Water Right Conditions Tracking Slip

Groundwater/Hydrology Section

FILE ## G-17365
ROUTED TO: Kerry Kavanagh
~~
RANGE-SECTION: 225/33E-30
CONDITIONS ATTACHED? [1yes [1no REMARKS OR FURTHER INSTRUCTIONS:
additional wells
Reviewer Mike Zwart

PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

TO:		Wate	r Rights S	ection				Dat	e <u>March</u>	9, 2012		
FROM	ſ :	Grou	nd Water/	Hydrology	Section _		ael Zwart					
SUBJI	ECT:	Appli	cation G-	17365			iewer's Name persedes re	eview of	May 7,	2010 Date of Re	eview(s)	
OAR 6 welfare to deter	90-310-1 c, safety a mine whe	30 (1) and heal there	The Depart th as descri presumpti	<i>ibed in ORS</i> ion is establ	oresume tha 537.525. I ished. OAR	t a propos Departmen 690-310-	sed groundw t staff reviev 140 allows 1	w ground wat the proposed	ensure the pre er applications use be modified icies in place a	servation under OA	of the put AR 690-3	10-140 meet
A. <u>GE</u>	NERAL	INFO	RMATIC	<u>ON</u> : A	pplicant's N	Name:	Andy Roo	ot		County:_	Harney	y
A1.	Applica	nt(s) se	ek(s) <u>1.40</u>	0 cfs from	m <u>two</u>	well		Malheur I				_ Basin,
A2.	Propose	ed use:	Irri	igation, 113	3.2 acres	—— Seas		•	o October 31			
A3.						for existin	g wells; ma	rk proposed	l wells as such	under lo	gid):	
Well	Log		Applicant Well #	Ac	oposed quifer*	Propos Rate(ci	fs) (T	Location /R-S QQ-Q)	2250'	on, metes N, 1200' E	fr NW con	r S 36
2	HARN :		15* 14		nic seds.	0.891		3E-30 NW-9 3E-30 SW-9		N, 780' E		
3	HARN:	$\overline{}$	16		anic seds.	1.40?		3E-30 NW-8		N, 780' E		
4	HARN	206	17	Volca	nic seds.	1.40?	225/3	3E-30 NW-	SW 1500	' N, 50' E	fr SW cor	S 30
5 * Albuzi	um, CRB,	Padrook										
Well	Well Elev	First Water	SWL	SWL	Well Depth	Seal Interval	Casing Intervals	Liner Intervals	Perforations Or Screens	Well Yield	Draw Down	Test
	ft msl	ft bls	IT bis	Date ————	(ft)	(ft)	(ft)	(ft)	<u>(ft)</u>	(gpm)	(ft)	Туре
15 14	4147	97 124	16 65	6/1/08 7/23/08	400	0-48	0-58 0-118	None None	None None	300		Air Air
16	4140	35	18	12/14/11	310	0-33	0-118	None	None	400		Air
17	4138	?	6	1/23/66	345	0-20	0-71	None	None	341	51	Pmp
Lice data	from ann	lication f	for proposed	wells								
A4. same ao well wa	Comme	ents: <u>Ar</u> A propo well #10	oplicant prosed permi	oposes to c t amendme iginal appli	nt to add t	hese newe Note that	er wells to the this well wa	he existing p as originally	or this applica ermit was not located at 131	possible. 0' N, 1280	*Note tl	<u>hat this</u>
A5. 🗆	manage (Not all	ment of basin r	ules contair	iter hydrauli n such provi	cally conne sions.)	cted to sur	Basin ro	are, or 🛭	to the developr	nent, class vated by th	ification a	and/or ation.
A6. 🗌	Name o	f admin	istrative ar	ea:					er limited by a			striction.

Version: 08/15/2003

ROU	ND WATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400-010, 410-0070
Ba	sed upon available data, I have determined that ground water* for the proposed use:
a.	is over appropriated, is not over appropriated, or is cannot be determined to be over appropriated during any period of the proposed use. * This finding is limited to the ground water portion of the over-appropriation determination as prescribed in OAR 690-310-130;
b.	will not or will likely be available in the amounts requested without injury to prior water rights. * This finding is limited to the ground water portion of the injury determination as prescribed in OAR 690-310-130;
c.	will not or will likely to be available within the capacity of the ground water resource; or
d.	will, if properly conditioned, avoid injury to existing ground water rights or to the ground water resource: i. The permit should contain condition #(s)
a.	Condition to allow ground water production from no deeper than ft. below land surface;
b.	Condition to allow ground water production from no shallower than ft. below land surface;
c.	Condition to allow ground water production only from the ground water reservoir between approximately ft. and ft. below land surface;
	Water Section. Describe injury —as related to water availability— that is likely to occur without well reconstruction (interference w/ senior water rights, not within the capacity of the resource, etc):
Gr	ound water availability remarks: <u>Region Manager Ivan Gall recommends use of Condition 7N in this basin.</u>
_	
_	
_	
_	
	

continued

Date: March 9, 2012

Application G-17365

Application G-17365	continued
Application G-1/303	continuea

C. GROUND WATER/SURFACE WATER CONSIDERATIONS, OAR 690-09-040

C1. 690-09-040 (1): Evaluation of aguifer confinement:

Well	Aquifer or Proposed Aquifer	Confined	Unconfined
All	Tuffaceous sedimentary rocks and sediments	\boxtimes	
	(Tvs of GW Report 16)		
<u> </u>			

Basis for aquifer confinement evaluation: <u>Locally, the aquifer may be semiconfined to confined, but regionally it is unconfined and discharges to Malheur Lake.</u> The wells appear to develop a confined aquifer below a thick clay or claystone.

