



Oregon Water Resources Department  
 725 Summer Street NE, Suite A  
 Salem, Oregon 97301-1271  
 (503) 986-0900  
 www.wrd.state.or.us

### Ground Water Review Form:

- Water Right Transfer
- Permit Amendment
- GR Modification
- Other

Application: T-11099

Applicant Name: Rendata Industrial Park, LLC

Proposed Changes:  POA       APOA       SW→GW       RA  
 USE       POU       OTHER

Reviewer(s): Jen Woody

Date of Review: 7/13/2010

The information provided in the application is insufficient to evaluate whether the proposed transfer may be approved because:

- The water well reports provided with the application do not correspond to the water rights affected by the transfer.
- The application does not include water well reports or a description of the well construction details sufficient to establish the ground water body developed or proposed to be developed.
- Other \_\_\_\_\_

1. Basic description of the changes proposed in this transfer: The applicant proposes to transfer certificated surface water rights 27800, 21969, 27802, and 31332 from Louse Creek to a groundwater right for four existing wells (JOSE 50369 and 9938, RIP #2 and #3- wellid's unknown) in an industrial park.
  
2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?  
 Yes     No    Comments: The proposed POD's produce water from the granitic aquifer, which is overlain by decomposed granitic material and alluvial sand, gravel, clay and cobbles. Spring water levels at Rendata's wells are coincident with Louse Creek, indicating they are hydraulically connected. However, the wells do not affect the Creek similarly as defined in 690-380-2130 (11)(b), which requires that use result in stream depletion of at least 50 percent of the rate of appropriation within 10 days of continuous pumping. Using Hunt (2003) to model impact on the creek, pumping JOSE 50369 or JOSE 9938 at a rate of 1.60 cfs (the maximum proposed rate) results in <<50% stream depletion at 10 days. There is insufficient well construction information provided to evaluate RIP #2 and RIP #3 for stream depletion. The wells meet rules regarding proximity to the creek, meaning they are within 500 feet of the creek as required by 690-380-2130 (2)(d); however they are not all less than 1000 feet upstream or downstream of the original POD's.
  
3. a) Is there more than one source developed under the right (e.g., basalt and alluvium)?  
 Yes     No \_\_\_\_\_  
 b) If yes, estimate the portion of the right supplied by each of the sources and describe any limitations that will need to be placed on the proposed change (rate, duty, etc.): \_\_\_\_\_

