

Lake Oswego

Two Centerpointe Dr., 6th Floor Lake Oswego, OR 97035 503-598-7070

www.jordanramis.com

Vancouver

1499 SE Tech Center Pl., #380 Vancouver, WA 98683 360-567-3900

Bend

360 SW Bond St., Suite 510 Bend, OR 97702 541-550-7900

November 2, 2016

Oregon Public Utility Commission Attention: Filing Center PO Box 1088

Salem, OR 97308-1088

Re:

Docket No. UM1769

In the Matter of Mountain Home Water District, Application to Abandon Water Service and Abandon Water Utility

Our File No. 53364-74986

To Whom it May Concern:

Enclosed for electronic filing are the following exhibits:

- Reply Testimony of John Lambie on behalf of Intervenors (Exhibit 100)
- Exhibits 101-103 supporting Exhibit 100
- Reply Testimony of Mel Kroker on behalf of Intervenors (Exhibit 200)
- Exhibits 201-208 supporting Exhibit 200

Sincerely,

JORDAN RAMIS PC

Peter D. Mohr

Admitted in Oregon, Washington, and Colorado

Peter.Mohr@jordanramis.com OR Direct Dial (503) 598-5529

Enclosures

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

In the Matter of

UM 1769

MOUNTAIN HOME WATER DISTRICT,

Application to Abandon Water Service And Abandon Water Utility

Reply Testimony of John Lambie on Behalf of Intervenors Mel and Connie Kroker

November 2, 2016

- 1 Q: Please State Your Name, Business Address, And Occupation.
- 2 A. My name is John Lambie and I am a Principal Groundwater Hydrologist of E-PUR,
- 3 LLC, an engineering and scientific consultancy. My business address is 4061 SW
- 4 Chesapeake Avenue, Portland, OR 97239.
- 5 Q. On Whose Behalf Are You Testifying in This Docket?
- 6 A. I am testifying on behalf of Intervenors Mel and Connie Kroker.
- 7 Q: Please Briefly Describe Your Education And Experience.
- 8 A: In 1983, I received a BS in Earth & Planetary Sciences at the Massachusetts Institute
- 9 of Technology, and in 1984 received an MS in Sediment Mechanics also at the
- Massachusetts Institute of Technology. Since earning my MS, I have received
- additional professional level training in groundwater modeling, risk assessment,
- decision benefit analysis, and data statistics and interpretation. I possess more than 30
- years of experience providing analyses, opinions and recommendations as a licensed
- professional engineer, geologist, and engineering geologist on projects throughout the
- United States and specifically in Oregon for the past 17 years of my professional
- career. My experience includes evaluation and modeling of water resources,
- groundwater hydrology, aquifer testing and well analysis, engineering-evaluation and
- design of water-resources projects, engineering cost-benefit analysis, subsurface
- chemical transport, engineering cost-benefit analysis, and water demand and
- conservation. I have evaluated water availability and water use at the basin scale and
- 21 site scale for a wide variety of water resource projects. The groundwater resource
- projects have included domestic wells, municipal and industrial supply planning and
- evaluation, agricultural water supply from groundwater and water supply for habitat
- areas. My Witness Qualifications Statement is found at Exhibit Kroker/101.
- 25 /////

1	Q:	Have You Previously Submitted Testimony Before The Public Utility
2		Commission Of Oregon ("The Commission")?
3	A:	No.
4	Q:	Have You Previously Submitted Testimony Before Any Other Type Of
5		Tribunal?
6	A:	Yes. I have been retained as an expert on a variety of legal cases. I have testified on
7		cases before both state and federal courts. In addition to courtroom testimony, I have
8		provided written opinions and had my deposition taken on a number of matters that
9		settled before trial. I have testified in court proceedings at least nine (9) times and
10		have been deposed no less than 21 times.
1	Q:	In Those Proceedings, Were You Asked To Testify On Groundwater
12		Hydrology?
13	A:	Yes.
14	Q:	Were You Asked To Testify On The Groundwater Conditions That Would
15		Determine The Production Of A Well Or Many Wells?
16	A:	Yes.
17	Q:	Have You Testified Before On The Interrelationships Between Different Wells?
18	A:	Yes
19	Q:	What Types Of Conditions Lead To Well Interference Among Different Wells?
20	A:	Principally three things, (1) completion of the wells in the same aquifer and aquifer
21		zone, (2) proximity of the wells to one another, and (3) the rate of extraction from the
22		wells.
23	Q:	Is Well Interference Always Detrimental?
24	A:	No. If there is a highly productive aquifer such as the Columbia River Basalt Group
25		("CRBG") then the hydraulic well interference is minimal and there are no