C2. **690-09-040** (2) (3): Evaluation of distance to, and hydraulic connection with, surface water sources. All wells located a horizontal distance less than ¼ mile from a surface water source that produce water from an unconfined aquifer shall be assumed to be hydraulically connected to the surface water source. Include in this table any streams located beyond one mile that are evaluated for PSI.

Well	SW #	Surface Water Name	GW Elev ft msl	SW Elev ft msl	Distance (ft)	Hydraulically Connected? YES NO ASSUMED	Potential for Subst. Interfer. Assumed? YES NO
15	1	Jones Canyon	4131	4150	1350		
15	2	Rock Creek	4131	4145	10000		
15	3	Cow Creek	4131	4145	5000		
14	1	Jones Canyon	4070	4150	1750		
14	2	Rock Creek	4070	4144	9400		
14	3	Cow Creek	4070	4145	5300		
16	1	Jones Canyon	4105	4150	1700		
16	3	Cow Creek	4105	4145	4750		
17	1_	Jones Canyon	4132	4150	2400		
17	3	Cow Creek	4132	4145	4000		

Basis for aquifer hydraulic connection evaluation: These creeks are intermittent and likely contain water only in very wet years. Ground water likely provides negligible baseflow to these creeks.

Water Availability Basin the well(s) are located within: Malheur Sl. > Malheur Lake ab Ninemile Sl. (31200107).

C3a. 690-09-040 (4): Evaluation of stream impacts for each well that has been determined or assumed to be hydraulically connected and less than 1 mile from a surface water source. Limit evaluation to instream rights and minimum stream flows that are pertinent to that surface water source, and not lower SW sources to which the stream under evaluation is tributary. Compare the requested rate against the 1% of 80% natural flow for the pertinent Water Availability Basin (WAB). If Q is not distributed by well, use full rate for each well. Any checked box indicates the well is assumed to have the potential to cause PSI.

Well	SW #	Well < 1/4 mile?	Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
						<u> </u>				
			 			- - 		H		

Version: 08/15/2003

C3b. 690-09-040 (4): Evaluation of stream impacts by total appropriation for all wells determined or assumed to be hydraulically connected and less than 1 mile from a surface water source. Complete only if Q is distributed among wells. Otherwise same evaluation and limitations apply as in C3a above.

SW #	Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
		10	(CIS)		(CIS)	<u> </u>		
	_ 							
-			-					

Comments:	This section does not apply.		
		,	

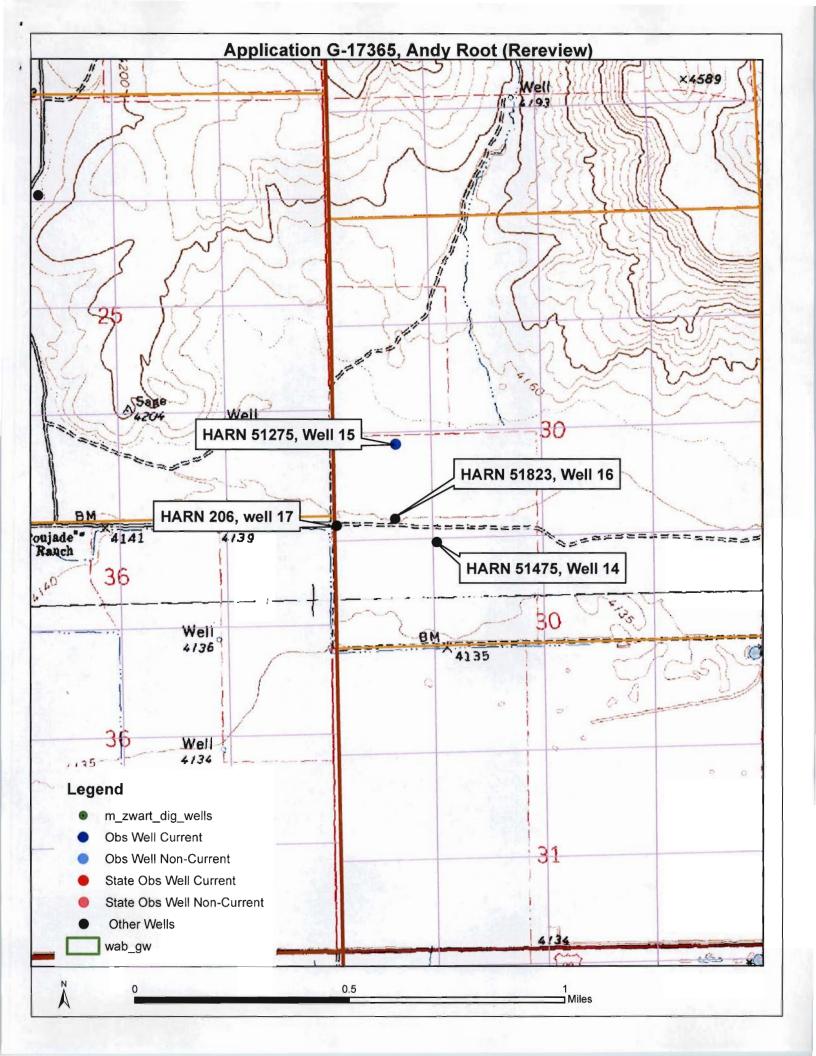
C4a. 690-09-040 (5): Estimated impacts on hydraulically connected surface water sources greater than one mile as a percentage of the proposed pumping rate. Limit evaluation to the effects that will occur up to one year after pumping begins. This table encompasses the considerations required by 09-040 (5)(a), (b), (c) and (d), which are not included on this form. Use additional sheets if calculated flows from more than one WAB are required.