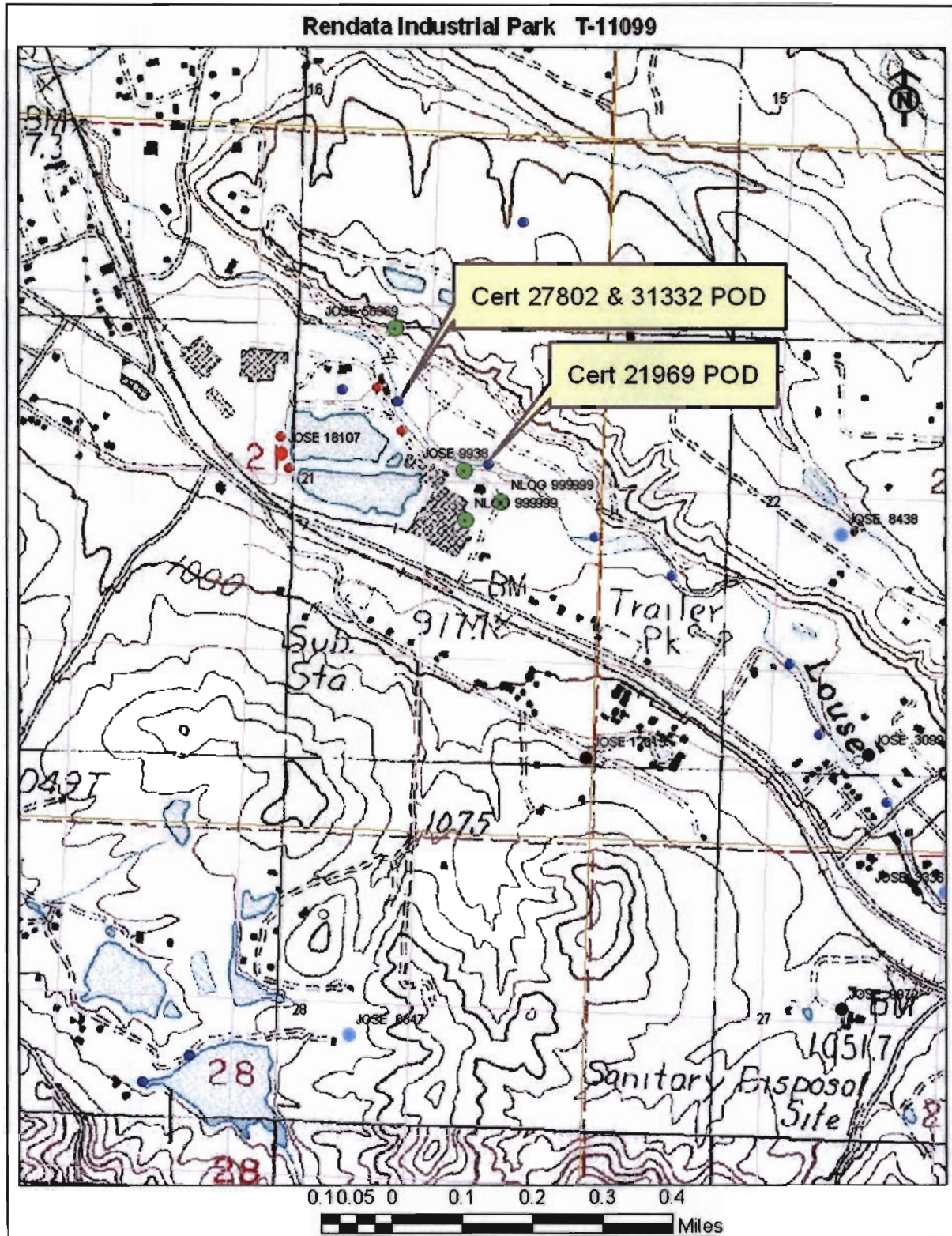
4. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another groundwater right**?  
 Yes  No Comments: The nearest groundwater right is more than one mile away. An increase in pumping effects at this distance is not expected.
- b) If yes, would this proposed change, at its maximum allowed rate of use, likely result in another groundwater right not receiving the water to which it is legally entitled?  
 Yes  No If yes, explain: \_\_\_\_\_
5. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another surface water source**?  
 Yes  No Comments: \_\_\_\_\_
- b) If yes, at its maximum allowed rate of use, what is the expected change in degree of interference with any **surface water sources** resulting from the proposed change?  
 Stream: \_\_\_\_\_  Minimal  Significant  
 Stream: \_\_\_\_\_  Minimal  Significant  
 Provide context for minimal/significant impact: \_\_\_\_\_
6. What conditions or other changes in the application are necessary to address any potential issues identified above: The applicant could adjust the application to transfer certificates 27802 and 31332 to JOSE 50369, and Certificate 21969 to the remaining 3 wells to satisfy the 1000 ft upstream or downstream from original POD rule. However, this would not change the finding that the wells, due to the semi confined nature of the granitic aquifer, will not affect the creek "similarly" as defined by rule. One option would be to propose a new well that satisfies 690-380-2130 (11)(b) regarding stream depletion at Louse Creek. A well that accesses only the unconfined alluvial aquifer is more likely to meet this standard.
7. Any additional comments

References

Sweet-Edwards/EMCON, Inc. 1990. Merlin Sanitary Landfill Phase II Hydrogeologic Investigation Report. Volumes I and II.

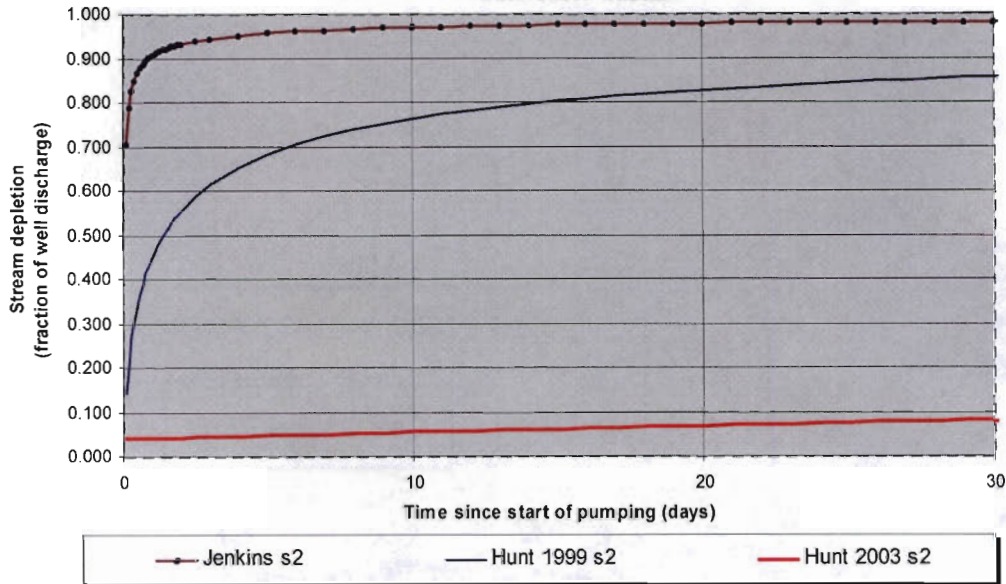
P.W. Hughes & Associates. 1981. Aquifer Test of the Josephine County Exploratory Well #3 North Valley Industrial Park: November 12-15, 1981.

