optional remote alarm module) (MOD-RAM) | | | | | | | | | |
| 4-20mA Output | YES (but requires optional 4-20mA module) (MOD-420) | | | | | | | | | |
| Lamp Change Reminder | YES (both audible and visual (full colour graphic)) | | | | | | | | | |
| Lamp Out Indicator | YES (both audible and visual (full colour graphic)) | | | | | | | | | |
| Shipping Weight | 3.0 kg (6.6 lbs) | 3.3 kg (7.3 lbs) | 4.2 kg (9.3 lbs) | 6.8 kg (15.0 lbs) | 8.0 kg (17.6 lbs) | 4.5 kg (9.9 lbs) | 5.4 kg (11.9 lbs) | 6.0 kg (13.2 lbs) | 7.3 kg (16.1 lbs) | 9.8 kg (21.6 lbs) |

## NSF-44 Water Softener (Water-Right Impression Plus Model #) w/NSF-60 SureSoft® Salt




NSF
CERTIFIED TO NSF/ANSI/CAN 60

## NSF-42 Cartridge Filter (DGD Series Model #)

CARTRIDGES

### DGD SERIES
### SEDIMENT CARTRIDGES

Sized for use in Big Blue filter housings, these cartridges will not impact taste, odor or color of the liquid being filtered. The polypropylene construction provides exceptional chemical resistance. The DGD Series' advanced design combines selective final filtration with appropriate prefiltration to achieve up to three times the dirt-holding capacity of similar size sediment cartridges and even greater capacity than standard spun or string wound cartridges. The larger diameter of the filter reduces the particle load, allowing it to operate at higher velocities. The effective filter depth is increased to a full 233%. This increased depth provides very high particulate reduction efficiencies and added loading capacity. The design and performance characteristics of the DGD cartridges make them an excellent choice for residential, rural, municipal and commercial applications.

| TECHNICAL FEATURE | | BENEFIT |
|---|---|---|
| Manufactured from 100% polypropylene | → | Provides exceptional chemical resistance |
| Combines two separate gradient layers in one filter | → | Selective final filtration with appropriate pre-filtration |
| The effective filter depth is increased to a full 233% of standard spun-polypropylene or string wound filters | → | Provides high particulate reduction efficiencies and added loading capacity |

NSF Tested and Certified by NSF International to NSF/ANSI Standard 42 for material requirements only.

**SPECIFICATIONS**

| | |
|---|---|
| Filtration Media | Spun Polypropylene |
| Length | 10"BB, 20"BB |
| Micron Rating | **1 micron:** DGD-2501<br>**5 micron:** DGD-5005<br>**25 micron:** DGD-7525 |
| Flow Rate | 10BB: 10 gpm @ 1psi (37.8 Lpm @ 0.69 bar)<br>20BB: 20 gpm @ 1 psi (75.7 Lpm @ 0.69 bar) |
| Contaminant | Sediment |
| Capacity | 6-12 Months |
| Temperature Rating | 40-145°F (4.4-62.8°C) |

114 | RESIDENTIAL FILTRATION 2024 FILTRATION PRODUCT CATALOG

## NSF-372 Horizontal Multi-Stage Pump (MH Series Model #

# MH SERIES (15-30-45 GPM) HORIZONTAL MULTI-STAGE PUMPS

The FPS MH Series, Multi-Stage Booster Pump is designed to meet your pressure boosting needs. The stainless steel construction offers high performance in a wide variety of applications. The MH Series is offered in three flow rates and five different horsepower sizes in 1-phase or 3-phase to make sure you can have the right pump to fit your application.

## FEATURES

- All 300 Series stainless steel wetted components
- High service factor motors
- Able to pump fluids at temperatures up to 225 °F
- Can operate in suction lift installation up to 10 feet
- Available in the flow rates of 15, 30 and 45 gpm
- Five motor horsepower size options in single-phase or three-phase
- High pressure capabilities up to 140 psi
- Certified for indoor and outdoor use
- NSF/ANSI/CAN 372 Certified


## APPLICATIONS

- Pressure Boosting
- Water Transfer
- Turf Irrigation
- Residential Lawn Sprinkler Systems
- Wash Down Applications
- Commercial Water Features
- Fountains