Well Q as CFS													Wells	stributed	
Well Q as CFS	Dec	I	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan	SW#	Well_
Distributed Welly SW# Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov	%		%	%	%	%	%	%	%	%	%	%	%		
Distributed Wells SW# Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov														s CFS	Well Q a
Well SW# Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Well Q as CFS Interference CFS Image: CFS of the part of the pa			_	_	_									nce CFS	Interfere
Well SW# Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Well Q as CFS Interference CFS Image: CFS of the part of the pa															
Well Q as CFS Interference CFS Interference CFS Well Q as CFS	Dec	I												SW#	Well
Interference CFS	%	\bot	%	%	%	%	%	%	%	%	%	.%	%		
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Interference CFS	%		%	%	%	%	%	%	%	%	%	%	%		
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Interference CFS	%	\top	%	%	%	%	%	%	%	%	%	%	%		
Well Q as CFS % <		T								_			_	s CFS	Well Q a
Well Q as CFS Interference CFS Well Q as CFS Well Q as CFS Interference CFS Well Q as CFS Well Q as CFS Well Q as CFS Interference CFS Well Q as CFS		\top												nce CFS	Interfere
Interference CFS %	%	\top	%	%	%	%	%	%	%	%	%	%	%		
Interference CFS %		\vdash												s CFS	Well Q a
Well Q as CFS Interference CFS % <		\top													
Well Q as CFS Interference CFS %	%	+	%	%	%	%	%	%	%	%	%	%	%		
Interference CFS %		+								_				s CFS	Well O a
% %		+				_		-						_	
Well Q as CFS	%	+	%	%	%	%	%	%	%	%	%	%	%		
		+						_						s CFS	Well O a
Interference CFS		-													
(A) = Total Interf.														al Interf.	(A) = Tot
(B) = 80 % Nat. Q														% Nat. Q	$(B) = 80^{\circ}$
(C) = 1 % Nat. Q				-										6 Nat. Q	(C) = 1 %
(D) = (A) > (C)	√		1	√	4	√ .	√′		v'	<i>±</i>	√	4	¥′.	> (C)	(D) = (A)
(E) = (A / B) x 100 % % % % % % % % % %	%	\top	%		%	%	%	%	%	%	%	%	%		

(A) = total interference as CFS; (B) = WAB calculated natural flow at 80% exceed. as CFS; (C) = 1% of calculated natural flow at 80% exceed. as CFS; (D) = highlight the checkmark for each month where (A) is greater than (C); (E) = total interference divided by 80% flow as percentage.

rication G- <u>17303</u> Continued	Date: <u>March 9, 2012</u>
B 1 6 1	
Basis for impact evaluation:	
690-09-040 (5) (b) The potential to impair or detrim	nentally affect the public interest is to be determined by the W
Rights Section.	the transfer of the public interest is to be determined by the transfer of the
If properly conditioned, the surface water source(s) can	n be adequately protected from interference, and/or ground water
under this permit can be regulated if it is found to substa	ntially interfere with surface water:
	· ·
i. The permit should contain condition #(s) ii. The permit should contain special condition	(s) as indicated in "Remarks" below:
persone and a comman special commission	(5) as mareated at Atematics below,
W / CW Pamarks and Conditions	
W / GW Remarks and Conditions	
	
References Used: Local well logs; local recent reviews;	GW Report 16, by Leonard, 1970; Greene, Walker, and
Corcoran, 1972, Geologic Map of the Burns Quadrangle	, Oregon, USGS Miscellaneous Geologic Investigations Map
80; Memo by Ivan Gall, 1/15, 2008: Stream Assessment	for Division 9 Review in the Malheur Lakes Basin.

Appli	plication G-17365 continued	Date: March 9, 2012
D. <u>W</u>	WELL CONSTRUCTION, OAR 690-200	
D1.	. Well #: Logid: <u>HARN 2</u>	06
D2.	THE WELL does not meet current well construction stands a. review of the well log; b. field inspection by report of CWRE d. other: (specify)	
D3.	THE WELL construction deficiency: a constitutes a health threat under Division 200 rules; b commingles water from more than one ground water r c permits the loss of artesian head; d permits the de-watering of one or more ground water r e other: (specify)	reservoirs;
D4.	THE WELL construction deficiency is described as follows	No deficiency is noted, but the well is quite old.
D5.	THE WELL a. was, or was not constructed ac original construction or most recen	cording to the standards in effect at the time of t modification.
	b. 🛛 I don't know if it met standards at	the time of construction.
D6. [Route to the Enforcement Section. I recommend withholding is filed with the Department and approved by the Enforcement	
THIS	IIS SECTION TO BE COMPLETED BY ENFORCEMEN	T PERSONNEL
D7. [☐ Well construction deficiency has been corrected by the following	ng actions:
		200
	(Enforcement Section Signature)	, 200
D8. [_	logs to this page).