OWRD Discharge Measurement on Louse Creek. 6/20/2010.



Transient Stream Depletion (Jenkins, 1970; Hunt, 1999, 2003)

JOSE 9938: Rendata



Output for Stream Depletion, Scenario 2 (s2):					Time pump on (pumping duration) = 360 days							
Days	30	60	90	120	150	180	210	240	270	300	330	360
J SD	98.3%	98.8%	99.0%	99.1%	99.2%	99.3%	99.3%	99.4%	99.4%	99.5%	99.5%	99.5%
H SD 1999	85.7%	89.7%	91.5%	92.5%	93.3%	93.8%	94.2%	94.6%	94.8%	95.1%	95.3%	95.5%
H SD 2003	8.42%	12.14%	14.98%	17.43%	19.60%	21.57%	23.27%	24.92%	26.32%	27.65%	28.97%	30.08%
Qw, cfs	1.600	1.600	1.600	1.600	1.600	1.600	1.600	1.600	1.600	1.600	1.600	1.600
H SD 99, cfs	1.372	1.435	1.464	1.481	1.492	1.501	1.508	1.513	1.518	1.521	1.525	1.528
H SD 03, cfs	0.135	0.194	0.240	0.279	0.314	0.345	0.372	0.399	0.421	0.442	0.464	0.481

Parameters:		Scenario 1	Scenario 2	Scenario 3	Units
Net steady pumping rate of well	Qw	718.08	718.08	718.08	gpm
Time pump on (pumping duration)	tpon	360	360	360	days
Perpendicular from well to stream	a	85	85	85	ft
Well depth	d	300	300	300	ft
Aquifer hydraulic conductivity	K	3	3	3	ft/day
Aquifer saturated thickness	b	17	17	17	ft
Aquifer transmissivity	T	51	51	51	ft*ft/day
Aquifer storativity or specific yield	S	0.0002	0.0002	0.0002	
Aquitard vertical hydraulic conductivity	Kva	0.3	1	10	ft/day
Aquitard saturated thickness	ba	130	130	130	ft
Aquitard thickness below stream	babs	129.6	129.6	129.6	ft
Aquitard porosity	n	0.2	0.2	0.2	
Stream width	ws	21	21	21	ft
Streambed conductance (lambda)	sbc	0.048611	0.162037	1.620370	ft/day
Stream depletion factor	sdf	0.028333	0.028333	0.028333	days
Streambed factor	sbf	0.081019	0.270062	2.700617	

9-275-F  
03/08

State of Oregon  
Water Resources Department  
DISCHARGE MEASUREMENT NOTES

Sta No. Misc 2010  
Meas No. \_\_\_\_\_  
Comp. By AG  
Checked By AG

Stream Louise Creek trip to Jumpoff Joe Cr  
Date 06/29, 2010 Party A. Glass  
Width 21.000 Area 7.590 Vel. 0.400 G.H. \_\_\_\_\_ Disch 3.038  
Method 0.2 No. Secs 5 G.H. Change \_\_\_\_\_ in \_\_\_\_\_ min.  
Method coef. 1.00 Meter No. P1782 AA, Pygmy, Flow Tracker, ADCP Std (Y/N) \_\_\_\_\_  
Hor. Angle coef. 1.00 ISWR 73037

GAGE READINGS				
Time	Recorder	T.G.	Inside	Outside
<u>S 1014</u>				
<u>F 1046</u>				

Spin before meas. \_\_\_\_\_ after \_\_\_\_\_  
Reading table, ice, boat, upstream, downstream side  
Bridge 4 (feet) mile, above, below gage and  
downstream side of  
bridge  
Meter suspended from rod  
\_\_\_\_\_ feet above bottom \_\_\_\_\_ lb \_\_\_\_\_ weight.  
Notes: \_\_\_\_\_  
Lat. 42.51582  
Long. 123.41263  
T 35 R 6W S 21 qq SW/NE

Measurement rated excellent (2%), good (5%), fair (8%), poor (over 8%) based on following conditions:  
Cross section Cobbles/silt/SAND/CONCRET  
Flow \_\_\_\_\_ Weather PARTLY CLOUDY/WIND  
Other QA check - PASS Air \_\_\_\_\_ \* @ \_\_\_\_\_  
Record removed N/A Flushed: L \_\_\_\_\_ U \_\_\_\_\_ Water \_\_\_\_\_ \* @ \_\_\_\_\_  
Control CONCRET and Pipe 500' upstream of bridge

Remarks Meas surface to ground trans Data for  
ground water review.