## SINGLE-PHASE ORDERING INFORMATION

| GPM | Suction x Discharge | HP | Stages | Voltage | S.F.A | Model No. | Order No. | Wt. (lbs.) |
|---|---|---|---|---|---|---|---|---|
| 15 | 1.25" x 1" | 0.5 | 2 | 115/230 | 9.4/4.7 | 15FMH05S2 | 96061500 | 22 |
| | | 0.75 | 3 | 115/230 | 12.4/6.2 | 15FMH07S3 | 96061501 | 25 |
| | | 1 | 4 | 115/230 | 14.8/7.4 | 15FMH1S4 | 96061502 | 29 |
| | | 1.5 | 5 | 115/230 | 19.9/9.95 | 15FMH15S5 | 96061503 | 35 |
| | | 2 | 6 | 115/230 | 24.0/12.0 | 15FMH2S6 | 96061504 | 40 |
| 30 | 1.25" x 1" | 0.75 | 2 | 115/230 | 12.4/6.2 | 30FMH07S2 | 96063000 | 25 |
| | | 1 | 3 | 115/230 | 14.8/7.4 | 30FMH1S3 | 96063001 | 33 |
| | | 1.5 | 4 | 115/230 | 19.9/9.95 | 30FMH15S4 | 96063002 | 37 |
| | | 2 | 5 | 115/230 | 24.0/12.0 | 30FMH2S5 | 96063003 | 41 |
| 45 | 1.50" x 1.25" | 1.5 | 2 | 115/230 | 19.9/9.95 | 45FMH15S2 | 96064500 | 33 |
| | | 2 | 3 | 115/230 | 24.0/12.0 | 45FMH2S3 | 96064501 | 39 |

## THREE-PHASE ORDERING INFORMATION

| GPM | Suction x Discharge | HP | Stages | Voltage | S.F.A | Model No. | Order No. | Wt. (lbs.) |
|---|---|---|---|---|---|---|---|---|
| 15 | 1.25" x 1" | 0.5 | 2 | 208-230/460 | 3.0/1.5 | 15FMH05S2-T | 96061510 | 24 |
| | | 0.75 | 3 | 208-230/460 | 3.6/1.8 | 15FMH07S3-T | 96061511 | 24 |
| | | 1 | 4 | 208-230/460 | 4.7/2.35 | 15FMH1S4-T | 96061512 | 29 |
| | | 1.5 | 5 | 208-230/460 | 6.8/3.4 | 15FMH15S5-T | 96061513 | 34 |
| | | 2 | 6 | 208-230/460 | 8.5/4.25 | 15FMH2S6-T | 96061514 | 42 |
| 30 | 1.25" x 1" | 0.75 | 2 | 208-230/460 | 3.6/1.8 | 30FMH07S2-T | 96063010 | 24 |
| | | 1 | 3 | 208-230/460 | 4.7/2.35 | 30FMH1S3-T | 96063011 | 33 |
| | | 1.5 | 4 | 208-230/460 | 6.8/3.4 | 30FMH15S4-T | 96063012 | 36 |
| | | 2 | 5 | 208-230/460 | 8.5/4.25 | 30FMH2S5-T | 96063013 | 43 |
| 45 | 1.50" x 1.25" | 1.5 | 2 | 208-230/460 | 6.8/3.4 | 45FMH15S2-T | 96064510 | 32 |
| | | 2 | 3 | 208-230/460 | 8.5/4.25 | 45FMH2S3-T | 96064511 | 41 |

## NSF-61 Fiberglass Pressure Tank (FlexCon FL2PRO Series Model #H2PL- )

**Submittal Data**

# Flex2PRO Series

**Water System Tanks**

Job Name: _____ Schedule #: _____

Location: _____ Model #: _____

Engineer: _____ Representative: _____

Contractor: _____

### Description

Flex2Pro (H2PL) series tanks are diaphragm type, pre-charged hydro-pneumatic tanks designed for residential and commerical water well, pressure booster, and irrigation systems.