INTEROFFICE MEMORANDUM

Water Rights Section

TO: Ivan Gall

FROM: Kerry Kavanagh

DATE: March 2, 2012

RE: G-17365 Andy Root

SUBJECT: Amendment - add two wells - gw re-review

On May 7, 2010, Mike Zwart completed a public interest review of Well 10 (HARN 51275) and Well 14 (HARN 51475).

On February 1, 2012, the Department received an amendment to Application G-17365 to add two additional wells, being Well 16 (HARN 51823) and Well 17 (HARN 206). On February 13, 2012, the Department received additional examination fees (\$250 for each additional well).

Please evaluate the two additional wells, Well 16 (HARN 51823) and Well 17 (HARN 206), and determine if Mike's May 7, 2010 review will change in any way. Please route the file to me when finished.

Thanks.



All Points Engineering and Surveying, Inc.

P.O. Box 767 (CRR) Terrebonne, OR 97760 (541) 548-5833 PH (541) 585-4602 FX Scott@APEandS.com

RECEIVED

FEB 0 1 2012

WATER RESOURCES DEPT SALEM, OREGON

ATTN: Kerry Kavenaugh Oregon Water Resources Dept 725 Summer St, Suite A Salem, OR 97301-1266

RE: Permit G-16578 & Permit Application G-17365

Dear Ms. Kavenavgh:

I am writing this letter to you in order to convey my intentions to add a well to both an existing permit (G-16578) and a permit application (G-17365).

I have included with this letter a map showing the location of the new well along with a check for \$250.00 to re-review the permit application and the well log. I will send the permit amendment application separately to Kelly Starnes for his review, as well.

Thank you for your attention to this matter.

Sincerely,

Andy Root/Owner

PERMIT AMENDMENT MAP

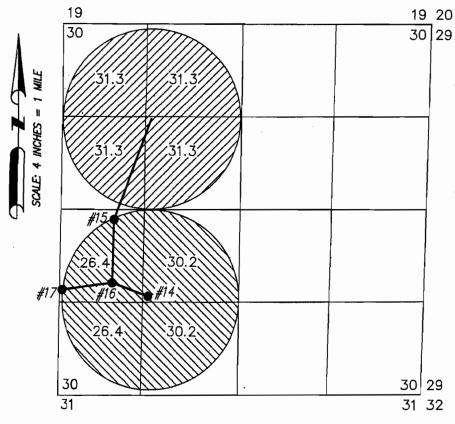
FOR GROUND WATER PERMIT
APPLICATIONS G-17107 & G-17365
ANDY ROOT

RECEIVED

TOWNSHIP 22 SOUTH, RANGE 33 EAST, SECTION 30, W.M. TAX LOTS: 303 & 1800

FEB 0 1 2012

WATER RESOURCES DEPT SALEM, OREGON



● WELL 14 (HARN 51475)

EXISTING WELL IN THE NW 1/4 OF THE SW 1/4 OF SECTION 30 LOCATED 1254 FEET NORTH AND 1240 FEET EAST FROM THE SW CORNER OF SECTION 30, TOWNSHIP 22 SOUTH, RANGE 33 EAST, W.M., HARNEY COUNTY, OREGON

WELL 15 (HARN 51275)

EXISTING WELL IN THE NW 1/4 OF THE SW 1/4 OF SECTION 30 LOCATED 2508 FEET NORTH AND 780 FEET EAST FROM THE SW CORNER OF SECTION 30, TOWNSHIP 22 SOUTH, RANGE 33 EAST, W.M., HARNEY COUNTY, OREGON

WELL 16 (HARN 51823)

NEW WELL IN THE NW 1/4 OF THE SW 1/4
OF SECTION 30 LOCATED 1610 FEET NORTH
AND 780 FEET EAST FROM THE SW CORNER
OF SECTION 30, TOWNSHIP 22 SOUTH, RANGE
33 EAST, W.M., HARNEY COUNTY, OREGON

WELL 17 (HARN 206)

PROPOSED WELL IN THE NW 1/4 OF THE SW 1/4 OF SECTION 30 LOCATED 1500 FEET NORTH AND 50 FEET EAST FROM THE SW CORNER OF SECTION 30, TOWNSHIP 22 SOUTH, RANGE 33 EAST, W.M., HARNEY COUNTY, OREGON

Scott D. Montgomery

Scott D. Montgomery

May 21, 2001

Start D. D. R. C. O. R. C. O

RENEWAL DATE: 12/31/2012

THIS MAP IS FOR THE PURPOSE OF DESIGNING AN IRRIGATION SYSTEM PLAN AND HAS NO INTENT TO PROVIDE LEGAL DIMENSIONS OR THE LOCATION OF PROPERTY LINES

113.2 ACRES PRIMARY IRRIGATION TO REMAIN FROM APP. G-17365, AS SHOWN



125.2 ACRES PRIMARY IRRIGATION TO REMAIN FROM APP. G-17107, AS SHOWN

PREPARED FOR:

ANDY ROOT 524 HWY 20 N HINES, OR 97738 PREPARED BY:



ALL POINTS ENGINEERING AND SURVEYING, INC. P.O. BOX 767 (CRR) TERREBONNE, OR 97760 (541) 548-5833 www.APEandS.com



ALL POINTS

ENGINEERING & SURVEYING, INC.

