Copy - withdrawn 2-7-17

CLAIM OF BENEFICIAL USE
for Permits claiming more than 0.1 cfs and All Transfers

Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

3/34

A fee of $175 must accompany this form for permits with priority dates after July 8, 1987.

A fee of $175 must accompany this form for any Transfer final orders including a water right with a priority date of July 9, 1987, or later.
Example – A transfer involves 5 rights and one of the rights has a priority date of July 9, 1987, or later, the fee is required.

A separate form shall be completed for each permit.

In cases where a permit has been amended through the permit amendment process, a separate claim for the permit amendment is not required. Incorporate the permit amendment into the claim for the permit.

This form is subject to revision. **Begin each new claim** by checking for a new version of this form at:
http://www.oregon.gov/owrd/pages/wr/cwre_info.aspx

The completion of this form is required by OAR 690-014-0100(1) and 690-014-0110(4).

Please type or print in dark ink. If this form is found to contain errors or omissions, it may be returned to you. **Every item must have a response.** If any requested information does not apply to the claim, insert "NA." **Do not delete or alter any section of this form unless directed by the form.** The Department may require the submittal of additional information from any water user or authorized agent.

"Section 8" of this form is intended to aid in the completion of this form and should not be submitted.

If you have questions regarding the completion of this form, please call 503-986-0900 and ask for the Certificate Section.

The Department has a program that allows it to enter into a voluntary agreement with an applicant for expedited services. Under such an agreement, the applicant pays the cost to hire additional staff that would not otherwise be available. This program means a certificate may be issued in about a month. For more information on this program see
http://www.oregon.gov/owrd/pages/mgmt_reimbursement_authority.aspx

SECTION 1
GENERAL INFORMATION

1. File Information

APPLICATION # (G, R, S OR T)	PERMIT # (IF APPLICABLE)	PERMIT AMENDMENT # (IF APPLICABLE)
G-15271	G-15205	NA

2. Property Owner (current owner information)

APPLICANT/BUSINESS NAME	PHONE NO.	ADDITIONAL CONTACT NO.
Townsend HB LLC	**503-647-9816**	

ADDRESS			
33865 NW Vadis Rd			
CITY	STATE	ZIP	E-MAIL
Cornelius	**OR**	**97113**	**joe@townsendfarms.com**

If the current property owner is not the permit or transfer holder of record, it is recommended that an assignment be filed with the Department. ***Each*** *permit or transfer holder of record must sign this form.*

3. Permit or transfer holder of record (this may, or may not, be the current property owner)

PERMIT OR TRANSFER HOLDER OF RECORD		
ADDRESS		
CITY	STATE	ZIP

ADDITIONAL PERMIT OR TRANSFER HOLDER OF RECORD		
ADDRESS		
CITY	STATE	ZIP

4. Date of Site Inspection: **August 12, 2015**

5. Person(s) interviewed and description of their association with the project:

NAME	DATE	ASSOCIATION WITH THE PROJECT
Joe Tankersley	**8/12/2015**	**Manager**

6. County: **Washington**

7. If any property described in the place of use of the permit or transfer final order is excluded from this report, identify the owner of record for that property (ORS 537.230(4)):

OWNER OF RECORD		
ADDRESS		
CITY	STATE	ZIP

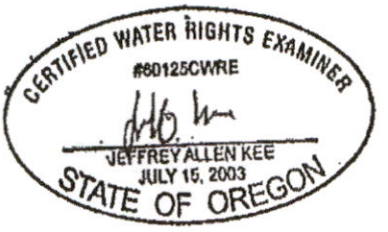
Add additional tables for owners of record as needed

SECTION 2
SIGNATURES

CWRE Statement, Seal and Signature

The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge.

Seal and Signature



CWRE NAME		PHONE NO.	ADDITIONAL CONTACT NO.
Jeffrey Kee		503-357-5717	
ADDRESS			
2137 19th Ave.			
CITY	STATE	ZIP	E-MAIL
Forest Grove	OR	97116	jkee@hevanet.com

Permit or Transfer Holder's of Record Signature or Acknowledgement

Each permit or transfer holder of record must sign this form in the space provided below.

The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge. I request that the Department issue a water right certificate.

SIGNATURE	PRINT OR TYPE NAME	TITLE	DATE
Michael E. Townsend	Michael E. Townsend	President	12-17-15

SECTION 3

CLAIM DESCRIPTION

1. Point of diversion/appropriation name or number:

POINT OF DIVERSION/APPROPRIATION (POD/POA) NAME OR NUMBER (CORRESPOND TO MAP)	WELL LOG ID # FOR ALL WORK PERFORMED ON THE WELL (IF APPLICABLE)	WELL TAG # (IF APPEICABLE)
Well #1	WASH 56924	L-45731

Attach each well log available for the well (include the log for the original well and any subsequent alterations, reconstructions, or deepenings)

2. Point of diversion/appropriation source and, if from surface water, the tributary:

POD/POA NAME OR NUMBER	SOURCE	TRIBUTARY
Well #1	Groundwater	Bausch Creek Drainage

3. Developed use(s), period of use, and rate for each use:

POD/POA NAME OR NUMBER	USES	IF IRRIGATION, LIST CROP TYPE	SEASON OR MONTHS WHEN WATER WAS USED	ACTUAL RATE OR VOLUME USED (CFS, GPM, OR AF)
Well #1	Irrigation	Strawberries/Clover	March 1-Oct 31	0.446 CFS
Total Quantity of Water Used				0.446 CFS

4. Provide a general narrative description of the distribution works. This description must trace the water system from **each** point of diversion or appropriation to the place of use:

Groundwater is pumped with a 15 hp submersible pump through a 3 inch line which dumps into a 9 ft wide by 5 ft deep ditch which flows into Ruffner Reservoir. Water is then pumped with a 75 hp centrifugal pump into a 8 inch mainline which runs back towards the Place of Use, then into a 6 inch mainline which continues up the hill into the middle of the Place of Use. Aluminum 3 inch hand lines distribute water to up to 75 sprinklers.

Reminder: The map associated with this claim must identify the location of the point(s) of diversion, Donation Land Claims (DLC), Government Lots (GLot), and Quarter-Quarters (QQ).

5. Variations:

Was the use developed differently from what was authorized by the permit, permit amendment final order, or extension final order? If yes, describe below. **NO**

(e.g. *"The permit allowed three points of diversion. The water user only developed one of the points."* or *"The permit allowed 40.0 acres of irrigation. The water user only developed 10.0 acres."*)

6. Claim Summary:

POD/POA NAME OR #	MAXIMUM RATE AUTHORIZED	CALCULATED THEORETICAL RATE BASED ON SYSTEM	AMOUNT OF WATER MEASURED	USE	# OF ACRES ALLOWED	# OF ACRES DEVELOPED
Well #1	0.446 CFS	1.51 CFS	Not operating during visit	Irrigation	62.3	62.0

SECTION 4

SYSTEM DESCRIPTION

Are there multiple PODs or POAs? **YES**

If *"YES"* you will need to copy and complete Sections 4B through 4G for each POD/POA.

POD/POA Name or Number this section describes (only needed if there is more than one):

POA at Well

A. Place of Use

1. Is the right for municipal use? **NO**

If "YES" the table below may be deleted.

TWP	RNG	MER	SEC	QQ	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
2 N	3 W	WM	29	NE of SW			irrigation	9.8 acres	
2N	3W	WM	29	NW of SE			irrigation	39.8 acres	
2N	3W	WM	29	SW of SE			irrigation	12.4 acres	
Total Acres Irrigated								62.0 acres	

Reminder: The map associated with this claim must identify Donation Land Claims (DLC), Government Lots (GLot), Quarter Quarters (QQ), and if for irrigation, the number of acres irrigated within each projected DLC, GLot, and QQ.

B. Diversion and Delivery System Information

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion/appropriation to the place of use.

1. Is a pump used? **YES**

If "NO" items 2 through item 6 may be deleted.

2. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Jaccuzzi	Grandfos	unknown	submersible	3"	3"
unknown	SKE365dD TTG019A	33029027	turbine	Unknown	8"

3. Motor Information

MANUFACTURER	HORSEPOWER
Jaccuzzi	15 hp

4. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *IF A WELL, THE WATER LEVEL DURING PUMPING	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
15	20	15 ft	0	1.51 CFS
75	150	12 ft	165 ft	0.97 CFS

5. Provide pump calculations:

See attached calculation sheet.

6. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
Not operating	During visit.		

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped? YES

If "NO" items 8 through item 11 may be deleted.

8. Mainline Information

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
8 inch	500 feet	PVC	Buried
To a 6 inch	1100 feet	PVC	Buried

9. Lateral or Handline Information

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
3"	3000 ft	aluminum	above

10. Sprinkler Information

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
5/32"	~50	5.0	75	75	0.84 CFS

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)

12. Additional notes or comments related to the system:

C. Groundwater Source Information (Well and Sump)

1. Is the appropriation from ground water (well or sump)? **YES**

If "NO", items 2 through 8 relating to this section may be deleted.

2. Describe the access port (type and location) or other means to measure the water level in the well:

On top of well head, approximately 24" above the ground.

3. If well logs are not available, provide as much of the following information as possible:

Casing Diameter	Casing Depth	Total Depth	Completion Date of Original Well	Completion Dates of Alterations	Who the well was drilled for	Well drilled by
8"	364'	462'	1/15/01	NA	Joseph Regan	AM Jannsen Well Drillers

4. In addition to the information requested in item "3" above, provide any other information which may help the Department locate any well logs associated with this appropriation.

L-45731

5. Is the appropriation from a dug well (sump)? **NO**

If "NO", items 6 through 8 relating to this section may be deleted.

Reminder: Construction standards for sumps can be found in OAR 690-210-0400.

D. Storage

1. Does the distribution system include in-system storage (e.g. storage tank, bulge in system / reservoir) **YES**

If "NO", item 2 and 3 relating to this section may be deleted.

If "YES" is it a: Storage Tank **NO**

Bulge in System / Reservoir **YES**

Complete appropriate table(s), unused table may be deleted.

2. Storage Tank:

Material (concrete, fiberglass, metal, etc.)	Capacity (in gallons)	Above Ground or Buried

3. Bulge in System / Reservoir:

Reservoir Name or Number (correspond to map)	Approximate Dam Height	Approximate Capacity (in acre feet)
Ruffner Reservoir	unknown	30 acre feet

WR

E. Gravity Flow Pipe

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe? **NO**

F. Gravity Flow Canal or Ditch

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system? **YES**

If "NO", items 2 through 4 relating to this section may be deleted.

2. Complete the table:

CANAL OR DITCH TYPE (MATERIAL)	TOP WIDTH OF CANAL OR DITCH	BOTTOM WIDTH OF CANAL OR DITCH	DEPTH	"N" FACTOR	AMOUNT OF FALL	LENGTH OF CANAL/ DITCH	SLOPE	COMPUTED RATE (IN CFS)
dirt	9'	9'	5'	.02	1'	1300'	.02	19.35

3. Provide calculations:

$Q = 1.486/.02\ (2.5)^{2/3}\ (0.14)^{1/2}$

4. If an actual measurement was taken, provide the following:

DATE OF MEASUREMENT	WHO MADE THE MEASUREMENT	MEASUREMENT METHOD	MEASURED QUANTITY OF WATER (IN CFS)

Attach measurement notes.

G. Reservoir

1. Does the claim involve a reservoir modified through a transfer? **NO**

Reminder: Complete this section if the reservoir right has been modified through the transfer process. If the claim is for a permitted reservoir use the Claim of Beneficial Use form for reservoirs.

If "NO", items 2 through 9 relating to this section may be deleted.

SECTION 5

CONDITIONS

All conditions contained in the permit, permit amendment, transfer final order, or any extension final order shall be addressed. Reports that do not address all performance related conditions will be returned.

