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

WELL LABEL # L [96339
START CARD#	1016183

(1) LAND OWNER Owner Well I.D. Rock 1	(9) LOCATION OF WELL (legal description)
First Name Last Name	County UNION Twp 5 S N/S Range 39 E E/
Company Heffernan Family Trust	Sec 27 NW 1/4 of the SW 1/4 Tax Lot 3200
Address 706 B Ave	Tax Map Number Lot
City LaGrande State or Zip 97850	Lat ° "or DMS o
	Long or DMS of
2) TYPE OF WORK New Well Deepening Conversion	Street address of well Nearest address
Alteration (repair/recondition) Abandonment	C Succe address of well (Treatest address
3) DRILL METHOD Rotary Air Rotary Mud Cable Auger Cable Mud	63600 View Point Lane North Powder OR. 97867
	(10) STATIC WATER LEVEL Date SWL(psi) + SWL(fit
(4) PROPOSED USE Domestic Irrigation Community	Existing Well / Predeepening 04-11-2012 1 X 2.3 Completed Well 04-20-2012 1 X 2.3
Industrial/Commercial Livestock Dewatering	Flowing Artesian? X Dry Hole?
Thermal Injection Other	WATER BEARING ZONES Depth water was first found 235
(5) BORE HOLE CONSTRUCTION Special Standard Attach copy	SWL Date From To Est Flow SWL(psi) + SWL(
Depth of Completed Well 757 ft.	04-11-2012 337 341 6,000 1
BORE HOLE SEAL sacks/	04-11-2012 389 410 6,000 1
Dia From To Material From To Amt Ibs	04-11-2012 422 476 6,000 1
20 0 230 Cement 5 230 200 S	04-12-2012 537 556 6,000 1
15 230 310 Bentonite Chips 0 5 20 S	04-14-2012 563 757 6,000 1
14.75 310 750	(11) WELL LOG Ground Flavorian
12.25 750 764	Ciound Dievation
low was seal placed: Method A B C D E	Material From To
Other bent chips	black & red vic. rock med-soft 313 316
Backfill placed from ft. to ft. Material	grey & black basalt hard, little blue claystone 316 337
ilter pack from ft. to ft. Material Size	red vic. soft 337 340
xplosives used: Yes Type Amount	brown & black med, basalt 340 341
	brown & grey hard basalt 341 354 blue claystone soft 354 362
(6) CASING/LINER Casing Liner Dia + From To Gauge Stl Plstc Wld Thrd	grey hard basalt & blue claystone 362 373
	broken brown med. basalt & blue claystone 373 389
○ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	red & black vic broken basalt 389 398
	brown soft basalt, porous 398 405
	red vic.soft basalt & blue-green claystone 405 410
	grey& brown hard basalt 410 416
	grey& brown hard basalt& blue claystone 416 422
Shoe Inside Outside Other Location of shoe(s)	brown vic. med basalt& blue claystone 422 428
Temp casing Yes Dia From To	grey& red vic.soft basalt& blue claystone 428 431
7) PERFORATIONS/SCREENS	black& brown vic. soft basalt& blue claystone 431 436
Perforations Method	black vic. fractured soft basalt& blue claystone 436 452
Screens Type Material	black& brown vic. soft basalt& blue claystone 452 464 black& grey vic.soft basalt/ brown seams 464 476
~ 	
Scrn/slot Slot # of Tele/ From To width length slots pipe size	Date Started 04-11-2012 Completed 04-20-2012
JUN 0 6 2012	(unbonded) Water Well Constructor Certification I certify that the work I performed on the construction, deepening, alterati
JUN V U (U)/	abandonment of this well is in compliance with Oregon water supply
- D. D. COUDOT	abandonment of this well is in compliance with Oregon water supply construction standards. Materials used and information reported the best of my knowledge and belief.
R RESOURCES DEPT	the best of my knowledge and belief.
WELL TESTS: Minimum testing time is 1 hour	License Number Date
	Password : (if filing electronically) MAY 18
Yield gal/min Drawdown Drill stem/Pump depth Duration (hr) 4,400 10 1	(bonded) Water Well Constructor Certification SALEM ODE
6,000 310 4	(bonded) Water Well Constructor Certification SALEM OP I accept responsibility for the construction, deepening, alteration, or about
310	I accept responsibility for the construction, deepening, alteration, of about
emperature 51 °F Lab analysis Yes By	work performed on this well during the construction dates reported above. A performed during this time is in compliance with Oregon water supply
	construction standards. This report is true to the best of my knowledge and b
Water quality concerns? Yes (describe below)	L
	License Number 1934 Date 04-27-2012
From To Description Amount Units	
	Password: (if filing electronically)