P.O. Box 767 (CRR) Terrebonne, Oregon 97760

RECEIVED

FEB 0 1 2012

WATER RESOURCES DEPT SALEM, OREGON

TRANSMITTAL

To:

Oregon Water Resources Department 725 Summer St. NE, Suit A Salem, OR 97301-1266 Date: 1/30/2012 Job: 11-040

Attention: Kelly Starnes & Kerry

Kavanagh

Re: Permit Amendment Application

[x] Prints [] Plans [] Plat [] Specifications [] Change order [] Other

Copies No. Description
1 Permit Amendment Application – Parts 1-4 (7 sheets letter bond)
1 2 Application Map (1 sheet letter bond)
Well Reports (4 sheet letter bond)
1 4 Letter from owner to add wells to App. G-17365 (1 sheet letter bond)
1 5 Checks for OWRD fees of \$1200 and \$250

Remarks: Hello Kelly,

I prepared the application and map for Mr. Root's well permit and application. Kerry Kavanagh is the case worker for App G-17365. Jeana Eastman was the case worker for App G-17107.

Thanks and if you have questions please don't hesitate to call (541) 548-5833.

Signed:

STATE OF OREGON

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

well label # 1 <u>93564</u> start card # <u>199640</u>

Instructions for completing this report are on the last page of this form.				
(1) LAND OWNER Owner Well I.D.	(9) LOCATION OF WELL (legal description)			
First Name Last Name	County HARNEM Twp 22 No Range 33 Or W W.M.			
Company RATTLASNAKE LANDY CATTLE CO.	Sec. 30 SW 1/4 of the SW 1/4 Tax Lot 1800			
Address 524 N. Huy 20 City HINES State OR Zip 97738				
City HINES State OR Zip 97738	Tax Map NumberLot DMS or DD			
(2) TYPE OF WORK Well Despening Conversion	Lat DMS of DD			
Alteration (repair/recondition)	Long DMS or DD			
Alteration (repair/recondition)	Street Address of Well (or nearest address) Cow Create RD			
(3) DRILL METHOD	Street Address of Well (of ficarest address)			
Rotary Air Rotary Mud Cable Auger Cable Mud				
Reverse Rotary Other	(10) STATIC WATED I EVEY			
L Reverse Rolary	(10) STATIC WATER LEVEL Date SWL(psi) + SWL(ft)			
(4) PROPOSED USE Domestic Pringation Community				
☐ Industrial/Commercial ☐ Livestock ☐ Dewatering ☐ Injection	Existing Well/Predeepening			
☐ Thermal ☐ Other	Completed Well 7-23-08 65			
	Flowing Artestan? Yes Dry Hole? Yes			
(5) BORE HOLE CONSTRUCTION Special Standard: Tyes (attach copy)	WATER BEARING ZONES Depth water was first found 12			
Depth of Completed Weil 400 ft.	CWI Data From To Fot Flow CWI (ani) 1 CWI (A)			
	SWL Date From To Est Flow SWL (psi) + SWL (ft)			
BORE HOLE SEAL				
Dia From To Material From To Amount Scks/lbs				
13 0 35 BONT. 0 35 74 SEKS				
19 35 119				
8 118 400				
	(11) WELL LOG Ground Elevation			
How was seal placed: Method A B C D E				
Other Pourso Dry	Material From To			
Backfill placed from ft. to ft. Material	SANDY BRN. CLAY O			
Filter pack fromft. toft. Material Size	SANDY BROWN CLAY 23 124			
Explosives used: Yes Type Amount	GRAVEL - CLAM 124 129			
22postro 2001 [2] (to 1)po	LIGHT GRAY PUMICE 129 135			
(6) CASING/LINER	SOFT BROWN ROLK - CLIM 135 184			
Csng Linr Dia + From To Gauge Steel Plastic Welded Thrd	BEOWN ROLL - CLIM 135 184 BEOWN ROLL 189 189			
84 + 2 118 ,250	BEOWN CLAY 188 190			
	LIGHT BROWN ROCK 190 196			
	DOWN BAN SANDSTONE 196 238			
	LIGHTGRAY PUMICE 238 270			
	Beaus Pumice 270 277			
	SANDY CLAY 277 295			
Shoo Thinks Thomas Tooks Location of shoots 119'	PHMICE- SANDY 295 317			
Shoe Inside Outside Other Location of shoe(s) //8'	SOFT BLACK LAVA ROCK 317 321			
Temporary casing Yes Diameter From To	GRAY PUMICE 32/ 335			
(T) PEDEOD ATTONIC (COPERNO	Date Started 7-21-08 Completed 7-23-08			
(7) PERFORATIONS/SCREENS Perforations Method	Date Started / LI Completed / L3 Co			
	(unbonded) Water Well Constructor Certification			
Screens Type Material	I certify that the work I performed on the construction, deepening, alteration, or			
	l certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water unpriv well			
	construction standards. Materials used and information reported above are true to			
Perf Scrn Csng Linr Dia From To width length slots size	the best of my knowledge and belief.			
	FEB 0 1 2012			
	License Number			
	WATER RESOURCES DEPT			
	SignedSALEM_ORFGON			
(8) WELL TESTS: Minimum testing time is 1 hour	(bonded) Water Well Constructor Certification			
Pump Bailer Flowing Artesian	l 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			
300 390' 2	supply well construction standards. This report is true to the best of my knowledge			
	and belief.			
	1864 - 3-2.6.0F			
Temperature Step Principality is a Principality in the Principalit	License Number 1855 Date 7-21-08			
Water quality concerns. Wes describe hearth	\mathcal{A}			
To Description Amount of Finite	Signed Chat has and Jan			
Contact Info. (optional)				
ATIC 4 ZUUU JUL				
WATER RESOURCES, DEPOR RESOURCES DEFIN				
ORIGINALA WAFFONESO CALEMDETARTMENT ONE CO	OPY FOR CONSTRUCTOR ONE COPY FOR CUSTOMER			