1. Time Limits:

Permits, transfer final orders, and any extension final orders contain any or all of the following dates: the date when the actual construction work was to begin, the date when the construction was to be completed, and the date when the complete application of water to the proposed use was to be completed. These dates may be referred to as ABC dates. Describe how the water user has complied with each of the development timelines established in the permit, extension or transfer final order:

	Date from Permit or Transfer	Date Accomplished*	Description of Actions Taken by Water User to Comply with the Time Limits
Issuance Date	Sept 17, 2002		
Begin Construction (A)			
Complete Construction (B)		May 2014	Drilled well. Laid out lines, applied water to land.
Complete Application of Water (C)	Oct 1, 2015	May 2014	Drilled well. Laid out lines, applied water.

* MUST BE WITHIN PERIOD BETWEEN PERMIT, TRANSFER FINAL ORDER, OR ANY EXTENSION FINAL ORDER ISSUANCE AND THE DATE TO COMPLETELY APPLY WATER

2. Is there an extension final order(s)? YES

If "NO", you may delete item 3 in this section.

3. If for a transfer extension order, provide the following information:

Volume	Page	Date Extended To
Final Order G-15205		10/1/2015

4. Initial Water Level Measurements:

a. Was the water user required to submit an initial static water level measurement? YES

If "NO", items 4b through 4d relating to this section may be deleted.

b. What month was the initial measurement to be taken in?

January well log

c. Was the measurement submitted to the Department? YES

d. If the initial measurement was not submitted, provide that measurement now, if available:

Date of Measurement	Measurement Made By	Method	Measurement
1/15/2001	CWRE	e-tape	17.00 feet

5. Annual Static Water Level Measurements:

a. Was the water user required to submit annual static water level measurements? YES

If "NO", items 5b through 5e relating to this section may be deleted.

b. Provide the month, or months, the static water level measurement(s) were to be made:

March

c. Were the static water level measurements taken in the month(s) required? YES

d. If "YES", were those measurements submitted to the Department? YES

e. If the annual measurements were not submitted, provide the measurements now:

Date of Measurement	Measurement Made By	Method	Measurement

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6. Pump Test (Required for most ground water permits prior to issuance of a certificate)

a. Did the permit require the submittal of a pump test? **YES**

If "NO", items 6b through 6e relating to this section may be deleted.

b. Has the pump test been previously submitted to the Department? **NO**

c. Is the pump test attached to this claim? **YES**

d. Has the pump test been approved by the Department? **NO**

e. Has a pump test exemption been approved by the Department? **NO**

**** Claims will not be reviewed until a pump test or exemption has been approved by the Department**

7. Measurement Conditions:

a. Does the permit, permit amendment, transfer final order, or any extension final order require the installation of a meter or approved measuring device? **YES**

If "NO", items 7b through 7f relating to this section may be deleted.

Reminder: If a meter or approved measuring device was required, the COBU map must indicate the location of the device in relation to the point of diversion or appropriation.

b. Has a meter been installed? **YES**

c. Meter Information

POD/POA NAME OR #	MANUFACTURER	SERIAL #	CONDITION (WORKING OR NOT)	CURRENT METER READING	DATE INSTALLED
Well #1	McCrometer	14-02005-03	working	530712	unknown

If a meter has been installed, items 7d through 7f relating to this section may be deleted.

8. Recording and reporting conditions

a. Is the water user required to report the water use to the Department? **YES**

If "NO", item 8b relating to this section may be deleted.

b. Have the reports been submitted? **YES**

METHOD OF SUBMITTING REPORT (PAPER OR ELECTRONIC)	WATER USER REPORTING ID
electronic	65909

If the reports have not been submitted, attach a copy of the reports if available.

9. Fish Screening

a. Are any points of diversion required to be screened to prevent fish from entering the point of diversion? **NO**

If "NO", items 9b through 9e relating to this section may be deleted.

10. By-pass Devices

a. Are any points of diversion required to have a by-pass device to prevent fish from entering the point of diversion? **NO**

If "NO", items 10b and 10c relating to this section may be deleted.

11. Other conditions required by permit, permit amendment final order, extension final order, or transfer final order:

a. Were there special well construction standards? **YES**
b. Was submittal of a ground water monitoring plan required? **NO**
c. Was the water user required to restore the riparian area if it was disturbed? **NO**
d. Was a fishway required? **NO**
e. Was submittal of a letter from an engineer required prior to storage of water? **NO**
f. Was submittal of a water management and conservation plan required? **NO**
g. Other conditions? **YES**

If "YES" to any of the above, identify the condition and describe the water user's actions to comply with the condition(s):

The Well shall be continuously cased and continuously sealed to a minimum depth of 20 feet into hard dense basalt. Well shall be shut off if an average water level decline of three or more feet for five consecutive years, and/or if a total water level decline of fifteen or more feet, hydraulic interference of more senior wells of 15 feet or more.

SECTION 6

ATTACHMENTS

Provide a list of any additional documents you are attaching to this report:

ATTACHMENT NAME	DESCRIPTION
Attachment A	Permit G-15205
Attachment B	March Static Water Measurements 2001-2015
Attachment C	Pump test cover and Data Sheet
Attachment D	Water Use Reporting ID 65909
Attachment E	Alternative Scale Approval for 1"=500'
Attachment F	Drillers Well Log L-45731 (WASH 56924)
Attachment G	Pump Calculation Sheet
Attachment H	Letter from watermaster bulge system
Attachment I	COBU map

SECTION 7

CLAIM OF BENEFICIAL USE MAP

The Claim of Beneficial Use Map must be submitted with this claim. Claims submitted without the Claim of Beneficial Use map will be returned. The map shall be submitted on poly film at a scale of 1" = 1320 feet, 1" = 400 feet, or the original full-size scale of the county assessor map for the location.

Provide a general description of the survey method used to prepare the map. Examples of possible methods include, but are not limited to, a traverse survey, GPS, or the use of aerial photos. If the basis of the survey is an aerial photo, provide the source, date, series and the aerial photo identification number.

The documents used to produce this map include Google Imagery Data 4/17/2015 45°37'18.67" N, 123° 04'33.57W and Washington County Tax maps T2N 3W Sections 29 & 32. Created using computer aided drafting program Autocad.

Map Checklist

Please be sure that the map you submit includes ALL the items listed below.
(Reminder: Incomplete maps and/or claims may be returned.)

- ☒ Map on polyester film
- ☒ Appropriate scale (1" = 400 feet, 1" = 1320 feet, or the original full-size scale of the county assessor map)
- ☒ Township, Range, Section, Donation Land Claims, and Government Lots
- ☒ If irrigation, number of acres irrigated within each projected Donation Land Claims, Government Lots, Quarter-Quarters
- ☒ Locations of fish screens and/or fish by-pass devices in relationship to point of diversion
- ☒ Locations of meters and/or measuring devices in relationship to point of diversion or appropriation
- ☒ Conveyance structures illustrated (pumps, reservoirs, pipelines, ditches, etc.)
- ☒ Point(s) of diversion or appropriation (illustrated and coordinates)
- ☒ Tax lot boundaries and numbers
- ☒ Source illustrated if surface water
- ☒ Disclaimer ("This map is not intended to provide legal dimensions or locations of property ownership lines")
- ☒ Application and permit number or transfer number
- ☒ North arrow
- ☒ Legend
- ☒ CWRE stamp and signature

16/34

STATE OF OREGON

COUNTY OF WASHINGTON

PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS PERMIT IS HEREBY ISSUED TO

REGAN FAMILY LIMITED PARTNERSHIP
JOSEPH REGAN
31233 FRENCH PRAIRIE ROAD (503) 694-5454
WILSONVILLE, OREGON 97070

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

APPLICATION FILE NUMBER: G-15271

SOURCE OF WATER: A WELL IN THE BAUSCH CREEK DRAINAGE

PURPOSE OR USE: IRRIGATION OF 62.3 ACRES

MAXIMUM RATE: 0.446 CUBIC FOOT PER SECOND

PERIOD OF USE: MARCH 1 THROUGH OCTOBER 31

DATE OF PRIORITY: DECEMBER 26, 2000

WELL LOCATION: SW ¼ SE ¼, SECTION 29, T2N, R3W, W.M.; 1120 FEET NORTH & 160 FEET EAST FROM S1/4 CORNER OF SECTION 29

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 2.5 acre-feet for each acre irrigated during the irrigation season of each year.

THE PLACE OF USE IS LOCATED AS FOLLOWS:

NE ¼ SW ¼ 10.0 ACRES
NW ¼ SE ¼ 39.9 ACRES
SW ¼ SE ¼ 12.4 ACRES
SECTION 29
TOWNSHIP 2 NORTH, RANGE 3 WEST, W.M.

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OWRD
SALEM, OREGON

Measurement, recording and reporting conditions:

(1) A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as

Rate to Oct 1, 2015

approved by the Director. The permittee shall maintain the meter or measuring device in good working order, shall keep a complete record of the amount of water used each month and shall submit a report which includes the recorded water use measurements to the Department annually or more frequently as may be required by the Director. Further, the Director may require the permittee to report general water use information, including the place and nature of use of water under the permit.

B. The permittee shall allow the watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.

The well shall be continuously cased and continuously sealed to a minimum depth of 20 feet into hard dense basalt.

(1) Use of water from the well, as allowed herein, shall be controlled or shut off if the well displays:

(a) An average water level decline of three or more feet per year for five consecutive years; or

(b) A total water level decline of fifteen or more feet; or

(c) A hydraulic interference decline of fifteen or more feet in any neighboring well providing water for senior exempt uses or wells covered by prior rights.

(2) The water user shall install a meter or other measuring device suitable to the Director, and shall submit an annual report of water used to the Department by December 1 of each year.

(3) The permittee/appropriator shall be responsible for complying with each of the following requirements for measuring water levels in the well.

(a) Use of water from a new well shall not begin until an initial static water level in the well has been measured and submitted to the Department.

(b) In addition to the measurement required in subsection (a) of this section, a water level measurement shall be made each year during the period March 1 through March 31.

(c) All water level measurements shall be made by a qualified individual. Qualified individuals are certified water rights

examiners, registered geologists, registered professional engineers, licensed land surveyors, licensed water well constructor, licensed pump installer, or the permittee/appropriator.

(d) Any qualified individual measuring a well shall use standard methods of procedure and equipment designed for the purpose of well measurement. The equipment used shall be well suited to the conditions of construction at the well. A list of standard methods of procedure and suitable equipment shall be available from the Department.

(e) The permittee/appropriator shall submit a record of the measurement to the Department on a form available from the Department. The record of measurement shall include both measurements and calculations, shall include a certification as to their accuracy signed by the individual making the measurements, and shall be submitted to the Department within 90 days from the date of measurement. The Department shall determine when any of the declines cited in section (1) are evidenced by the well measurement required in section (3).

If the number, location, or construction of any well deviates from that proposed in the permit application or permit conditions, the conclusions of the Proposed Final Order and Final Order under which this permit was granted may be revised, conditions may be appropriately revised, or this permit may not be valid.

STANDARD CONDITIONS

If substantial interference with a senior water right occurs due to withdrawal of water from any well listed on this permit, then use of water from the well(s) shall be discontinued or reduced and/or the schedule of withdrawal shall be regulated until or unless the Department approves or implements an alternative administrative action to mitigate the interference. The Department encourages junior and senior appropriators to jointly develop plans to mitigate interferences.

The wells shall be constructed in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge adequate to determine water level elevation in the well at all times.

The use shall conform to such reasonable rotation system as may be ordered by the proper state officer.

Prior to receiving a certificate of water right, the permit holder shall submit the results of a pump test meeting the department's standards, to the Water Resources Department. The Director may require water level or pump test results every ten years thereafter.

Failure to comply with any of the provisions of this permit may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the permit.

This permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

The use of water shall be limited when it interferes with any prior surface or ground water rights.

The Director finds that the proposed use(s) of water described by this permit, as conditioned, will not impair or be detrimental to the public interest.

Complete application of the water to the use shall be made on or before October 1, 2006. If the water is not completely applied before this date, and the permittee wishes to continue development under the permit, the permittee must submit an application for extension of time, which may be approved based upon the merit of the application.

Within one year after complete application of water to the proposed use, the permittee shall submit a claim of beneficial use, which includes a map and report, prepared by a Certified Water Rights Examiner (CWRE).

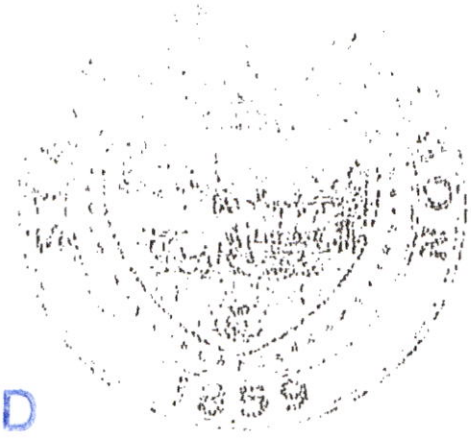
Issued September 17, 2002

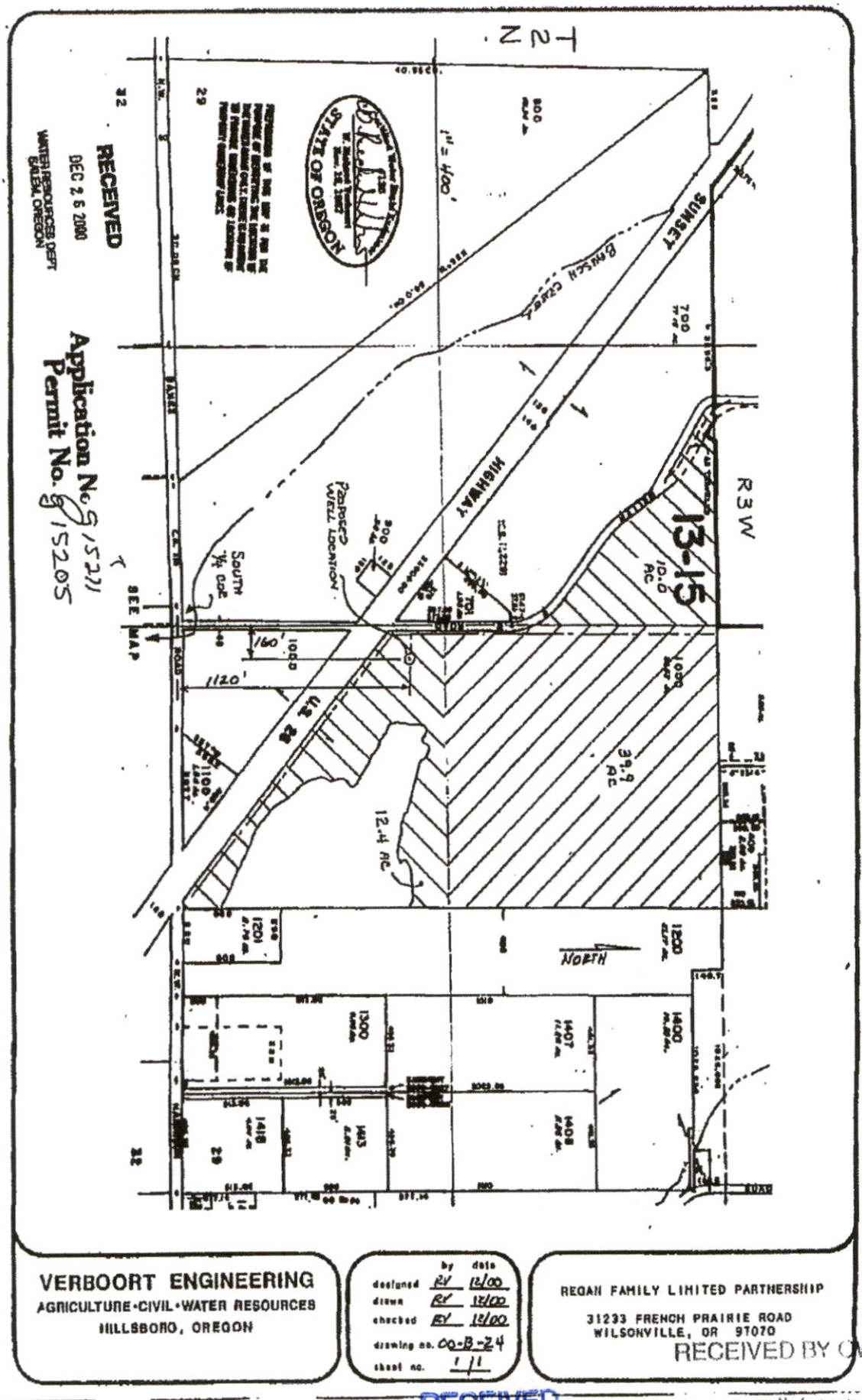
Dwight Ford for
Paul R. Cleary, Director
Water Resources Department

Application G-15271 Water Resources Department PERMIT G-15205
Basin 2 Volume 20A E FK DAIRY CR MISC District 18

REAL ESTATE TRANSACTIONS: Pursuant to ORS 537.330, in any transaction for the conveyance of real estate that includes any portion of the lands described in this permit, the seller of the real estate shall, upon accepting an offer to purchase that real estate, also inform the purchaser in writing whether any permit, transfer approval order, or certificate evidencing the water right is available and that the seller will deliver any permit, transfer approval order or certificate to the purchaser at closing, if the permit, transfer approval order or certificate is available.

CULTURAL RESOURCES PROTECTION LAWS: Permittees involved in ground-disturbing activities should be aware of federal and state cultural resources protection laws. ORS 358.920 prohibits the excavation, injury, destruction or alteration of an archeological site or object, or removal of archeological objects from public and private lands without an archeological permit issued by the State Historic Preservation Office. 16 USC 470, Section 106, National Historic Preservation Act of 1966 requires a federal agency, prior to any undertaking to take into account the effect of the undertaking that is included on or eligible for inclusion in the National Register. For further information, contact the State Historic Preservation Office at 503-378-4168, extension 232.





VERBOORT ENGINEERING
AGRICULTURE • CIVIL • WATER RESOURCES
HILLSBORO, OREGON

	by	date
designed	RV	12/00
drawn	RV	12/00
checked	RV	12/00
drawing no.	00-B-24	
sheet no.	1 / 1	

REGAN FAMILY LIMITED PARTNERSHIP
31233 FRENCH PRAIRIE ROAD
WILSONVILLE, OR 97070

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DEC 24 2015
SALEM, OR

Stuntzner Engineering & Forestry, LLC

TELEPHONE (503) 357-5717
FAX (503) 357-5698
EMAIL: billflatz@stuntzner.com
2137 19th Avenue
Forest Grove, OR 97116

COOS BAY - FOREST GROVE - DALLAS - JUNCTION CITY

Townsend Farms
Attn: Joe Tankersley
23400 NE Townsend Way
Fairview, OR 97024

March 18, 2015

File G-15271
Permit G-15205
Start card 137400
ID L45731, WASH 56924
Depth 462'
Meter: McCrometer
Flowmeter #14-02005-03

Dear Mr. Tankersley:

Water level readings for the referenced well at the Townsend Farms property near Banks, Oregon are as follows. Depth for cwre readings is from the top of casing (tc), which is about 24" above natural ground level.
Hand held GPS Location: N45-37.501', W 123-04.998'.

DATE OF READING	GAGE, psi	E-TAPE	DEPTH FT	USE
01-15-01 driller	n/a	-	17.0 (ls)	
03-13-01 cwre	n/a	-	18.2 tc	
03-12-02 cwre	158	-	13.4 tc	
03-13-03 cwre	-	13.9'	13.9' tc	
03-04-04 cwre	-	15.1'	15.1' tc	
03-07-05 cwre	-	17.8'	17.8' tc	
03-14-06 cwre	-	14.1'	14.1' tc	
03-23-07 cwre	-	14.9'	14.9' tc	
03-20-14 cwre	-	17.2'	17.2' tc	00.0067 ac/ft
03-18-15 cwre	-	18.0'	18.0' tc	27.8482 ac/ft

Readings were taken with an e-tape.

Air line equation : depth = 378 - (psi x 144/62.4)

I hereby certify that, to the best of my ability, the information on this report is accurate and representative of the static level of the aquifer at the time of measurement.

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Bill Flatz, P.E.
Stuntzner Engineering & Forestry

Email copy to joe@townsendfarms.com

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Water Use Report Based on Water Right

◉ excel
○ text

Permit: G 15205 *

TOWNSEND HB LLC 23400 NE TOWNSEND WAY FAIRVIEW, OR 97024

Records per page: 10

Acre-feet (AF) of Water Used

Water Year*	Report ID	Facility	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total Water Used	Irrigated Acres
2016	65909	A WELL (WASH 56924/L-45731)	0.00	0.00	0.00										0.00	
2015	65909	A WELL (WASH 56924/L-45731)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	6.00	7.00	18.00	2.60	38.60	38.60
2014	65909	A WELL (WASH 56924/L-45731)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	8.00	8.00	2.40	2.40	27.80	26.00

*The water year is named for the calendar year in which it ends. Example: the 2014 water year begins Oct. 1, 2013 and ends Sep. 30, 2014.

- Water use is reported by point of diversion (POD), rather than by water right.
- If a POD is shared with multiple water rights, it is not feasible to separate out the amount used under the water right be used by other rights using this same POD.
- Monthly amounts indicate:
  - For diverted rights, the total amount diverted during the month;
  - For storage rights, the amount generally stored in the reservoir/pond during the month, as represented by the vo impounded on approximately the same day each month.
- Water Use amounts have all been converted to "acre-feet" (AF), regardless of the original measurement unit reported. water that will cover an acre of ground one foot deep = 325,850 gallons.
- Zeroes indicate that a report was received, stating that no water was used during those months; if a year is not listed, n was received for that year.

23/34

11/25/15

Your request for a waiver is approved as requested. The Department will accept a Claim map at a scale of 1 inch to 500 feet. Please attach a copy of this waiver approval to your Claim.

Take care. Happy Thanksgiving!

Gerry

Gerry Clark
Water Right Services Division
Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301

Phone: 503-986-0811

RECEIVED WASH 56924

25/34

STATE OF OREGON JAN 19 2001
WATER SUPPLY WELL REPORT
(as required by ORS 537.765) WATER RESOURCES DEPT.
Instructions for completing this report are on the last page of this form.