### Materials of Construction

Shell: Polypropylene tank reinforced w/ fiberglass and sealed w/ epoxy resin

Diaphragm: Butyl rubber w/ copolymer polypropylene lower water chamber

Connection: Rigid Sch. 80 PVC

### Ratings

Max. Working Pressure: 125 PSI
Max. Working Temp: 120 F
Pre-Charge (adjustable): 38 PSI

NSF/ANSI 61
NSF/ANSI 372

**Tank Specifications**

| Model | Diameter (inches) | Height (inches) | System Connection Schedule 80 (inches) | Volume (gallons) | Drawdown (gallons) | | | Weight (lbs) |
|---|---|---|---|---|---|---|---|---|
| | | | | | 20/40 | 30/50 | 40/60 | |
| H2PL 15 | 16.5 | 25.6 | 1 | 15 | 6.0 | 5.1 | 4.4 | 19 |
| H2PL 22 | 16.5 | 34.1 | 1 | 22 | 8.8 | 7.5 | 6.5 | 24 |
| H2PL 35 | 16.5 | 48.9 | 1 | 35 | 14.1 | 11.9 | 10.3 | 33.5 |
| H2PL 38SQ | 24.2 | 29.75 | 1 ¼ | 38 | 13.89 | 11.8 | 10.5 | 39.4 |
| H2PL 42 | 21.4 | 37.0 | 1 ¼ | 40 | 16.1 | 13.6 | 11.8 | 38 |
| H2PL 50 | 21.4 | 43.3 | 1 ¼ | 50 | 20.1 | 17.0 | 14.7 | 47 |
| H2PL 65 | 21.4 | 51.3 | 1 ¼ | 65 | 26.1 | 22.1 | 19.1 | 58 |
| H2PL 82 | 21.4 | 64.7 | 1 ¼ | 82 | 33.0 | 27.9 | 24.1 | 69.5 |
| H2PL 90 | 24.2 | 57.0 | 1 ¼ | 90 | 36.2 | 30.6 | 26.5 | 77 |
| H2PL 120 | 24.2 | 72.1 | 1 ¼ | 119 | 47.9 | 40.5 | 35.0 | 99.5 |

FLEXCON INDUSTRIES
A Swan Group Company

300 Pond St • Randolph, MA 02368 • 800-527-0030 • 781-986-2029 FAX • www.flexconind.com

## Sample Results – Coliform bacteria, nitrate, and arsenic were all non-detect.

**WATERLAB CORP.**

ORELAP ID# OR100039

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

**TEST REPORT**

**Stadeli Water Systems**
**PO Box 832**
**Silverton, OR 97381**

**SAMPLE INFORMATION**

Location: 11050 NE Worden Hill Dr, 97115/ well tap
Date Sampled: 01/15/2025 Sample Type: Water
Time Sampled: 1100 Collected by: Eric

**CASE NARRATIVE**

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory. This report shall not be reproduced except in full without permission in writing.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAP. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

**TESTING INFORMATION**

Lab #: 20250115-063

| | | | | | |
|---|---|---|---|---|---|
| Date Received: | 01/15/2025 | Time Received: | 1319 | Received by: | SW |
| Date Started: | 01/15/2025 | Time Started: | 1650 | Tech: | SW |
| Date Read: | 01/16/2025 | Time Read: | 1231 | Tech: | SW |
| Date Reported: | 01/16/2025 | | | Reported By: | SW |
| *Chlorine Residual: | N/A | | | | |

Amount of Sample Used: 100 mls
Method Code: SM 20th ED 9223B P/A Colilert 18 ®

**TOTAL COLIFORM BACTERIA RESULTS**

Analysis shows Total Coliform Bacteria to be: **ABSENT**
Absent= Acceptable Present= Unacceptable

**E.COLI COLIFORM BACTERIA RESULTS**

Analysis shows E. coli Bacteria to be: **ABSENT**
E. coli is a sub-section of Total Coliform and its presence in water indicates that raw

**WATERLAB CORP.**

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

**TEST REPORT**

**TO: Stadeli Water Systems**
**PO Box 832**
**Silverton, OR 97381**

1/27/2025

STAWAT

PO#:

**Collection Information**

Date: 1/15/2025
Time: 1100
By: Eric

**Lab Receipt Information**

1/15/2025
1319
SW

Lab #: 20250115-064
Location: 11050 NE Worden Hill Dr 97115/ well tap

**Case Narrative**

The analyses were performed according to the guidelines in the WATERLAB Corp Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory. This report shall not be reproduced except in full without permission in writing.