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



WELL LABEL#L 935640 START CARD# 199640

Instructions for completi					
(1) LAND OWNER Owner Well I.D.				(9) LOCATION OF WELL (legal description)	
First Name Company WATTLE SMAKE Last Name LATTLE LOSTILE LOS				County TWR V Twp 27 Nor S Range 33 Bor W W.	
Address 52 V N. Hury 20					Sec 30 Sw 1/4 of the Sw 1/4 Tax Lot 1800
City HINES	State _	OR 2	ip <u>4//</u>	38	Tax Map Number Lot Lat Or DMS or D
(2) TYPE OF WORK	New Well	Deepening	Conve	rsion	Lat DMS or D
(2) TYPE OF WORK New Well Deepening Conversion Alteration (repair/recondition) Abandonment					
					Street Address of Well (or nearest address) Low Carek RD
(3) DRILL METHOD	in Day	—	□ C-N-10		
Totary Air Rotary Mud Cable Auger Cable Mud				(40) CON A CONTROL WAY A CONTROL WITH THE T	
Reverse Rotary Other				(10) STATIC WATER LEVEL Date SWL(psi) + SWL(ft)	
(4) PROPOSED USE Domestic Inrigation Community				Existing Well/Predeepening	
☐ Industrial/Commercial		_] Injection		Completed Well
☐ Thermal	Other				Flowing Artesian? Yes Dry Hole? Yes
(5) BORE HOLE CON	STRUCTION Spec	sial Standards	T Ves (atto	ch conv)	WATER BEARING ZONES Depth water was first found
Depth of Completed Well		Jai Statidatu.	L_1 100 (atta	оп сору)	
	111				SWL Date From To Est Flow SWL (psi) + SWL (ft)
BORE HOLE	[Normalal	SEAL	14	l Galeallha	
Dia From To	Material	From To	Amount	Scks/lbs	4
				 	
					(11) WELL LOG Ground Elevation
How was seal placed: M	ethod A B	□с□	D DE		•
Other					Material From To
Backfill placed from					- CONTINUED-
Filter pack from ft					BLACK LAVA
Explosives used: Yes	Туре	Amount _			WITH GRAY CLAH B35 400
CA CINCA INED					SEAMS
(6) CASING/LINER Cang Linr Dia + Fr	om To Gauge	Steel P	astic Welde	d Thrd	
Cong Dia 1 11	oin 10 Gauge	Stool II	astro Welde	- TIEG	
					DECENTED BECEIVED
					TECEIVEI)
				-	FIED A 4 2010
				- 	AUG 1 4 2008 . FEB U L ZUIZ
	. [7.04]	6 -1: (-)			WATER RESOURCES DEPT WATER RESOURCES DEPT
Shoe Inside Outside Temporary casing Yes					UNIFIE ALIVED DEFI
Temporary casing 1 res	Diametel	- FOIL	_ 10		SALEM, OREGON SALEM, OREGON
(7) PERFORATIONS/S	SCREENS				Date StartedCompleted
Perforations Method					(make a deal) Wester Well Company to the Complete Heart
Screens Type		Material			(unbonded) Water Well Constructor Certification 1 certify that the work 1 performed on the construction, deepening, alteration, o
	\	Screen/	1	Telc/	abandonment of this well is in compliance with Oregon water supply well
Scre			lot # of	pipe	construction standards. Materials used and information reported above are true to
Perf Scrn Csng Linr Dis	From To	width le	igth slots	size	the best of my knowledge and belief
	1			+	License Number Date
	+ +	+		 	•
					Signed
(0) WELL TECTO, MA		In I have			(bonded) Water Well Constructor Certification
(8) WELL TESTS: Min		IS 1 Hour ☐ Flowing	Artegian	ļ	[accept responsibility for the construction, deepening, alteration, or
		_ :		ا س	abandonment work performed on this well during the construction dates reported
Yield gal/min Draw	down Drill stem/Pu		Duration	(111)	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.	
Temperature Se_ °F La	b analysis 🖂 Yes Bv				License Number 3555 Date 7-24-08 Signed Athen 5. Aug
Water quality concerns? Yes (describe below)				Cott of 1	
From To Description Amount Units				Signed Control of Control	
					Contact Info. (optional)
JUL 2 5 2000					
		1			-