UNIO 52347

WATER SUPPLY WELL REPORT continuation page

WELL I.D. # L	96339
START CARD	# 1016183

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E HO	LE					SEAL	,			sacks/
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(6)	CAS	SING	:/LII	NER

Casing Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
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(7) PERFORATIONS/SCREENS

Perf/S creen	Casing/ Liner	Screen Dia	From	То	Scrn/slot width	Slot length	# of slots	Tele/ pipe size
	\vdash							

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

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)
		, ,	

Water Quality Concerns

From	To	Description	Amount	Units
				
	-			+

(10) STATIC WATER LEVEL Water Bearing Zones

SWL Date	From	To	Est Flow	SWL(psi)	+ SWL(ft)
			_		
_					
					<u> </u>

(11) WELL LOG

Material	From	To
grey& black very hard basalt fractured	476	479
red& black med. basalt porous	479	507
grey very hard basalt& little blue claystone	507	526
grey hard basalt& grey clay	526	537
black& red vis. med basalt& blue claystone	537	540
grey hard fractured basalt& grey blue claystone	540	549
black& grey fractured basalt& blue clay	549	555
brown porous basalt& light green claystone	555	556
grey very hard basalt	556	560
black& grey vis.soft basalt& little green claystone	560	565
blue green stickey clay soft	565	570
black vis basalt& greenish blue claystone	570	573
black brown weathered broken rock soft	573	578
black grey weathered broken &blueish claystone	578	583
grey basalt hard&blue green claystone	583	599
brown vis.soft basalt& yellow claystone	599	602
red vis.soft basalt white seams&yellow claystone	602	605
black brown grey fractured vis. soft basalt	605	609
red vis. soft basalt	609	614
red and black fractured basalt& blue claystone	614	627
grey black brown fractured basalt	627	665
black grey vis. soft basalt	665	673
grey clay going to greenish grey clay soft	673	675
black soft scorcia	675	679
rotton black rock& tan clay	679	681
tan& brown claystone going into sand stone	681	691
black broken vis. basalt&blue claystone	691	718
black soft scorcia	718	722
brown stickey clay	722	731

Comments/Remarks

course brown sand	731-734	
black scorcia broken soft black basalt	734-736	
sandy blue clay& fue black rocks	736-746	
stickey grey clay	746-748	
blue claystone& blue stickey clay	748-753	
blue clay caving &weathered brown grey hard rock	753-764	