WATERLAB Corp certifies that this report is in compliance with the requirements of NELAP. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.

| Analyte | Method | Acc* | Results | Qual | MRL | Units | EPA Limit | Analysis Date Time | Tech |
|---|---|---|---|---|---|---|---|---|---|
| Healthy Water Pkg 4A well/spring | | | | | | | | | |
| pH | EPA 150.1 | | 6.80 | H | | pH units | 6.5 - 8.5 | 1/15/2025 1415 | as |
| Specific Conductance | SM2510B | A | 600. | | 1. | umhos/cm | | 1/15/2025 | as |
| Arsenic | SM3113B | A | ND | | 0.002 | mg/l | 0.010 | 1/22/2025 | bem |

",20th ed
/A

received by the

n approval of

H holding time is 15 minutes.

**WATERLAB CORP.**

2603 - 12th Street, SE
Salem, OR 97302
Voice: (503) 363-0473
FAX: (503) 363-8900

**TEST REPORT**

LAB # : 20250115-064 (Cont) STAWAT Page: 2

| Analyte | Method | Acc* | Results | Qual | MRL | Units | EPA Limit | Analysis Date Time | Tech |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | EPA300.0 | A | 2.83 | | 0.3 | mg/l | 250 | 1/16/2025 | as |
| Copper | SM3111 B | A | ND | | 0.1 | mg/l | 1.0 | 1/22/2025 | bem |
| Fluoride | EPA300.0 | A | 0.210 | | 0.2 | mg/l | 4.0 | 1/16/2025 | as |
| Hardness as CaCO3 | SM2340C | A | 12. | | 10. | mg/l CaCO3 | 250 | 1/23/2025 | as |
| Iron | SM3111B | A | 1.09 | EN | 0.1 | mg/l | 0.3 | 1/22/2025 | bem |
| Lead | SM3113 B | A | ND | | 0.001 | mg/l | 0.015 | 1/27/2025 | bem |
| Manganese | SM3111B | A | ND | | 0.05 | mg/l | 0.05 | 1/22/2025 | bem |
| Nitrogen, Nitrate | EPA300.0 | A | ND | | 0.2 | mg NO3-N/l | 10. | 1/16/2025 1530 | as |
| Silica | H8185 | | 31.1 | | 1. | mg/l SiO2 | | 1/24/2025 | as |
| Sodium | SM3111B | A | 142. | | 1.0 | mg/l | 20. | 1/22/2025 | bem |
| Sulfate | EPA300.0 | A | ND | | 1.5 | mg/l SO4 | 250 | 1/16/2025 | as |
| Zinc | SM3111 B | A | ND | | 0.1 | mg/l | 5.0 | 1/22/2025 | bem |

## Land Use Approval

3321-602

PUBLIC HEALTH DIVISION
Drinking Water Services

Oregon Health Authority

**Land Use Compatibility Statement**

Certain plan review approvals for drinking water projects have been identified by the Land Conservation and Development Commission as Class B permits affecting land use. The Oregon Health Authority is therefore required by ORS 197.180, OAR 660, division 30, OAR 660, division 31, the Oregon Health Authority's approved State Agency Coordination Program, and OAR 333-061-0062 to ensure that projects defined in OAR 333-061-0062(1) conform with statewide planning goals and are compatible with city and county comprehensive plans and land use regulations. In order to ensure such compatibility, this form or other acceptable documentation and necessary attachments must accompany each applicable set of project plans submitted to the Oregon Health Authority for review.

**General Information**

Project Title: Austin Sparkling Project 11050 NE Worden Hill Rd Dundee – winery + tasting room

Applicant: I Can't Afford This Property LLC
Name of Water System

Type of Project: new source
Treatment, Transmission, Storage, Distribution, New Source, etc.

Project Contact Person: Tiffany Austin, owner
Engineer, Owner, etc., including title

3113 Crestview Dr
Mailing Address

Newberg OR 97132 — 415.971.7185
City, State, Zip Code — Phone

gandtsparkling@gmail.com
Email Address

The local government entity* having comprehensive planning authority over the site of the proposed project is:

Agency Name: Yamhill County — Phone: 503-434-7516

Address: 400 NE Baker Street McMinnville — Zip: 97128

(*If the proposed project is located within the jurisdiction of more than one planning authority, all entities must certify compatibility.)