PERMIT AMENDMENT MAP

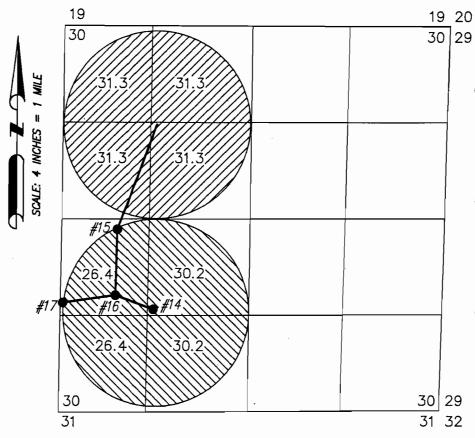
FOR GROUND WATER PERMIT APPLICATIONS G-17107 & G-17365 ANDY ROOT

RECEIVED

TOWNSHIP 22 SOUTH, RANGE 33 EAST, SECTION 30, W.M. TAX LOTS: 303 & 1800

FEB 0 1 2012

WATER RESOURCES DEPT SALEM, OREGON



WELL 14 (HARN 51475)

EXISTING WELL IN THE NW 1/4 OF THE SW 1/4 OF SECTION 30 LOCATED 1254 FEET NORTH AND 1240 FEET EAST FROM THE SW CORNER OF SECTION 30, TOWNSHIP 22 SOUTH, RANGE 33 EAST, W.M., HARNEY COUNTY, OREGON

WELL 15 (HARN 51275)

EXISTING WELL IN THE NW 1/4 OF THE SW 1/4 OF SECTION 30 LOCATED 2508 FEET NORTH AND 780 FEET EAST FROM THE SW CORNER OF SECTION 30, TOWNSHIP 22 SOUTH, RANGE 33 EAST, W.M., HARNEY COUNTY, OREGON

WELL 16 (HARN 51823)

NEW WELL IN THE NW 1/4 OF THE SW 1/4
OF SECTION 30 LOCATED 1610 FEET NORTH
AND 780 FEET EAST FROM THE SW CORNER
OF SECTION 30, TOWNSHIP 22 SOUTH, RANGE
33 EAST, W.M., HARNEY COUNTY, OREGON

WELL 17 (HARN 206)

PROPOSED WELL IN THE NW 1/4 OF THE SW 1/4 OF SECTION 30 LOCATED 1500 FEET NORTH AND 50 FEET EAST FROM THE SW CORNER OF SECTION 30, TOWNSHIP 22 SOUTH, RANGE 33 EAST, W.M., HARNEY COUNTY, OREGON



RENEWAL DATE: 12/31/2012

THIS MAP IS FOR THE PURPOSE OF DESIGNING AN IRRIGATION SYSTEM PLAN AND HAS NO INTENT TO PROVIDE LEGAL DIMENSIONS OR THE LOCATION OF PROPERTY LINES

113.2 ACRES PRIMARY IRRIGATION TO REMAIN FROM APP. G-17365, AS SHOWN



125.2 ACRES PRIMARY IRRIGATION TO REMAIN FROM APP. G-17107, AS SHOWN

PREPARED FOR:

ANDY ROOT 524 HWY 20 N HINES, OR 97738 PREPARED BY:



ALL POINTS ENGINEERING AND SURVEYING, INC. P.O. BOX 767 (CRR) TERREBONNE, OR 97760 (541) 548-5833 www.APEandS.com

From: ACW Inc. 6-16578

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

	MOMEPLACE	•••••••			
HARN 51823	PNOT 14 (\$13?)	Page 1 of 1			
12-14-2011 WELL LABEL # L 107662					
	START CARD # 1015574				