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

WELL LABEL # L	96339
START CARD #	1016183

(1) I AND OSUMED OF THE PROPERTY OF THE PROPER	
(1) LAND OWNER Owner Well I.D. Rock 1	(9) LOCATION OF WELL (legal description)
irst Name Last Name	County UNION Twp 5 S N/S Range 39 E E/W WM
Company Heffernan Family Trust	Sec <u>27 NW 1/4 of the SW 1/4 Tax Lot 3200</u>
Address 706 B Ave	Tax Map Number Lot
City LaGrande State or Zip 97850	Lat ° ' " or DMS or DD
2) TYPE OF WORK New Well Deepening Conversion	Long OMS or DD
Alteration (repair/recondition) Abandonment	Street address of well • Nearest address
3) DRILL METHOD	63600 View Point Lane North Powder OR. 97867
Rotary Air Rotary Mud Cable Auger Cable Mud	(10) STATIC WATER LEVEL Date SWL(psi) + SWL(ft)
	Existing Well / Predeepening 04-11-2012 1 X 2.3
4) PROPOSED USE Domestic Irrigation Community	Completed Well 04-20-2012 1 X 2.3
Industrial/Commercial Livestock Dewatering	Flowing Artesian? X Dry Hole?
Thermal Injection Other	WATER BEARING ZONES Depth water was first found
BORE HOLE CONSTRUCTION Special Standard Attach copy	
epth of Completed Well 757 ft.	04-11-2012 337 341 6,000 1
BORE HOLE SEAL sacks.	04 11 2012 200 410 6 000 1
Dia From To Material From To Amt lbs	04-11-2012 422 476 6,000 1
20 0 230 Cement 5 230 200 S	04-12-2012 537 556 6,000 1
15 230 310 Bentonite Chips 0 5 20 S	04-14-2012 563 757 6,000 I
14.75 310 750 12.25 750 764	(11) WELL LOG Ground Elevation
ow was seal placed: Method A XB C D E	Glowid Elevation
, — — — — —	Material From To black & red vic. rock med-soft 313 316
Other bent chips	grey & black basalt hard, little blue claystone 316 337
ckfill placed from ft. to ft. Material	red vic. soft 337 340
er pack from ft. to ft. Material Size	brown & black med. basalt 340 341
losives used: Yes Type Amount	brown & grey hard basalt 341 354
) CASING/LINER	blue claystone soft 354 362
asing Liner Dia + From To Gauge Stl Plstc Wld Thrd	grey hard basalt & blue claystone 362 373
● ○ 16 × 3 230 .375 ● ○ ×	broken brown med. basalt & blue claystone 373 389
RAP BAP H	red & black vic.broken basalt 389 398
R A H H H H	brown soft basalt, porous 398 405
	red vic.soft basalt & blue-green claystone 405 410
	grey& brown hard basalt 410 416
	grey& brown hard basalt& blue claystone 416 422
Shoe Inside Outside Other Location of shoe(s)	brown vic. med basalt& blue claystone 422 428
Temp casing Yes Dia From To	grey& red vic.soft basalt& blue claystone 428 431 black& brown vic. soft basalt& blue claystone 431 436
PERFORATIONS/SCREENS	black vic. fractured soft basalt& blue claystone 436 452
Perforations Method	black& brown vic. soft basalt& blue claystone 452 464
Screens Type Material	black& grey vic.soft basalt/ brown seams 464 476
rf/S Casing/Screen Scrn/slot Slot # of Tele/	Date Started 04-11-2012 Completed 04-20-2012
en Liner Dia From To width length slots pipe size	(unbonded) Water Well Constructor Certification
	I certify that the work I performed on the construction, deepening, alteration, or
	abandonment of this well is in compliance with Oregon water supply well
	construction standards. Materials used and information reporter to the best of my knowledge and belief.
	the best of my knowledge and belief.
WELL TESTS: Minimum testing time is 1 hour	License Number Date
Pump Bailer Air Flowing Artesian	Password: (if filing electronically)
Yield gal/min Drawdown Drill stem/Pump depth Duration (hr)	Signed WATER Street
4,400 10 1	(bonded) Water Well Constructor Certification SALEM OPPOSITE
6,000 310 4	I accept responsibility for the construction, deepening, alteration, or a part of the construction, deepening, alteration, or a part of the construction of the constr
	work performed on this well during the construction dates reported above. All work
mperature 51 °F Lab analysis Yes By	performed during this time is in compliance with Oregon water supply well
ater quality concerns? Yes (describe below)	construction standards. This report is true to the best of my knowledge and belief.
atci quality collecties: 1 to (describe colori)	License Number 1934 Date 04-27-2012
From To Description Amount Units	
	Password: (if filing electronically)
	Password : (if filing electronically) Signed

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WATER SUPPLY WELL REPORT - continuation page

WEI.	1.	LD.	#	L	96339
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START CARD # 1016183