(Continued on Back)

1 revised 7/9/20

Complete either part A or part B.

☒ A. Land Use Compatibility Determination - Planning Authority Statement (*to be completed by local planning authority*)

I certify that this project has been reviewed for compatibility with:
- The acknowledged comprehensive plan and land use regulations.
- Statewide planning goals. The goals apply because conditions described in OAR 660-31-0025(3) exist.

I find that this project (**check one**) ☒ IS compatible – Docket Approval: SDR-03-24
☐ IS NOT compatible

Attach appropriate land use decision(s) written findings as required in ORS 215.416 (8) or (9), or 227.173 (1) or (2), or OAR 660-31-026.

Signature: Tiffanie Wills — Date: 10/24/2025

Print Name: Tiffanie Wills — Title: Associate Planner, Yamhill County

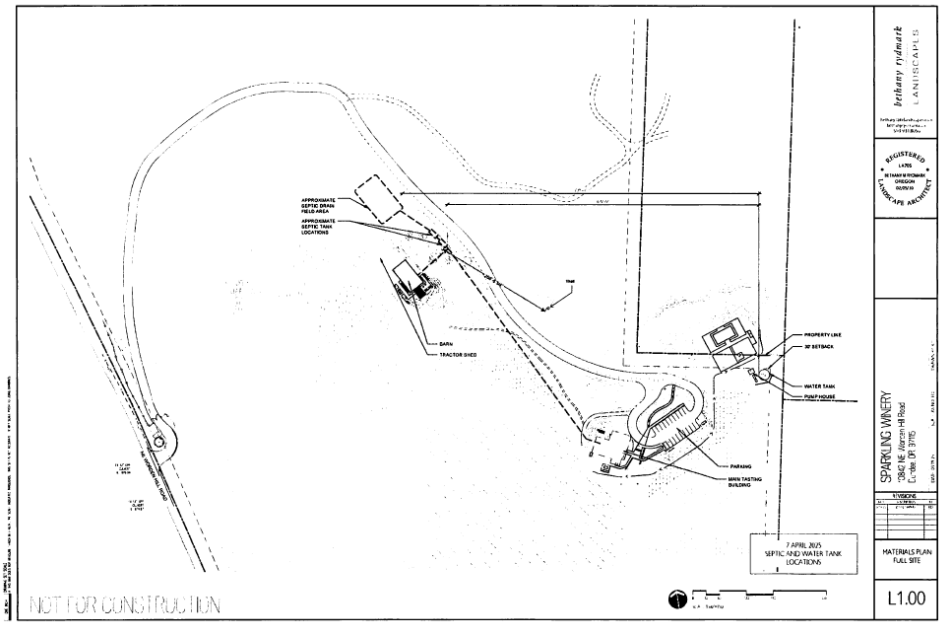
☐ B. Request for Conditional Plan Review Approval, Pending Land Use Compatibility Determination (*to be completed by applicant*)

I hereby certify that I have applied to the local government entity cited on page 1 for a determination of compatibility with the local acknowledged plan or the statewide planning goals as applicable. I hereby request that the Authority issue a conditional approval of the plans with the understanding that issuance of said approval is not a finding of compliance with the statewide planning goals or compatibility with the applicable, acknowledged comprehensive plan and land use regulations, but is conditional upon the applicant receiving a land use approval from each unit of local government. I understand that final plan review approval for this project will not be effective until and unless the Oregon Health Authority receives a signed copy of the land use approval and determines it to be complete and adequate.

Signature _____ Date _____

Print Name _____ Title _____

2 revised 7/9/20



## Water Right Information

**Hofeld Evan E**

**From:** PLAHN Joel M * WRD <Joel.M.PLAHN@water.oregon.gov>
**Sent:** Friday, January 23, 2026 9:35 AM
**To:** Christiane Kraemer
**Cc:** Tiffany Austin; leta@taylorlombardo.com; Kaleb Dark
**Subject:** RE: 11050 NE Worden Hill Rd. Dundee OR

Hi Christiane,

The storage of 25,000 gallons of water from a well for fire protection would require a water right. However, if you purchased 25,000 gallons of water from a water provider like a municipality and have it delivered that would not require a new water right. I included the ORS for exempt use of well water of 5,000 gallons a day for single industrial or commercial purposes below. This email should be sufficient documentation for OHA & ODA. If not let me know.