(1) LAND OWNER Owner Well I.D.			
	(9) LOCATION OF WELL (legal description)		
First Name Last Name	County Harnay Twp 22.00 S N/S Range 23.00 E E/W WN Sec 20 NW 1/4 Of the SW 1/4 Tax Lot 300		
Company ACW Address PO Box 3	Sec 30 NW 1/4 of the SW 1/4 Tax Lot 300		
City Burns State Or Zip 97720	Lat o or DMS or DD		
	Long or DMS or DD		
(2) TYPE OF WORK New Well Deepening Conversion Alteration (repair/recondition) Abandonment	Street address of well (Nearest address		
	72987 Cowcreek Road		
(3) DRILL METHOD	Burns, Or 97720		
Rotary Air Rotary Mud Cable Auger Cable Mud	(10) STATIC WATER LEVEL Date SWL(psi) + SWL(ft)		
Reverse Rotary Other	Date \$WL(psi) + \$WL(ft) Existing Well / Predeepening		
(4) PROPOSED USE Domestic Irrigation Community	Completed Well 12-14-2013 18		
Industrial/Commericial Livestock Dewatering	Flowing Artesian? Dry Hole?		
TharmalOther	WATER BEARING ZONES Depth water was first found 35		
(5) BORE HOLE CONSTRUCTION Special Standard Attach copy			
Depth of Completed Well 310.00 ft.	12-14-2011 35 310 400 18		
BORE HOLE SEAL sacks			
Dia From To Material From To Amt lbs	- 		
14 0 21 Bentonite Chips 0 21 30 \$	1		
	41) WELL TOO		
	(11) WELL LOG Ground Elevation		
How was seal placed: Method A B C D E	Material From To		
Other poured & tamped	Topsoil elsy loam Clay brown 1 5		
Backfill placed from ft. to ft. Material Filter pack from ft. to ft. Material Size	sand medium brown		
Explosives used: Yes Type Amount	Clay grey 14 35		
	Gravel sand 35 65		
(6) CASING/LINER Casing Liner Dia + From To Gauge Sti Plate Wid Thrd	Clay green		
	Pumico pink 130 140		
8 10 A 2 80 250 8 A H	Cinders black 140 150		
	Claystone green 160 180		
	Pumice pink 180190 Pumice grey 190 222		
	Bandstone blue green 1 1 222 310		
Shoe Inside Outside Other Location of shoe(s)			
Temp casing Yes Dia From To	LEB O J MILA		
(7) PERFORATIONS/SCREENS	TO THE PERSON OF		
Perforations Method	WATER RESOURCES DEPT		
Screens Type Material	SALEM OREGON		
Perf/S Casing/Screen Scrn/slot Slot # of Tele/	Date Started 12-14-2011 Completed 12-14-2011		
creen Liner Dia From To width length slots pipe size	(upbonded) 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.		
(8) WELL TESTS: Minimum testing time is 1 hour	License Number Date		
. — — — — — — — — — — — — — — — — — —	Electronically Filed		
Pump Bailer Air Flowing Artesian Yield gail/min Drawdown Drill stem/Pumo denth Duration (hr)	Signed		
400 1 10 1	(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		
Temperature 64 °F Lab analysis Yes By	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.		
Water quality concerns? Yes (describe below) From To Description Amount Units	Liconse Number 1424 Date 12.14.201)		
	Electronically Filed		
	Signed TIMOTHY K RILEY (E-filed)		
	Contact Info (optional)		

LOG FILED IN 225/33E-30 CORRECTED NOTICE TO WATER WELL CONTRACTOR

The original and first copy MAY 2 & 196 WATER WELL REPORT
of this report are to be MAY 2 & 196 WATER WELL REPORT
filed with the
STATE ENGINEER, SALEM 10 OREGON ENGINEETATE OF OREGON
within 30 days from the date ALEM OREGON
of well completion. WELLI State Permit No. (1) OWNER; (11) WELL TESTS: Drawdown is amount water level is lowered below static level was a pump test made? Les \(\subseteq No \) If yes, by whom? gal./min. with 5 / ft. drawdown after (0 ,,, ,, (2) LOCATION OF WELL: Bailer test gal./min. with ft. drawdown after Hazuly County Driller's well number Artesian flow g.p.m. Date T. 715 R 371 A Section 3 6 W.M. Temperature of water Co-Was a chemical analysis made?

Yes Bearing and distance from section or subdivision corner (12) WELL LOG: Diameter of well below casing AMA Depth drilled 345 ft. Depth of completed well Formation: Describe by color, character, size of material and structure, and show thickness of aquifiers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation. MATERIAL FROM (3) TYPE OF WORK (check): Mell [A Deepening [] Abandon 🗇 Reconditioning [7] 20 bandonment, describe material and procedure in Item 12. 20 <u> 30</u> 40 30 (4) PROPOSED USE (check): (5) TYPE OF WELL: Rotary ,Driven 🛘 Domestic | Industrial | Municipal | Cable Jetted 🛘 100 Irrigation Test Well | Other Dug Bored | 123 (6) CASING INSTALLED: Threaded | Welded 130 _ ft. to 30 ft. Gage" Diam. from ... ft. to ft. Gage . 2 45 310 10 32/ (7) PERFORATIONS: Perforated? | Yes ANO 120 34/5 Type of perforator used Size of perforations in, by perforations from ft. to perforations from perforations from perforations from FEB 0 1 2012 perforations from (8) SCREENS: Well screen installed? | Yes | No WATER RESOURCES DEPT Manufacturer's Name SALEM, OREGONm. Slot size Et from Work started / 2-//o 19 65 Completed 196 Diam. ... Slot size Set from Date well drilling machine moved off of well 1966 (9) CONSTRUCTION: (13) PUMP: Well seal-Material used in seal Backs at Manufacturer's Name Depth of seal 2 0 ft. Was a packer used? 200 H.P. Diameter of well bore to bottom of seal Were any loose strata cemented off? | Yes | No Depth Water Well Contractor's Certification: Was a drive shoe used? Tes | No This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief. Was well gravel packed? ☐ Yes ☐ No Size of gravel; _______ft. to _______ft. Gravel placed from Did any strata contain unusable water?

Yes PNo (Type or print) Type of water? Depth of strata Method of sealing strata off Drilling Machine Operator's License No (10) WATER LEVELS: Static level ft. below land surface Date /-13-610 Artesian pressure Ibs. per square inch Date

Contractor's License No. 2

(USE ADDITIONAL SHEETS IF NECESSARY)