WELL I.D. # L 45731
START CARD # 137400

(1) OWNER: Well Number
Name JOSEPH E. REGAN
Address 31233 FRENCH PRAIRE RD.
City WILSONVILLE State OR Zip 97070

(2) TYPE OF WORK
[X] New Well [ ] Deepening [ ] Alteration (repair/recondition) [ ] Abandonment

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

(4) PROPOSED USE:
[X] Domestic [ ] Community [ ] Industrial [ ] Irrigation
[ ] Thermal [ ] Injection [ ] Livestock [ ] Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval [ ] Yes [X] No Depth of Completed Well 462 ft.
Explosives used [ ] Yes [X] No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Sacks or pounds
12"	0	60	Cement	0	60	36 sks
10"	60	364	Cement	348	364	10 sks
8"	364	462				

How was seal placed: Method [ ] A [X] B [X] C [ ] D [ ] E
[ ] Other
Backfill placed from 60 ft. to 348 ft. Material Bentonite
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8"	+2	364	250	[X]	[ ]	[X]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]
Liner:					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
[ ] Perforations Method
[ ] Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]

(8) WELL TESTS: Minimum testing time is 1 hour
[ ] Pump [ ] Bailer [X] Air [ ] Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
120		460	1 hr.
90		300	"
45		100	"

Temperature of water 54°F Depth Artesian Flow Found
Was a water analysis done? [X] Yes By whom AMJ
Did any strata contain water not suitable for intended use? [ ] Too little
[ ] Salty [ ] Muddy [ ] Odor [ ] Colored [ ] Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County WASHINGTON Latitude Longitude
Township 2N N or S Range 3W E or W. WM.
Section 29 SW 1/4 SE 1/4
Tax Lot 1000 Lot Block Subdivision
Street Address of Well (or nearest address) 39385 NW BANKS RD
BANKS, OR 97106

(10) STATIC WATER LEVEL:
17 ft. below land surface. Date 01/15/01
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 377

From	To	Estimated Flow Rate	SWL
377	426	120 gpm	17

(12) WELL LOG:
Ground Elevation

Material	From	To	SWL
Brown clay	0	16	
Sticky gray clay	16	29	
Sticky brown clay	29	35	
Red-brown decomp rock & clay	35	54	
Sticky gray clay	54	60	
Sticky red-brown clay & decomp rock	60	115	
Soft red-brown decomp rock	115	172	
Brown & gray-brown rock, weathered	172	325	
Soft gray-brown basalt, brkn	325	354	
Gray-brown & brown basalt, frac. w/broken strks.	354	426	17
Hard gray basalt w/gray-black strks.	426	438	
Gray-brown basalt	438	444	
Gray basalt	444	462	

Date started 01/08/01 Completed 01/15/01

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, 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.
Signed Mike Bigsby WWC Number 1492 Date 01/16/01

(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 water supply well construction standards. This report is true to the best of my knowledge and belief.
Signed WWC Number 1266 Date 01/16/01

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

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Well Pump Capacity Calculation Sheet

using Department designed formula:

(hp)(efficiency) / (lift + psi head) = capacity in cfs

Efficiency:

Centrifugal = 6.61
Turbine = 7.04

Data Entry (fill in underlined blanks)

HP =	15
Efficiency =	6.61
Lift =	15
PSI =	20

Results Calculated

(hp)(efficiency) =	99.15
Head based on psi =	50.8
Total dynamic head = (head + lift)	65.8

Pump Capacity = 1.51 cubic feet per second

Delivery Pump Capacity Calculation Sheet

using Department designed formula:

Data Entry (fill in underlined blanks)

HP =	75
Efficiency =	7.04
Lift =	165
PSI =	150

Results Calculated

(hp)(efficiency) =	528
Head based on psi =	381.1
Total dynamic head = (head + lift)	546.1

Pump Capacity = 0.97 cubic feet per second

Jeffrey Kee

From: CONSTANS Jake W <jake.w.constans@state.or.us>
Sent: Thursday, September 10, 2015 1:47 PM
To: Jeffrey Kee
Subject: RE: Groundwater Use Permit G-15205

Hello Jeffrey,

I do confirm that the reservoir can be used as a bulge in the system and shouldn't require any kind of amendment to the permit. Thanks for the follow up regarding the metering devices.

Jake Constans
Oregon Water Resources Department
District 18 Watermaster
(503) 846-7780
1400 SW Walnut St. Suite 240, MS 49
Hillsboro, OR 97123

From: Jeffrey Kee [jkee@stuntzner.com]
Sent: Thursday, September 10, 2015 1:39 PM
To: CONSTANS Jake W
Subject: Groundwater Use Permit G-15205

Jake, I just wanted to confirm that you regard the irrigation delivery system associated with Permit G-15205 as a bulge system.

And for your information the client informed me there are totalizing flow meters at both the Point of Appropriation at the Well in addition to the pump located at Ruffner reservoir.

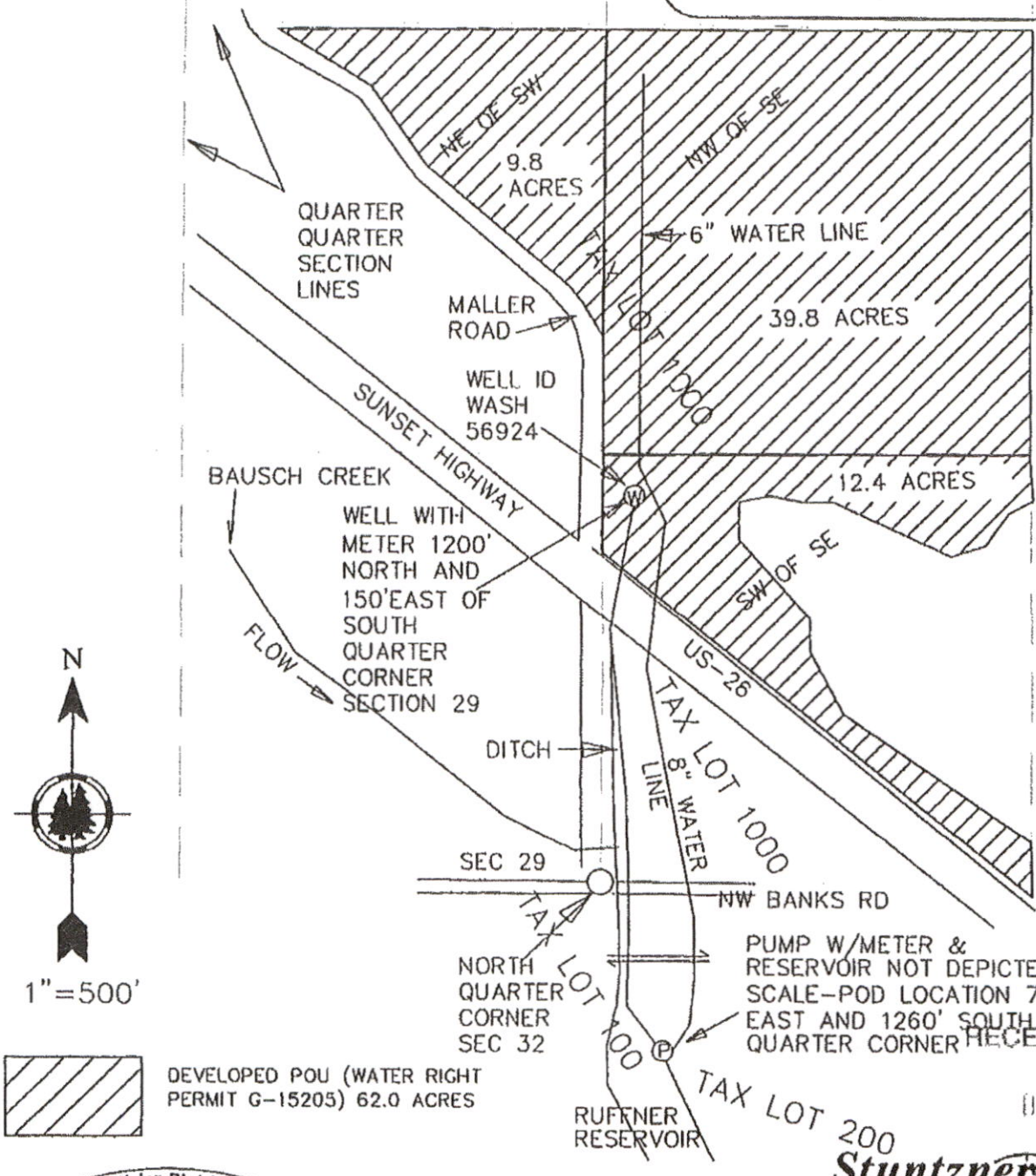
Thank you,

Jeffrey Kee
Certified Water Rights Examiner/Professional Land Surveyor
Stuntzner Engineering & Forestry LLC
2137 19th avenue
Forest Grove, Or 97116
Office 503-357-5717
C phone 541-294-0179

CLAIM OF BENEFICIAL USE MAP

LOCATION:
T2N, R3W, WM.: TL 1000 SECTIONS 29 & 32
WASHINGTON COUNTY WILLAMETTE RIVER BASIN
APPLICATION G-15271 PERMIT G-15205

PREPARED FOR:
TOWNSEND FARMS
33865 NW VADIS RD.
CORNELIUS, OR 97113



DEVELOPED POU (WATER RIGHT PERMIT G-15205) 62.0 ACRES

Certified Water Right Examiner
#60125
Jeffrey A. Kee
July 15, 2003
STATE OF OREGON
EXPIRES 06/30/2017

THIS MAP WAS PREPARED FOR THE PURPOSE OF IDENTIFYING THE LOCATION OF A WATER RIGHT ONLY AND IS NOT INTENDED TO PROVIDE LEGAL DIMENSIONS OR LOCATION OF PROPERTY OWNERSHIP.

MAP BASE:
WASHINGTON COUNTY TAX MAP T2N,R3W, GOOGLE AERIAL PHOTO 2014

Stuntzner Engineering & Forestry, LLC

Project: 315-061
Drawing: TOWNSEND FARMS COBU
By: JAK
Date Revised: 12-16-2015

STATE OF OREGON
WATER RESOURCES DEPARTMENT
INTEROFFICE MEMO

Date: January 15, 2016

TO: Ivan Gall

FROM: Kerry Kavanagh

SUBJECT: Pump Test for Application G-15271, Permit G-15205
RE: RA Project Number R12360-17 – Townsend HB LLC

If this file could be reviewed and returned to me by **February 19th**, I'd appreciate it.

Please let me know if the pump test is satisfactory.

Please have your staff record 4 hours of time to review the pump test.

If you have any questions, please let me know. Thanks!

1/2

31/34

Oregon Water Resources Department

PUMP TEST FORM COVER SHEET

Well Owner:
Name: Townsend Farms
Address: 33865 N.W. VAD's RD
County: WASHINGTON
City: CORNELIUS State: OR Zip: 97113
Original owner (from well log): JOSEPH REGAN

Well Location:
Township: 2 [S] N Range: 3 [E] W
Section: 29 ¼: [NE][SE] ¹/₁₀ [NE][SW] ¹/₀₄ : [NE][NW]
Well depth: 462' Date drilled: 1/8/2001
Owners well no. (if any): WASH 5 6924
POD ID: L-45731

Water Right Information:
Application: G-15271 Permit: G-15205 Certificate:
Is this well listed on more than one water right? ☐ Yes If yes, list additional water rights below:
Application: Permit: Certificate:
Application: Permit: Certificate:

Pump Test:
Test Conducted by: Jim Roofener Well Owner? ☐ Yes
Company: Hillsboro Pump Service
Address: PO Box 890 Date of Test: 03/03/2014
City: Cornelius State: OR Zip: 97113
Daytime phone: 503-793-2742

Method of discharge measurement (see our brochure for more information): Flow meter
Method of water-level measurement (pick one or enter other method used): Electric tape
Length of air line (if used):

Pump type (pick one or enter other method used): Submersible
Was the pump test conducted during normal use of the well? ☐ Yes Note: well was not in use

Are you aware of any wells, other than domestic or stock wells, pumping within 1000 feet of the tested well during the test or within 24 hours prior to the test? ☐ Yes Note:
If yes, give approximate distances to each and approximate pumping rate of each. If possible, indicate if they were turned on or off during the test:

Is there a lake, stream or other surface water body within ¼ mile of the tested well? ☐ Yes If yes, give approximate distance from the well and approximate elevation difference between the surface water and the well head. Approx. distance: ft Approx. elevation difference: ft

Well elevation is above surface water body.

Description of measuring point (e.g. top port of 1 inch port pipe, west side) 1/2" well vent

Measuring point distance above land surface 2.00 feet.