G.H. of zero flow: GH \_\_\_\_\_ - Rod ft. \_\_\_\_\_ ft.  
Max: TG \_\_\_\_\_ +Clip Fnd \_\_\_\_\_ -Clip Reset \_\_\_\_\_ ft.  
Min: TG \_\_\_\_\_ +Clip Fnd \_\_\_\_\_ -Clip Reset \_\_\_\_\_ ft.

Louse Creek\_2010-06-29.dis

File\_Name Louse Creek\_2010-06-29.WAD  
 Start\_Date\_and\_Time 2010/06/29 10:14:25  
 Site\_Name  
 Operator(s) A GLASS  
 Sensor\_Type FlowTracker\_Handheld\_ADV  
 Serial\_# P1782  
 Software\_Ver 2.20 (Build 65 - Jul 2 2007)  
 CPU\_Firmware\_Version 3.5  
 Averaging\_Interval 40 sec  
 Unit\_System English Units  
 Discharge\_Equation Mid-Section  
 Start\_Edge REW  
 #\_Stations 31  
 Total\_width 21.000 ft  
 Total\_Area 7.590 ft^2  
 Total\_Discharge 3.0380 cfs  
 Mean\_Depth 0.361 ft  
 Mean\_Velocity 0.4003 ft/s  
 Mean\_SNR 25.7 dB  
 Mean\_Verr 0.0139 ft/s  
 Mean\_Temp 66.55 deg F  
 Mean\_Bnd 0 Best  
 Boundary\_Condition\_(Bnd) 0 Best  
 1 Good  
 2 Fair  
 3 Poor

Discharge\_Uncertainty\_(ISO)  
 Overall 2.6 %  
 Accuracy 1.0 %  
 Depth 0.3 %  
 Velocity 0.7 %  
 width 0.1 %  
 Method 1.6 %  
 #\_Stations 1.7 %

Discharge\_Uncertainty\_(Statistical)  
 Overall 5.4 %  
 Accuracy 1.0 %  
 Depth 2.4 %  
 Velocity 4.8 %  
 width 0.1 %

Automatic\_Quality\_Control\_Test\_(BeamCheck)  
 6/29/2010 10:13:09  
 Noise\_level\_check Pass  
 SNR\_check Pass  
 Peak\_location\_check Pass  
 Peak\_shape\_check Pass

St	Clock	Loc	Depth	IceD	%Dep	MeasD	Npts	Spike	vel	SNR	Angle	Verr
Bnd	Temp	CorrFact	MeanV	Area	(*D)	Flow	%Q	(%)	(ft/s)	(dB)	(deg)	(ft/s)
( )	(degF)	( )	(ft/s)	(ft^2)	(ft)	(cfs)	(%)	( )	(ft/s)	(dB)	(deg)	(ft/s)
00	10:14	24.00	0.000	0.000	0.0	0.000	0	0	0.0000	0.0	0	0.0000
0	0.00	1.00	0.0000	0.000	0.0000	0.0						
01	10:14	25.00	0.300	0.000	0.6	0.120	40	0	0.0118	45.1	38	0.0043
0	65.73	1.00	0.0118	0.255	0.0030	0.1						
02	10:15	25.70	0.300	0.000	0.6	0.120	40	0	0.0597	28.6	-60	0.0082
0	65.95	1.00	0.0597	0.210	0.0125	0.4						
03	10:17	26.40	0.400	0.000	0.6	0.160	40	2	0.2014	28.8	-14	0.0128