**537.545 Exempt uses; map; filing of use; fee; rules.** (1) A registration, certificate of registration, application for a permit, permit, certificate of completion or ground water right certificate under ORS 537.505 to 537.795 and 537.992 is not required for the use of ground water for:
(f) Any single industrial or commercial purpose in an amount not exceeding 5,000 gallons a day; or

Thanks, Joel Plahn
District 22 Watermaster
Cell 503-508-2394

OREGON WATER RESOURCES DEPARTMENT
Integrity | Service | Technical Excellence | Teamwork | Forward-Looking

**From:** Christiane Kraemer <christiane@thegrantcompanyinc.com>
**Sent:** Thursday, January 22, 2026 1:21 PM
**To:** PLAHN Joel M * WRD <Joel.M.PLAHN@water.oregon.gov>
**Cc:** Tiffany Austin <gandtsparkling@gmail.com>; leta@taylorlombardo.com; Kaleb Dark <kaleb@thegrantcompanyinc.com>
**Subject:** RE: 11050 NE Worden Hill Rd. Dundee OR

You don't often get email from christiane@thegrantcompanyinc.com. Learn why this is important

Hi Joel,

You and I had a phone conversation regarding this a while back. We are approaching the end of the project and need to get the water approval process moving forward.

OHA needs a document that the property doesn't need water rights. If I remember correctly, you were trying to figure out what to do in a situation like this, where the filling of the tank for the fire fighting needs is really a one-time thing. The floats and controls in the tank won't allow it to drop below the 25,000 gallon level, only opening the fire hydrant will.

Do you know how we can obtain a document that says the property doesn't need water rights?

Christiane Kraemer
GRANT CO.
503.845.6035
503.932.0114

**From:** PLAHN Joel M * WRD <Joel.M.PLAHN@water.oregon.gov>
**Sent:** Monday, October 27, 2025 1:55 PM
**To:** Christiane Kraemer <christiane@thegrantcompanyinc.com>
**Cc:** Tiffany Austin <gandtsparkling@gmail.com>; leta@taylorlombardo.com; Kaleb Dark <kaleb@thegrantcompanyinc.com>
**Subject:** RE: 11050 NE Worden Hill Rd. Dundee OR

Hi Christiane,

For the commercial use for the tasting room site ORS 537.545(f) which is copied below. The 46,000 gallons water storage tank for fire protection will need a water right if that water comes from the well. If you buy the water for the fire suppression from a municipality and truck it to the site to fill the tank a water right would not be required. Feel free to give me a call if you have any questions.

**537.545 Exempt uses; map; filing of use; fee; rules.** (1) A registration, certificate of registration, application for a permit, permit, certificate of completion or ground water right certificate under ORS 537.505 to 537.795 and 537.992 is not required for the use of ground water for:
(f) Any single industrial or commercial purpose in an amount not exceeding 5,000 gallons a day; or

Thanks, Joel Plahn
District 22 Watermaster
Cell 503-508-2394

OREGON WATER RESOURCES DEPARTMENT

Integrity | Service | Technical Excellence | Teamwork | Forward-Looking

**From:** Christiane Kraemer <christiane@thegrantcompanyinc.com>
**Sent:** Friday, October 24, 2025 12:42 PM
**To:** PLAHN Joel M * WRD <Joel.M.PLAHN@water.oregon.gov>
**Cc:** Tiffany Austin <gandtsparkling@gmail.com>; leta@taylorlombardo.com; Kaleb Dark <kaleb@thegrantcompanyinc.com>
**Subject:** 11050 NE Worden Hill Rd. Dundee OR

> You don't often get email from christiane@thegrantcompanyinc.com. Learn why this is important

Joel,

I'm the general contactor on a new winery/tasting building at the above address. The owner had a well drilled on the project and we've installed a 46,000 gallon water storage tank on the property. The fire department required the reservoir for fire suppression, with additional storage since the well is not high producing.

I'm helping with the OHA & ODA approval process for the drinking water. Evan Hofeld from OHA says one of the items needed is documentation that the property will not need water rights. The vineyard is not irrigated, and the owner says there are no water rights. Can you tell me how we get this documentation?

Thank you for your help.

Christiane Kraemer

GRANT CO.
503.845.6035
503.932.0114