Static water level measurements: (A minimum of three measurements are required in the hour before pumping begins at no less than 20 minutes apart):

Time	Depth to water below meas. point	Depth to water below land surface
7:00 am	13.00	11.00
7:20 am	13.00	11.00
7:40 am	13.00	11.00

Discharge measurements: (A discharge measurement is required at the start of pumping and at least once an hour during the test; additional measurements should be noted on the Pump Test Data Sheet):

Time	Discharge Rate	Discharge Units (e.g. gpm, cfs, etc)
8:00 am	230.00	gpm (gallons per minute)
9:00 am	200.00	gpm (gallons per minute)
10:00 am	200.00	gpm (gallons per minute)
11:00 am	200.00	gpm (gallons per minute)
12:00 pm	200.00	gpm (gallons per minute)

Time pump turned on: Date 03/03/2014 Time 8:00 am
Time pump turned off: Date 03/03/2014 Time 12:00 pm
Total pumping time: 4 hours 0 minutes

Note: Well must be idle for at least 16 hours prior to the test.
Additional forms can be obtained from our web site at: http://www.wrd.state.or.us OWRD 2/9/2000

Required Signature:

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Oregon Water Resources Department

PUMP TEST DATA SHEET

Application: G-15271 Permit: G-15205 Certificate: _____ Pod_Id: WASH 56924

All water-level measurements must either be in feet and inches, or feet and decimal fractions.

Drawdown Data

Date	Time	Time Since Pump Started (minutes)	Depth to Water Below Measuring Pt	Depth to Water Below Land Surface	Comments
3/3/14	8:02 am	2	62' 6"	60' 6"	well water very rusty
3/3/14	8:04 am	4	97' 2"	95' 2"	
3/3/14	8:06 am	6	122' 9"	120' 9"	
3/3/14	8:08 am	8	145' 4"	143' 4"	
3/3/14	8:10am	10	166' 3"	164' 3"	well water clearing up
3/3/14	8:15 am	15	201' 5"	199' 5"	
3/3/14	8:20 am	20	223' 9"	221' 9"	
3/3/14	8:25 am	25	241' 11"	239' 11"	well water running clear
3/3/14	8:30 am	30	258" 4"	256' 4"	
3/3/14	8:45 am	45	271' 6"	269' 6"	
3/3/14	9:00 am	60	282' 7"	280' 7"	Draw down slowing
3/3/14	9:15 am	75	291' 9"	289' 9"	
3/3/14	9:30 am	90	298' 1"	296' 1"	
3/3/14	9:45 am	105	304' 3"	302' 3"	
3/3/14	10:00 am	120	309' 3"	307' 3"	
3/3/14	10:15 am	135	314' 8"	312' 8"	
3/3/14	10:30 am	150	316' 2"	314' 2"	
3/3/14	10:45 am	165	318' 9"	316' 9"	
3/3/14	11:00 am	180	320' 5"	318' 5"	
3/3/14	11:15 am	195	321' 7"	319' 7"	
3/3/14	11:30 am	210	321' 8"	319' 8"	
3/3/14	11:45 am	225	321' 9"	319' 9"	
3/3/14	12:00 pm	240	321' 11"	319' 11"	

Recovery Data

Date	Time	Time Since Pump Stopped (minutes)	Depth to Water Below Measuring Pt	Depth to Water Below Land Surface	Comments
3/3/14	12:02 pm	2	277' 3"	275' 3"	
3/3/14	12:04 pm	4	256' 7"	254' 7"	
3/3/14	12:06 pm	6	237' 1"	235' 1"	
3/3/14	12:08 pm	8	220' 6"	218' 6"	
3/3/14	12:10 pm	10	203' 4"	201' 4"	
3/3/14	12:15 pm	15	181' 2"	179' 2"	
3/3/14	12:20 pm	20	162' 9"	160' 9"	
3/3/14	12:25 pm	25	145' 3"	143' 3"	
3/3/14	12:30 pm	30	129' 4"	127' 4"	
3/3/14	12:45 pm	45	98' 2"	96' 2"	
3/3/14	1:00 pm	60	83' 7"	81' 7"	
3/3/14	1:15 pm	75	73' 5"	71' 5"	
3/3/14	1:30 pm	90	64' 10"	62' 10"	
3/3/14	1:45 pm	105	57' 2"	55' 2"	
3/3/14	2:00 pm	120	53' 1"	51' 1"	
3/3/14	2:15 pm	135	41' 4"	39' 4"	
3/3/14	2:30 pm	150	34' 4"	32' 4"	
3/3/14	2:45 pm	165	31' 7"	29' 7"	
3/3/14	3:00 pm	180	27' 11"	25' 11"	
3/3/14	3:15 pm	195	24' 3"	22' 3"	
3/3/14	3:30 pm	210	22' 6"	20' 6"	
3/3/14	3:45 pm	225	19' 5"	17' 5"	
3/3/14	4:00 pm	240	17' 3"	15' 3"	
3/3/14	5:00 pm	300	13' 6"	11' 6"	
3/3/14	7:00 pm	360	11'	9'	well fully recovered

Additional forms can be obtained from our web site at: http://www.wrd.state.or.us

ATTACH - C - 1/22

From: ORLOWSKI Dennis R * WRD
Sent: Tuesday, May 16, 2023 10:02 AM
To: Eric Urstadt
Cc: CLARK Gerald E * WRD; FERREIRA Gabriela R * WRD
Subject: RE: TownsendFarms, Inc. - Opinion of well compliance to the intent of the well conditions – permit G-15205 (appl G-15271) or develop a way to mitigate concerns of Water Resources Department (WRD)

Eric,

I understand you recently chatted with Gerry Clark, during which he might have mentioned my revised findings, as documented in the attached memorandum.

Please attach this memorandum to the claim when you resubmit it to Gerry.

Thanks,
Dennis

From: Eric Urstadt <ericurstadt@hotmail.com>
Sent: Tuesday, April 11, 2023 6:01 PM
To: ORLOWSKI Dennis R * WRD <Dennis.R.ORLOWSKI@water.oregon.gov>
Subject: Re: TownsendFarms, Inc. - Opinion of well compliance to the intent of the well conditions – permit G-15205 (appl G-15271) or develop a way to mitigate concerns of Water Resources Department (WRD)

Dennis,
If possible, my client wants me to come in and meet with your team and discuss the issue and potential alternatives. My schedule is very flexible and this is important to my client.

Sent from my iPhone
Eric Urstadt
Ericurstadt@hotmail.com
503.647.1919(h)
971.250.1520(c)

On Apr 11, 2023, at 2:20 PM, ORLOWSKI Dennis R * WRD <Dennis.R.ORLOWSKI@water.oregon.gov> wrote:

Eric,

I've brought myself up to speed with this issue, but will need to discuss internally with other staff before we can provide you with a definitive response. I'm trying to meet with them within the next couple of days, so you should hear from me later this week.

Regards,
Dennis

From: ORLOWSKI Dennis R * WRD
Sent: Monday, April 10, 2023 3:51 PM
To: Eric Urstadt <ericurstadt@hotmail.com>
Subject: RE: TownsendFarms, Inc. - Opinion of well compliance to the intent of the well conditions – permit G-15205 (appl G-15271) or develop a way to mitigate concerns of Water Resources Department (WRD)

Hi Eric,

I received your voice message from last Friday (incidentally I was on leave that day). I'm starting to look into this now, and will be in touch soon to discuss (tomorrow most likely).

Please note that my OWRD cell phone number is 971-283-6429, so please call that number in the future (the other number you called is my personal phone, which I no longer have to use for work since the Department issued us work cell phones).

Thanks,
Dennis

Dennis Orlowski, RG
Hydrogeologist, Groundwater Section
725 Summer Street NE, Suite A Salem, OR 97301 | Cell: 971-283-6429

<image001.png>
Integrity | Service | Technical Excellence | Teamwork | Forward-Looking

From: Eric Urstadt <ericurstadt@hotmail.com>
Sent: Friday, April 7, 2023 9:24 AM
To: BROWN Travis C * WRD <Travis.C.BROWN@water.oregon.gov>
Cc: ORLOWSKI Dennis R * WRD <Dennis.R.ORLOWSKI@water.oregon.gov>; joe.tankersley@townsendfarms.com
Subject: Re: TownsendFarms, Inc. - Opinion of well compliance to the intent of the well conditions – permit G-15205 (appl G-15271) or develop a way to mitigate concerns of Water Resources Department (WRD)

Travis, Sorry that I got that wrong. And thanks for moving it on to the right person.
Eric

Sent from my iPhone
Eric Urstadt
Ericurstadt@hotmail.com
503.647.1919(h)
971.250.1520(c)

C-3/22

On Apr 7, 2023, at 2:46 AM, BROWN Travis C * WRD <Travis.C.BROWN@water.oregon.gov> wrote:

Hi Eric,

I was about to dive into this application, but realized it's actually in Dennis Orlowski's focus area. As such, I'm going to defer to him on whether WASH 56924 meets the intent of the construction condition for Permit G-15205.

Dennis – let me know if there's anything I can do to help.

Thanks,
Travis

Travis Brown, RG | Hydrogeologist – Groundwater Section

Pronouns: He/him/his
Email: Travis.C.Brown@water.oregon.gov | Phone: 971-301-3088
Address: 725 Summer St. NE, Suite A, Salem, OR 97301

<image001.png>
Integrity | Service | Technical Excellence | Teamwork | Forward-Looking

From: Eric Urstadt <ericurstadt@hotmail.com>
Sent: Monday, April 3, 2023 12:49 PM
To: BROWN Travis C * WRD <Travis.C.BROWN@water.oregon.gov>
Cc: Joe Tankersley <joe.tankersley@townsendfarms.com>
Subject: TownsendFarms, Inc. - Opinion of well compliance to the intent of the well conditions – permit G-15205 (appl G-15271) or develop a way to mitigate concerns of Water Resources Department (WRD)

Mr. Travis Brown,
Joe Tankersley of Townsend Farms has requested that I schedule a time to meet with you in Salem (and/or Water Resources Department) about the above matter. Please let me know if there are any times available for that; my schedule is very open at this time. Below is a summary of the reason for the meeting.

My client, Townsend Farms, Inc, has water right permit G-15205, and we are trying to resolve a permitting issue with the well, which tripped up a 2015 Claim of Beneficial Use (COBU) for the permit. The exact well condition in the permit is copied below.

<image.png>

The permit conditions are clear and the well construction person has told us that the well does not meet the well construction requirements in the permit, so it typically follows that must drill a new well and we have time do do that. However, we request that you and/or WRD review the well to see if the existing well does meet the *intent* of the permit requirements or if there is any other way the concerns of WRD can be mitigated while using the existing well.

C-4/22

There is one main reason that Townsend does not want to attempt to drill a new well to meet the conditions. The well driller (who has a very good reputation) believes, and the well log information indicates, that drilling a new well to meet the permit well construction requirements (as interpreted currently) will mostly likely (almost certainly) result in a well that has little or no water production. Perhaps you will see something different. So Townsend Frams is legitinately concerned that they will drill a new well, getting little or no water production, all when the current well did meet the *intent* of the WRD conerns.

My interpetation of the groundwater review records is that the intent of the conditions were likley develpoed to prevent adverse effects to other groundwater user in the area. The well has been used for many years at full production with no known problems anywhere around the area. A while ago, I have checked with the local Watermaster, Jake Constans, for this information.

Information relating to the issue information is attached in case you have time to do a quick review and also as a basis of information for the meeting. A quick second look with your groundwater expertise will be greatly appreciated. Below is a short discussion of my current thinking about the issue:

The attached information is:

1. Subject well log - WASH_56924
2. Permit - G-15205 (and map)
3. Email Chain – (from 2017)

An email chain from 2017 discusses prior WRD thoughts and issues is attached.
The main issues are below:

1. WRD stated because the seal is made of two different types of seals (sections of both cement and bentonite) that the seal was not one continuous seal. I talked to the well driller, Jannsen/Bigsby, who is a highly-regarded driller in the area, and he also thought that the meaning of the condition was simply a continuous seal and not a requirement for one type of seal only in the well.
2. The requirement to go "20 feet into hard dense basalt" was apparently (per the mail chain) interpreted by WRD to mean the seal needed to go to 374 feet when the well log seal goes to 364 feet, or 10 feet short.