Louse Creek\_2010-06-29.dis

3	65.98	1.00	0.2014	0.280	0.0564	1.9						
04	10:19	27.10	0.300	0.000	0.6	0.120	40	1	0.0010	29.0	86	0.0259
0	66.04	1.00	0.0010	0.210	0.0002	0.0						
05	10:20	27.80	0.400	0.000	0.6	0.160	40	1	0.4797	30.9	3	0.0148
0	66.09	1.00	0.4797	0.280	0.1343	4.4						
06	10:23	28.50	0.600	0.000	0.6	0.240	40	2	0.4009	30.1	7	0.0102
0	66.15	1.00	0.4009	0.420	0.1684	5.5						
07	10:24	29.20	0.600	0.000	0.6	0.240	40	3	0.2359	29.9	-3	0.0092
0	66.16	1.00	0.2359	0.420	0.0991	3.3						
08	10:24	29.90	0.500	0.000	0.6	0.200	40	1	0.4137	31.1	15	0.0125
0	66.22	1.00	0.4137	0.350	0.1448	4.8						
09	10:26	30.60	0.400	0.000	0.6	0.160	40	0	0.3842	30.5	-1	0.0154
0	66.25	1.00	0.3842	0.280	0.1076	3.5						
10	10:27	31.30	0.300	0.000	0.6	0.120	40	0	0.6995	30.7	18	0.0249
0	66.31	1.00	0.6995	0.210	0.1469	4.8						
11	10:28	32.00	0.300	0.000	0.6	0.120	40	1	0.8494	30.1	15	0.0226
0	66.34	1.00	0.8494	0.210	0.1783	5.9						
12	10:29	32.70	0.250	0.000	0.6	0.100	40	0	1.0046	30.3	20	0.0157
0	66.40	1.00	1.0046	0.175	0.1758	5.8						
13	10:30	33.40	0.300	0.000	0.6	0.120	40	0	0.7602	29.4	29	0.0154
0	66.42	1.00	0.7602	0.210	0.1596	5.3						
14	10:31	34.10	0.400	0.000	0.6	0.160	40	0	0.4675	27.7	28	0.0177
0	66.43	1.00	0.4675	0.280	0.1309	4.3						
15	10:32	34.80	0.400	0.000	0.6	0.160	40	1	0.4701	27.9	37	0.0112
0	66.45	1.00	0.4701	0.280	0.1316	4.3						
16	10:33	35.50	0.400	0.000	0.6	0.160	40	0	0.4452	26.8	31	0.0125
0	66.54	1.00	0.4452	0.280	0.1247	4.1						
17	10:34	36.20	0.400	0.000	0.6	0.160	40	0	0.4790	24.7	31	0.0151
0	66.60	1.00	0.4790	0.280	0.1341	4.4						
18	10:35	36.90	0.400	0.000	0.6	0.160	40	0	0.4514	23.2	24	0.0151
0	66.69	1.00	0.4514	0.280	0.1264	4.2						
19	10:36	37.60	0.400	0.000	0.6	0.160	40	1	0.5105	21.0	25	0.0125
0	66.88	1.00	0.5105	0.280	0.1429	4.7						
20	10:37	38.30	0.400	0.000	0.6	0.160	40	0	0.5394	20.0	26	0.0154
0	67.10	1.00	0.5394	0.280	0.1510	5.0						
21	10:38	39.00	0.400	0.000	0.6	0.160	40	1	0.4898	17.6	26	0.0121
0	67.19	1.00	0.4898	0.280	0.1372	4.5						
22	10:39	39.70	0.400	0.000	0.6	0.160	40	3	0.4331	18.7	24	0.0115
0	67.14	1.00	0.4331	0.199	0.0864	2.8						
23	10:50	40.00	0.400	0.000	0.6	0.160	40	1	0.5026	17.8	18	0.0105
0	67.30	1.00	0.5026	0.140	0.0704	2.3						
24	10:40	40.40	0.300	0.000	0.6	0.120	40	0	0.3983	17.0	20	0.0151
0	67.03	1.00	0.3983	0.165	0.0659	2.2						
25	10:41	41.10	0.450	0.000	0.6	0.180	40	0	0.2969	17.6	10	0.0138
0	66.94	1.00	0.2969	0.315	0.0936	3.1						
26	10:42	41.80	0.500	0.000	0.6	0.200	40	0	0.3245	18.0	12	0.0118
0	66.90	1.00	0.3245	0.350	0.1136	3.7						
27	10:43	42.50	0.400	0.000	0.6	0.160	40	0	0.3757	16.7	0	0.0121
3	66.88	1.00	0.3757	0.280	0.1052	3.5						
28	10:45	43.20	0.300	0.000	0.6	0.120	40	1	0.1686	19.6	10	0.0194
3	66.88	1.00	0.1686	0.210	0.0354	1.2						
29	10:46	43.90	0.200	0.000	0.6	0.080	40	1	0.0095	26.2	-11	0.0049
3	66.83	1.00	0.0095	0.180	0.0017	0.1						
30	10:46	45.00	0.000	0.000	0.0	0.000	0	0	0.0000	0.0	0	0.0000
0	0.00	1.00	0.0000	0.000	0.0000	0.0						