Column Size Column Col	i) + SWL(ft)
BORE HOLE Dia From To Material From To Amt lbs SWL Date From To Est Flow SWL(ps	i) + SWL(ft)
Dia From To Material From To Amt lbs SWL Date From To Est Flow SWL(ps	+ swL(ft)
FILTER PACK	i) + SWL(ft)
From To Material Size	
(11) WELL LOG	
(6) CASING/LINER	
Material From	То
Casing Liner Dia + From To Gauge Stl Plstc Wld Thrd grey& black very hard basalt fractured 476	
red& black med. basalt porous 479	
grey very hard basalt& little blue claystone 507	
grey hard basalt& grey clay 526 black& red vis. med basalt& blue claystone 537	
black& red vis. med basalt& blue claystone 537 grey hard fractured basalt& grey blue claystone 540	
black& grey fractured basalt& blue clay 549	
brown porous basalt& light green claystone 555	
grey very hard basalt 556	
black& grey vis.soft basalt& little green claystone 560	565
blue green stickey clay soft 565	
black vis basalt& greenish blue claystone 570	
black brown weathered broken rock soft 573	
black grey weathered broken &blueish claystone 578 grey basalt hard&blue green claystone 583	
red vis out baselt white seams evellow claystone 602	
Perf/S Casing/ Screen Scrn/slot Slot # of Tele/ black brown grey fractured vis soft basalt 605	
creen Liner Dia From To width length slots pipe size red vis. soft basalt 609	
red and black fractured basalt& blue claystone 614	627
grey black brown fractured basalt 627	665
black grey vis. soft basalt 665	
grey clay going to greenish grey clay soft 673	
black soft scorcia 675	
rotton black rock& tan clay 679 tan& brown claystone going into sand stone 681	
black broken vis. basalt&blue claystone 691	
black soft scorcia 718	
brown stickey clay 722	
(8) WELL TESTS: Minimum testing time is 1 hour	
Yield gal/min Drawdown Drill stem/Pump depth Duration (hr)	
Tield gai/min Drawdown Drin stem/rump depair Duration (iii) Comments/Remarks	
course brown sand 731-734	į.
black scorcia broken soft black basalt 734-730	6
	10
black scorcia broken soft black basalt 734-730	°
black scorcia broken soft black basalt 734-736 sandy blue clay& fue black rocks 736-74 stickey grey clay 746-74 blue claystone& blue stickey clay 748-75	53
black scorcia broken soft black basalt 734-736 sandy blue clay& fue black rocks 736-74 stickey grey clay 746-74 blue claystone& blue stickey clay blue claystone& blue stickey clay blue clay caving &weathered brown grey hard rock 753-76	53
black scorcia broken soft black basalt 734-736 sandy blue clay& fue black rocks 736-74 stickey grey clay 746-74 blue claystone& blue stickey clay 748-75	53
Water Quality Concerns From To Description Amount Units black scorcia broken soft black basalt 734-736 sandy blue clay& fue black rocks 736-74 stickey grey clay 746-74 blue clay stone& blue stickey clay 748-75 blue clay caving & weathered brown grey hard rock 753-76	53
Water Quality Concerns From To Description Amount Units black scorcia broken soft black basalt 734-736 sandy blue clay& fue black rocks 736-74 stickey grey clay 746-74 blue clay stone& blue stickey clay 748-75 blue clay caving & weathered brown grey hard rock 753-76	53
Water Quality Concerns From To Description Amount Units black scorcia broken soft black basalt 734-736 sandy blue clay& fue black rocks 736-74 stickey grey clay 746-74 blue clay stone& blue stickey clay 748-75 blue clay caving &weathered brown grey hard rock 753-76	53
Water Quality Concerns From To Description Amount Units black scorcia broken soft black basalt 734-736 sandy blue clay& fue black rocks 736-74 stickey grey clay 746-74 blue clay stone& blue stickey clay 748-75 blue clay caving &weathered brown grey hard rock 753-76	53

WATER RESOURCES DEPT SALEM, OREGON