To me, of critical importance, and maybe where you can help us is the question of, "Does the constructed well meet the intent of the permit conditions?".

Marc Norton, of WRD, did the groundwater review in early 2001. I have his printed report, but not in an electronic format, so I have not attached that.

His reasoning for the specific conditions is not clear to me; however, he must have thought there might be adverse effects to nearby wells as shown in his report, so he added the specific well conditions to prevent any adverse effects by this well.

This is a valid goal and Marc Norton was trying to foresee the future. However; we have the advantage of knowing that the well has not adversely affected any wells in the area because we know of no complaints. I have asked the Watermaster. Jake Constans, and he said he doesn't recall any such issues in the area. Jake did say that the Salem Groundwater Section might have better records of this, and I have not pursued this. The area is the **taxlot 1000 in SE ¼, S29, T2N, R3W** – just northeast of Banks, OR.

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JUN 21 2023
OWRD

C-5/22

Per the well log, if the well was to be sealed 20' into the "hard dense basalt" (starting at 426 feet), the well would be sealed off from the water bearing zone (being 377-426 feet).

Townsend Farms bought the farm back 2013 or 2014. They grow berries and obviously use lots of water. The well has been pumped very hard, when needed, for several years. If the well was going to adversely effect another water user or water source, it certainly would have happened and been noticed by now.

The well might not quite exactly meet the specified conditions, but the well construction satisfy the intent of WRD's concerns. Do you agree with this?

Or, in your review, if you can think of some solution other than to completely reconstruct the well and decommission the current well?

Respectfully,

Eric Urstadt, PE, PLS, CWRE
Aspen Rural Land Consulting
Water Rights – Forestry – Rural Land Engineering – Land Surveying
(971) 250-1520 (cell, text, voicemail)

<WASH_56924.pdf>
<G_15205Map.pdf>
<G_15205.pdf>
<SangLeeWellEmailChain1.pdf>

C-6/22

State of Oregon **Water Resources Department**

Interoffice Memorandum *May 15, 2023*

To: Gerry Clark, Certificate Section

From: Dennis Orlowski, Groundwater Section

Subject: WASH 56924 – Well Sealing Requirements, COBU for Permit G-15205 (Townsend Farms)

Background

In 2017, a Claim of Beneficial Use (COBU) for permit G-15205 that was submitted in 2015 was flagged for denial by OWRD Certificates staff because the authorized POA, WASH 56924, did not strictly meet the following permit condition: "*The well shall be continuously cased and continuously sealed to a minimum depth of 20 feet into hard dense basalt.*"

WASH 56924 is 462 feet deep and obtains groundwater from water-bearing portions of the Columbia River Basalt Group (CRBG) (see attached well log). WASH 56924 is fully cased from 0-364 feet below land surface (ft bls), and sealed with cement grout from 0-60 and 348-364 ft bls; open borehole is present below the casing from 364 to 462 ft bls. The WASH 56924 well log also indicates that between 60 and 348 ft bls the annular space was "backfilled" with bentonite, but according to Kris Byrd[1] this does not constitute a continuous seal between the over- and underlying grouted portions.

In late 2017 the permit holder's agent, Eric Urstadt of Aspen Rural Land Consulting, communicated with several OWRD staff to discuss potential remedies to reconcile the fact that WASH 56924 does not strictly meet the well seal condition established by permit G-15205. Aurora Bouchier of the Groundwater Section concluded that in order to satisfy the permit well seal condition, WASH 56924 would have to be "continuously cased and continuously sealed to a depth of 374 feet." After Kris Byrd determined that there was not an acceptable method to retroactively construct a continuous seal in WASH 56924 to 374 ft bls, Aurora concluded that "…a new well will need to be constructed" because it does not meet the permit-conditioned well sealing requirements.[2]

Application G-15271 was submitted in December 2000, and permit G-15205 was issued in September 2002. WASH 56924 was completed in January 2001, during the period when the application was being processed by OWRD. Townsend Farms acquired the permit when they purchased the associated farm in 2013 or 2014, and since that time have pumped WASH 56924 to irrigate berry crops, presumably up to the maximum rates and duties authorized by permit G-15205.

An extension request for permit G-15205 was approved on May 19, 2017; the extended permit completion date is October 1, 2023.

In light of this pending permit expiration date, Eric Urstadt recently contacted me with a request to resume discussions about WASH 56924, specifically to address his and the permit holder's contention that the *well, as-constructed, meets the intent of the permit seal condition requirement.*[3]

Revised Conclusions and Recommendation

Well seals serve several purposes: (1) prevent contaminated substances from migrating from the ground to the subsurface by providing a tight seal between the upper well casing and the surrounding formation; (2) prevent commingling of groundwater between discretely-different aquifers; (3) mitigate potential interference with neighboring wells or streams.

In areas where little is known about existing subsurface conditions, Groundwater Section staff will often recommend the most conservative well sealing method, i.e., to continuously case and continuously seal from land

[1] See attached email communication, November 14, 2017
[2] See attached email communications Sept-Nov, 2017
[3] See attached 4/7/2023 email from Eric Urstadt

C-7/22

surface to just above a principal water-bearing zone, as was done for the groundwater review for permit G-15205 (application G-15271).

After reviewing the most up-to-date information and consulting with Well Construction staff, I have concluded the following key points:

- **WASH 56924 meets current minimum well construction/seal requirements**
  - *Notwithstanding the well sealing condition of permit G-15205*, according to Well Construction staff WASH 56924 meets current minimum well seal requirements.[4]
  - WASH 56924 has a split seal (0-60 and 348-364 ft bls) that complies with current allowable sealing methods for under-reamed drillholes (OAR 690-210-0150); the lower seal effectively isolates the underlying water-bearing zones from shallower zones, i.e., prevents commingling.
- **Long-term groundwater conditions have been stable**
  - When the groundwater review for application G-15271 was completed in 2001, there was much less data available to rely upon compared to the present day.
  - But now, with the benefit of having more than 20 years of additional groundwater level data from WASH 56924 and other nearby wells, it is clear that generally stable conditions have been present in the CRBG aquifer in this area (see attached hydrograph - note that WASH 7651 and WASH 62373 are City of Banks municipal wells that are pumped year-round, hence the greater variability of those levels).
  - Actually, despite being actively pumped as an irrigation well since 2001, water levels in WASH 56924 have experienced a modest overall *increase* as of early 2023 (~5 feet).
- **There have been no reported well interference complaints in the area around WASH 56924**
  - Lack of interference complaints suggests that groundwater conditions in the local CRBG aquifer are capable of sustaining all existing groundwater uses, and that use of WASH 56924 in particular, *as currently constructed*, is not adversely affecting neighboring wells.
- **Compliance with existing permit well seal condition would not result in a measurable difference in existing groundwater conditions**.
  - It is highly unlikely that constructing a new well to the same approximate depth as WASH 56924, but cased and sealed as stipulated in permit G-15205, would result in groundwater conditions any different than those that currently exist.

From this information and additional analysis, **I conclude that the existing seal configuration of WASH 56924 adequately meets the intended purposes, i.e., it prevents undue interference with other wells and commingling of aquifers.** Therefore, I recommend that the Water Rights Section reconsider imposing the well seal condition of permit G-15205 when evaluating the COBU that was submitted in 2015 for that permit.

[4] See attached 4/20/2023 email from Tommy Laird

C-8/22

RECEIVED WASH 56924

JAN 19 2001
WATER RESOURCES DEPT
SALEM, OREGON

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)
Instructions for completing this report are on the last page of this form.

WELL I.D. # L 45731
START CARD # 137400

(1) OWNER: Well Number
Name JOSEPH E. REGAN
Address 31233 FRENCH PRAIRE RD.
City WILSONVILLE State OR Zip 97070

(2) TYPE OF WORK
[X] New Well [ ] Deepening [ ] Alteration (repair/recondition) [ ] Abandonment

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

(4) PROPOSED USE:
[X] Domestic [ ] Community [ ] Industrial [ ] Irrigation
[ ] Thermal [ ] Injection [ ] Livestock [ ] Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval [ ] Yes [X] No Depth of Completed Well 462 ft.
Explosives used [ ] Yes [X] No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Sacks or pounds
12"	0	60	Cement	0	60	36 sks
10"	60	364	Cement	348	364	10 sks
8"	364	462				

How was seal placed: Method [ ] A [X] B [X] C [ ] D [ ] E
[ ] Other
Backfill placed from 60 ft. to 348 ft. Material Bentonite
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8"	+2	364	250	[X]	[ ]	[X]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]
Liner:					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
[ ] Perforations Method
[ ] Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]

(8) WELL TESTS: Minimum testing time is 1 hour
[ ] Pump [ ] Bailer [X] Air [ ] Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
120		460	1 hr.
90		300	"
45		100	"

Temperature of water 54°F Depth Artesian Flow Found
Was a water analysis done? [X] Yes By whom AMJ
Did any strata contain water not suitable for intended use? [ ] Too little
[ ] Salty [ ] Muddy [ ] Odor [ ] Colored [ ] Other
Depth of strata:

(9) LOCATION OF WELL by legal description:
County WASHINGTON Latitude Longitude
Township 2N N or S Range 3W E or W WM
Section 29 SW 1/4 SE 1/4
Tax Lot 1000 Lot Block Subdivision
Street Address of Well (or nearest address) 39385 NW BANKS RD
BANKS, OR 97106

(10) STATIC WATER LEVEL:
17 ft. below land surface. Date 01/15/01
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 377

From	To	Estimated Flow Rate	SWL
377	426	120 gpm	17

(12) WELL LOG:
Ground Elevation

Material	From	To	SWL
Brown clay	0	16	
Sticky gray clay	16	29	
Sticky brown clay	29	35	
Red-brown decomp rock & clay	35	54	
Sticky gray clay	54	60	
Sticky red-brown clay & decomp rock	60	115	
Soft red-brown decomp rock	115	172	
Brown & gray-brown rock, weathered	172	325	
Soft gray-brown basalt, brkn	325	354	
Gray-brown & brown basalt, frac. w/broken strks.	354	426	17
Hard gray basalt w/gray-black strks.	426	438	
Gray-brown basalt	438	444	
Gray basalt	444	462	

Date started 01/08/01 Completed 01/15/01

(unbonded) Water Well Constructor Certification:
I certify that the work I performed on the construction, 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.
WWC Number 1492
Signed Mark Bippy Date 01/16/01

(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 water supply well construction standards. This report is true to the best of my knowledge and belief.
WWC Number 1266
Signed Date 01/16/01

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

RECEIVED
JUN 21 2023
OWRD

C-9/22

2017 Email Correspondence

C-10/22

From: BYRD Kristopher R * WRD
Sent: Tuesday, November 14, 2017 4:09 PM
To: Eric Urstadt
Cc: BOUCHIER Aurora C * WRD; Roy Jannsen – Jannsen Well Drilling (jannsenwelldrilling@frontier.com); joe@townsendfarms.com; JEFFERY Joel W * WRD; BYRD Kristopher R * WRD; gerald.e.clark@state.or.us **Subject:** RE: Townsend HB, LLC Application G–15271, Permit G–15205 – determination by WRD GW staff – the well that was constructed and claimed does NOT meet permit conditions

Mr. Urstadt,

I reviewed the information you submitted regarding your proposal to alter the well identified as "WASH 56924" in order to bring it into compliance with the permit condition detailed below. Your proposal includes:

1. Perforating the 8" casing with a special perforating tool at several depths along the entire depth of the existing 8" casing.
2. Placing a 6" casing inside the existing 8" casing to a depth of 374'.
3. Then pressure grout the annular space between the 6 and 8" casing, and via the perforations also pressure grout the annular space between the 8" casing and the earth.

Unfortunately, the repair method you describe is not considered a continuous case and seal. In addition, the grout placement method you provided does not meet our minimum well construction standards for the installation of an annular seal. The only way to properly place continuous casing and seal, as required, would be to completely remove the existing casing and seal, clean out the borehole to the appropriate depth and diameter, and then place a continuous grout seal from at least 374 feet BGS to land surface. If your licensed well constructor chooses to repair the existing well in this manner, feel free to have them contact us. We would be happy to come out to the site with our down hole camera prior to the continuous seal being placed in order to verify that 374 feet is the appropriate casing and seal depth.

Please let me know if I can be of further assistance,

Kris

Kristopher R. Byrd, Manager
Well Construction and Compliance
Section Oregon Water Resources
Department (503) 986-0851 Direct Line
(503) 986-0902 Fax
We're on the Web: www.wrd.state.or.us

From: Eric Urstadt [mailto:ericurstadt@hotmail.com]
Sent: Tuesday, November 14, 2017 10:54 AM
To: BYRD Kristopher R * WRD
Cc: BOUCHIER Aurora C * WRD; Roy Jannsen - Jannsen Well Drilling (jannsenwelldrilling@frontier.com); joe@townsendfarms.com
Subject: RE: Townsend HB, LLC Application G-15271, Permit G-15205 - determination by WRD GW staff

C-11/22

- the well that was constructed and claimed does NOT meet permit conditions

Mr. Kris Byrd,
You have been mentioned ase the expert in well construction at the Water Resources Department (WRD), and this email is written to ask for your opinion relating to a well construction proposal. Can you give a bit of your time to review this unusual well construction matter?

The attached well log is for the a permit for which the subject permit condition is copied below:

> The well shall be continuously cased and continuou
> minimum depth of 20 feet into hard dense basalt.

Aurora's email below suggests that if we continuously seal and case to a depth of 374', then the altered well would meet this condition, which is our goal.

The well constructor, Roy Jannsen, of Jannsen Well Drilling, says he could accomplish a continuous case and seal (and meet the intentions of the seal) by:

1. Perforating the 8" casing with a special perforating tool at several depths along the entire depth of the existing 8" casing.
2. Placing a 6" casing inside the existing 8" casing to a depth of 374'.
3. Then pressure grout the annular space between the 6 and 8" casing, and via the perforations also pressure grout the annular space between the 8" casing and the earth.

We believe that this will constitute a continuous case and seal to the depth required. We also believe this will meet the main intent of the case and seal – to prevent intermixing of water in different aquifers.

Roy Jannsen has been in the business a long time and he says he can provide a continuous seal (and case) using this procedure with his equipment.

Since you are the WRD expert on well construction,

- Do you agree with the method described above?
- Is there anything other idea that you would recommend?
- Do you have any questions or clarifications to add?

Thank you (in advance) for your time in helping us with this matter.

Eric Urstadt, PE, PLS
Aspen Rural Land Consulting
Engineering, Surveying, Water Rights, Reservoirs, Forestry
Licensed in Oregon and Washington
(971) 250-1520 (voice, message, text)

C-12/22

From: Eric Urstadt
Sent: Friday, October 13, 2017 10:31 AM
To: 'BOUCHIER Aurora C * WRD' <Aurora.C.Bouchier@oregon.gov>
Subject: RE: Townsend HB, LLC Application G–15271, Permit G–15205 – determination by WRD GW staff – the well that was constructed and claimed does NOT meet permit conditions

Aurora,
Thanks for the reply. I found your email in my junk folder along with some other WRD things.
AArggh Eric

From: BOUCHIER Aurora C * WRD [mailto:Aurora.C.Bouchier@oregon.gov]
Sent: Wednesday, October 11, 2017 12:07 PM
To: Eric Urstadt <ericurstadt@hotmail.com>
Cc: CLARK Gerald E * WRD <Gerald.E.Clark@oregon.gov>; IVERSON Justin T * WRD <Justin.T.Iverson@oregon.gov>; ORLOWSKI Dennis R * WRD <Dennis.R.Orlowski@oregon.gov>; BYRD Kristopher R * WRD <Kristopher.R.Byrd@oregon.gov>
Subject: RE: Townsend HB, LLC Application G–15271, Permit G–15205 – determination by WRD GW staff – the well that was constructed and claimed does NOT meet permit conditions

Hello Eric,

Unfortunately, we do not have the ability to remove permit conditions. This eliminates option 2 which you outlined.

Deepening the well as described in option 3 does not address the 'continuously sealed' condition and is therefore not a viable solution. Therefore a new well will need to be constructed.

Looking at the well log, water was encountered from 377 to 426 feet below land surface, and the water level rose 360 feet above the water bearing zone. The log describes *grey–brown and brown fractured basalt with broken streaks* from 354 to 426 feet. Given this log, which is the best knowledge available at this specific location, there is an ability to CONTINUSOULY CASE **AND CONTINUOUSLY SEAL** to a depth of 374 feet, which would be 20 feet into the basalt unit overlying, and presumably confining, the water bearing zone. I have spoken with Kris Byrd, the Well Construction and Compliance Manager (copied on this email), regarding this permit. There is a possibility that Well Construction may be available to work with the driller and run a video log down the well to assist with selecting the seal/casing depth.

Regardless of location for a new well (adjacent to the current well [option 4], or in a different tax lot [option 1]), a permit amendment will need to be submitted. Permits are tied to specific wells and therefore any change in well requires an amendment.

I hope this information is

useful. Cheers.
Aurora Bouchier, R.G.
Hydrogeologist Oregon Water Resources Department

C-13/22

725 Summer St., NE, Suite A
Salem, OR 97301-1271
503.986.0841
Aurora.C.Bouchier@oregon.gov

"All the water that will ever be is, right now." –National Geographic, October 1993

"When the well is dry, we know the worth of water." –Benjamin Franklin, Poor Richard's Almanack, 1746

From: ORLOWSKI Dennis R * WRD
Sent: Monday, October 02, 2017 2:16 PM
To: Eric Urstadt
Cc: CLARK Gerald E * WRD; BOUCHIER Aurora C * WRD; IVERSON Justin T * WRD
Subject: RE: Townsend HB, LLC Application G-15271, Permit G-15205 - determination by WRD GW staff - the well that was constructed and claimed does NOT meet permit conditions

Hello Eric,

In reviewing the OWRD file for this permit, I noticed that Aurora Bouchier of the Groundwater Staff was involved in previous discussions related to well construction. Therefore, I will be asking Aurora (copied here) to resume her role in these discussions.

Regards

,
Dennis

From: Eric Urstadt [mailto:ericurstadt@hotmail.com]
Sent: Thursday, September 28, 2017 9:59 AM
To: ORLOWSKI Dennis R * WRD
Cc: 'joe@townsendfarms.com'
Subject: FW: Townsend HB, LLC Application G-15271, Permit G-15205 - determination by WRD GW staff - the well that was constructed and claimed does NOT meet permit conditions

Dennis,
Here is the information on the project I discussed a few minutes ago. I suspect that this topic might need someone like Dwight French to be a part of. He might know of other options that we don't think of.

Eric Urstadt, PE, PLS
Aspen Rural Land Consulting
Engineering, Surveying, Water Rights, Reservoirs, Forestry
Licensed in Oregon and Washington
(971) 250-1520 (voice, message, text)

C- 14/22

From: Eric Urstadt
Sent: Friday, September 08, 2017 11:24 AM
To: 'gerald.e.clark@state.or.us' <gerald.e.clark@state.or.us>
Subject: FW: Townsend HB, LLC Application G−15271, Permit G−15205 − determination by WRD GW staff − the well that was constructed and claimed does NOT meet permit conditions

Gerry,
Meeting Request

Per our conversation the other day .....I see now that you have seen this file before. Since the email below, we have successfully extended the time for the permit so any issues can be resolved (which was option 1 down below). The owner has "big" money invested and very much needs this well to continue operations.

The main issue is the permit condition that is copied below in large text.

So now, with the extension of time, we want to determine all of our potential paths to success. I'm requesting a meeting with the people at the State that can help us develop some ideas and weigh in on our ideas to resolve this. It seems the groundwater section would have a lot of input. The well driller has a lot of expertise in well drilling in the area and construction and reconstruction. Currently, we believe some potential options are:

1. Move well to another site (or tax lot). It is expected by the well driller that the Roofner tract (to the South) will more likely have ground conditions for a well that can meet the permit conditions. They have the ability to convey water back and forth. If possible, I expect this would require a "permit amendment" that would likely need another GW review.
2. Monitor of wells in the area to determine if any adverse impact will occur. This would mean effectively removing the permit well condition by mitigating for the concerns that inspired the condition. Inspection of the GW Section notes implies that adverse effects to other wells in the aquifer nearby would occur unless the subject condition was utilized.
3. Deepen the Sang Lee well hoping to hit water further down and using a concrete seal between the current 8" casing and new 6" casing − will WRD agree this seal is adequate?
4. Re−drill the well near to the current well and see what one finds….and how far can we get away from permitted coordinates without permit amendment?.
5. There might be other solutions that we have not thought of or considered at all.

The goal is to have a good outcome for Townsend, the Water Resources Department, and the public, and I hope you can help.

Thanks for your help.

Eric Urstadt, PE, PLS
Aspen Rural Land Consulting
Engineering, Surveying, Water Rights, Reservoirs, Forestry
Licensed in Oregon and Washington
(971) 250-1520 (voice, message, text)

C-15/22

Hi Eric,

Permit G–15205 has the following condition:

The well shall be continuously cased and continuou minimum depth of 20 feet into hard dense basalt.

Well 1 (WASH 56924) does NOT meet the construction standards of being continuously cased AND continuously sealed to a minimum depth of 20 feet into hard dense basalt; therefore, this well cannot be approved given its construction.

Because this permit condition was not met, the water user has NOT made proof by demonstrating beneficial use within the time window and meeting all terms and conditions of the permit; therefore, I am unable to issue a certificate. Based on information in the Claim of Beneficial Use (Claim) report and map, the Department will issue a final order of certification (denial).

Options may include (but not limited to):

1) Withdraw the Claim and 2) apply for an Extension of time – please discuss extension application with Corey Courchane at 503–986–0825 or Jeffrey Pierceall at 503–986–0802.
   - Then, alter the constructed well (WASH 56924) in order to meet all permit conditions. Please discuss alteration of well with Joel Jeffrey at 503–986–0852 or Kris Bryd at 503–986–0851, with the Department's Well Compliance and Construction Section.

2) Withdraw the Claim and 2) apply for an Extension of time.
   - And 3) apply for permit amendment to add a well that will meet all permit conditions. Please discuss permit amendment application with Kelly Starnes at 503–986–0886, with the Department's Transfer Section.

Please let me know how you wish to

proceed. Kerry

Kerrp Kavanagh | Reimbursement Authority, Certificates, Water Right Services Division

Oregon Water Resources Department | 725 Summer St. NE, Suite A, Salem, Oregon 97301 Voice 503.986.0927 | Fax 503.986.0901
Email: Kerry.L.Kavanagh@oregon.gov Web: http://oregon.gov/ORWD

C-16/22

4/7/2023 Email from Eric Urstadt

C-17/22

From: Eric Urstadt <ericurstadt@hotmail.com>
Sent: Monday, April 3, 2023 12:49 PM
To: BROWN Travis C * WRD <Travis.C.BROWN@water.oregon.gov>
Cc: Joe Tankersley <joe.tankersley@townsendfarms.com>
Subject: TownsendFarms, Inc. - Opinion of well compliance to the intent of the well conditions – permit G-15205 (appl G-15271) or develop a way to mitigate concerns of Water Resources Department (WRD)

Mr. Travis Brown,
Joe Tankersley of Townsend Farms has requested that I schedule a time to meet with you in Salem (and/or Water Resources Department) about the above matter. Please let me know if there are any times available for that; my schedule is very open at this time. Below is a summary of the reason for the meeting.

My client, Townsend Farms, Inc, has water right permit G-15205, and we are trying to resolve a permitting issue with the well, which tripped up a 2015 Claim of Beneficial Use (COBU) for the permit. The exact well condition in the permit is copied below.

The well shall be continuously cased and continuously sealed tc minimum depth of 20 feet into hard dense basalt.

The permit conditions are clear and the well construction person has told us that the well does not meet the well construction requirements in the permit, so it typically follows that must drill a new well and we have time do do
that. However, we request that you and/or WRD review the well to see if the existing well does meet the *intent* of the permit requirements or if there is any other way the concerns of WRD can be mitigated while using the existing well.

There is one main reason that Townsend does not want to attempt to drill a new well to meet the conditions. The well driller (who has a very good reputation) believes, and the well log information indicates, that drilling a new well to meet the permit well construction requirements (as interpreted currently) will mostly likely (almost certainly) result in a well that has little or no water production. Perhaps you will see something different. So Townsend Frams is legitinately concerned that they will drill a new well, getting little or no water production, all when the current well did meet the *intent* of the WRD conerns.

My interpetation of the groundwater review records is that the intent of the conditions were likley develpoed to prevent adverse effects to other groundwater user in the area. The well has been used for many years at full production with no known problems anywhere around the area. A while ago, I have checked with the local Watermaster, Jake Constans, for this information.

Information relating to the issue information is attached in case you have time to do a quick review and also as a basis of information for the meeting. A quick second look with your groundwater expertise will be greatly appreciated. Below is a short discussion of my current thinking about the issue:

The attached information is:

A. Subject well log - WASH_56924
B. Permit - G-15205 (and map)
C. Email Chain – (from 2017)

C-18/22

An email chain from 2017 discusses prior WRD thoughts and issues is attached. The main issues are below:

- WRD stated because the seal is made of two different types of seals (sections of both cement and bentonite) that the seal was not one continuous seal. I talked to the well driller, Jannsen/Bigsby, who is a highly-regarded driller in the area, and he also thought that the meaning of the condition was simply a continuous seal and not a requirement for one type of seal only in the well.
- The requirement to go "20 feet into hard dense basalt" was apparently (per the mail chain) interpreted by WRD to mean the seal needed to go to 374 feet when the well log seal goes to 364 feet, or 10 feet short.

To me, of critical importance, and maybe where you can help us is the question of, "Does the constructed well meet the intent of the permit conditions?".

Marc Norton, of WRD, did the groundwater review in early 2001. I have his printed report, but not in an electronic format, so I have not attached that.

His reasoning for the specific conditions is not clear to me; however, he must have thought there might be adverse effects to nearby wells as shown in his report, so he added the specific well conditions to prevent any adverse effects by this well.

This is a valid goal and Marc Norton was trying to foresee the future. However; we have the advantage of knowing that the well has not adversely affected any wells in the area because we know of no complaints. I have asked the Watermaster. Jake Constans, and he said he doesn't recall any such issues in the area. Jake did say that the Salem Groundwater Section might have better records of this, and I have not pursued this. The area is the **taxlot 1000 in SE ¼, S29, T2N, R3W** – just northeast of Banks, OR.
Per the well log, if the well was to be sealed 20' into the "hard dense basalt" (starting at 426 feet), the well would be sealed off from the water bearing zone (being 377-426 feet).

Townsend Farms bought the farm back 2013 or 2014. They grow berries and obviously use lots of water. The well has been pumped very hard, when needed, for several years. If the well was going to adversely effect another water user or water source, it certainly would have happened and been noticed by now.

The well might not quite exactly meet the specified conditions, but the well construction satisfy the intent of WRD's concerns. Do you agree with this?

Or, in your review, if you can think of some solution other than to completely reconstruct the well and decommission the current well?

Respectfully,
Eric Urstadt, PE, PLS, CWRE
Aspen Rural Land Consulting
Water Rights – Forestry – Rural Land Engineering – Land Surveying (971) 250-1520 (cell, text, voicemail)

C-19/22

4/20/2023 Email from Tommy Laird (OWRD WCC)

C-20/22

ORLOWSKI Dennis R * WRD

From: LAIRD Tommy K * WRD
Sent: Thursday, April 20, 2023 1:39 PM
To: ORLOWSKI Dennis R * WRD
Cc: BYRD Kristopher R * WRD
Subject: RE: WASH 56924 (Townsend Farms) - current compliance?

Dennis,

I reviewed WASH 56924 (state.or.us) and it appears to meet minimum construction standards.

There appears to be no consolidated formation to seal into due to the formation below 60 feet being either weathered, decomposed, fractured, or broken. Therefore, a minimum 18-foot seal would be needed. Since the upper seal is to 60 feet the well appears to be sufficiently sealed.

Get back to me with any questions,

Tommy Laird
Well Construction Program Coordinator
Oregon Water Resources Department
725 Summer Street NE, Suite A Salem, OR 97301
Cell 503-302-8618

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From: BYRD Kristopher R * WRD <Kristopher.R.BYRD@water.oregon.gov>
Sent: Wednesday, April 19, 2023 10:00 AM
To: LAIRD Tommy K * WRD <Tommy.K.LAIRD@water.oregon.gov>
Subject: FW: WASH 56924 (Townsend Farms) - current compliance?

Hi Tommy,
Can you please respond to this question.
Thanks

Kristopher Byrd
Well Construction Section Manager
725 Summer St NE Suite A | Salem OR 97301 | Phone 503-991-2470

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From: ORLOWSKI Dennis R * WRD <Dennis.R.ORLOWSKI@water.oregon.gov>
Sent: Wednesday, April 19, 2023 9:15 AM
To: BYRD Kristopher R * WRD <Kristopher.R.BYRD@water.oregon.gov>
Subject: WASH 56924 (Townsend Farms) - current compliance?

Hello Kris,

C-21/22

Regarding WASH 56924: you might remember this well from discussions several years ago with Eric Urstadt, Aurora, Gerry Clark, etc. (?). The issue has now landed in my lap!

Notwithstanding permit conditions that relate to well construction, would WASH 56924 meet current well construction standards?

Please give me a call to discuss if that would be

easier. Thanks,
Dennis

Dennis Orlowski, RG
Hydrogeologist, Groundwater Section
725 Summer Street NE, Suite A Salem, OR 97301 | Cell: 971-283-6429

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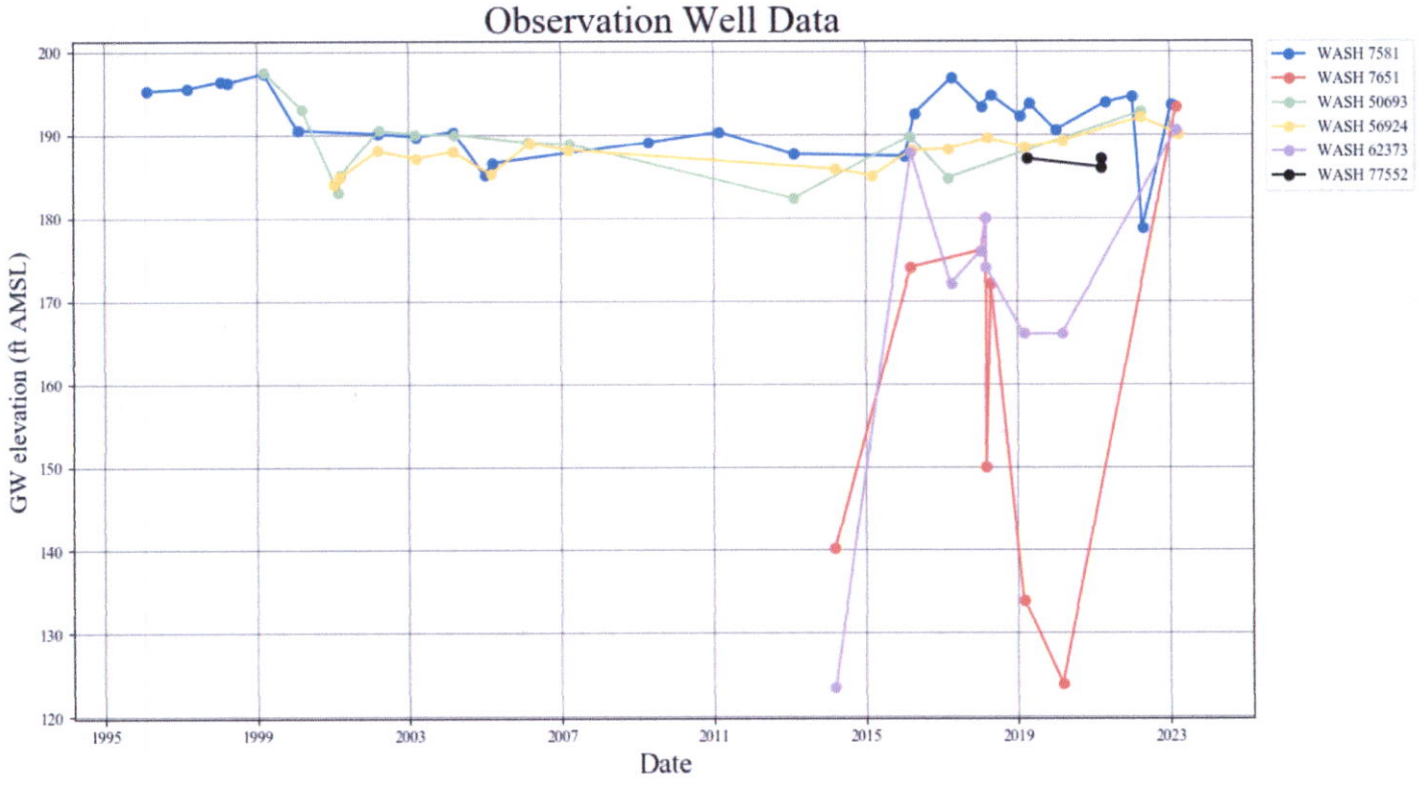
C-22/22

Hydrograph – Local CRBG Aquifer Wells (Jan-April only)



LAND SURVEYING PLANNING ENGINEERING WATER RIGHTS FORESTRY GPS & GIS

Stuntzner Engineering & Forestry, LLC

TELEPHONE (503) 357-5717
FAX (503) 357-5698
WEBSITE: www.stuntzner.com
2137 19th Avenue
Forest Grove, OR 97116

COOS BAY - FOREST GROVE - DALLAS - JUNCTION CITY

December 21, 2015

Oregon Water Resources Department
725 Summer Street NE, Ste. A
Salem, OR 97301-1266

RE: Permit G-15205

To Whom It May Concern:

A *Claim of Beneficial Use* has been completed for Permit G-15205. Accompanying the *Claim* is a *Certificate Reimbursement Authority Estimate Application*. You will find the following enclosed:

1. Check #3363 in the amount of $175 to cover the review fees for the *Claim of Beneficial Use*

2. The completed and signed *Claim of Beneficial Use*
   - Copy of Permit
   - March Static Water Measurements
   - Pump test
   - Water Use Reporting ID
   - Alternative Scale Approval
   - Drillers Well Log
   - Pump Calculation
   - Bulge System Letter
   - COBU map

3. Check #3364 in the amount of $125 for the application fee for *Reimbursement Authority*

4. The completed and signed *Certificate Reimbursement Authority Estimate Application*.

If you have any questions on this submitted material, please contact Jeffrey Kee at 503-357-5717 or jkee@stuntzner.com

Sincerely,
Stuntzner Engineering & Forestry LLC

Carol Taylor
Office Assistant