1		detrimental effects from mutual well interference(s).
2	Q:	Can You Please Explain?
3	A:	The lowering of groundwater pressure during extraction (drawdown) decreases with
4		increases in the aquifer transmissivity. Because the CRBG aquifer zones have such
5		high transmissivity the resulting drawdown for each water supply well is very, very
6		small causing no discernible interference.
7	Also it	f the aquifer has a sufficient source of recharge annually to meet the local demands, as
8		evidenced by a record of stable annual groundwater levels, then there is no
9		cumulative detrimental effect from water supply wells extracting from the same zones
10		in the same aquifer.
11	Q:	Can One Determine How Resilient The Water Supply Is In An Aquifer By
12		Looking At Wells?
13	A:	Yes. The best evidence for this is the historic record of groundwater-pressure
14		elevations over time in an aquifer.
15	Q:	What Type Of Information Would Lead One To Conclude From A Number Of
16		Wells That A Particular Aquifer Is Healthy?
17		A: The fluctuation of groundwater hydraulic heads fits a seasonal and longer
18	term p	attern of declines in hydraulic head during summer months and annual or longer
19	drough	nt periods and increases in hydraulic head during winter months and annual or longer
20	period	s of normal and above normal precipitation.
21		Q: What Type Of Information Would Lead One To Conclude From A
22	Numb	er Of Wells That A Particular Aquifer Is Being Used At A Rate That Is Resulting
23	In The	e Increasing Reduction Of Available Ground Water Supply?
24	A:	A chronic lowering of hydraulic heads over time from year to year as measured
25		during the same season of each year.

1	Q:	Are You Providing Any Exhibits With Your Testimony?
2	A:	Yes.
3	Q:	What Is The Purpose Of Your Testimony?
4	A:	The purpose of my testimony is to discuss my analysis of a total of six (6) water
5		supply wells located within and around the Mountain Home Water District (the
6		"District"), that (a) have historically and currently provide water to the water system
7		of the District, or (b) are nearby wells not part of the water system.
8	Q:	Could You Please Provide A Summary of Your Analyses To The Commission?
9	A:	I assessed the water wells of the Mountain Home Water District for their current and
10		future utility as water supply sources for the District.
11	The M	ountain Home Water District has effectively replaced Well 3 with Well 5 after their
12		well driller (Olsen-Pulliam Well Drilling, Inc.) damaged Well 3 after repairing the
13		borehole and then improperly attempting to case or line the borehole out of
14		accordance with Oregon Well Construction Standards.
15	It is po	ossible that Well 3R can be rehabilitated using a 4-inch pump protecting well liner if
16		damage to the borehole by Olsen-Pulliam Well Drilling can be overcome. Repair of
17		Well 3R may be of benefit to the District in providing a safer and more reliable
18		supply of water than in the past.
19	The D	istrict has previously relied upon Well 2 to provide water to the District's pump house
20		and this practice should be discontinued absent extensive testing of water quality
21		from Well 2 and a video logging of Well 2 to attempt to ascertain its construction and
22		suitability for domestic water supply.
23	Extrac	tion of groundwater over the past 43 years by the District's wells and those other wells
24		nearby have not lowered groundwater pressures and thus water is and should remain
25		available to all current users of groundwater in the area.

1	Q:	What Is The Type And Source Of Information You Relied On In Preparing
2		Your Analysis And Testimony?
3	A:	My assessment and testimony is based on information I acquired through my
4		completion of a site visit to see and consider a total of six wells in question as well as
5		through my review of information provided by Intervenors, documents of public
6		record maintained by the Oregon Water Resources Department that document the
7		construction and performance of the wells, and information provided by the District
8		in response to data requests. I completed the site visit on Friday October 28, 2016.
9		During that portion of the site visit to assess the District's wells and water system, I
10		was accompanied by counsel for Intervenors Mel and Connie Kroker, Intervenor Mel
11		Kroker, counsel for Keith Ironside, and Mr. Keith Ironside.
12	Q:	What Were The Wells That You Considered In Completing Your Assessment Of
13		The Water System?
14	A:	I assessed a total of six (6) wells which I will refer to as "Well 1," "Well 2," "Well
15		3," and "Well 3R" (both of which refer to Well 3, however, the reference to "3R" is
16		made to acknowledge that this well was later subject to alteration by the District thus
17		requiring the submittal of a new OWRD Water Supply Well Report and assignment
18		of a new OWRD Well ID), "Well 4," "Well 5," and "Well 6." A plat map that has
19		been edited to show the general location of each of the wells is attached as Exhibit
20		101. This map is used for illustrative purposes only and Intervenor Mel Kroker
21		prepared it and provided it to me.
22	Q:	Could You Describe Each Of The Districts Wells You Assessed?
23	A:	In consideration of counsel for the District's letter dated April 29, 2016 providing the
24		Mountain Home Water Districts responses to Staff Data Request Nos. 01-13, which
25		was provided to me by Intervenor Mel Kroker at the request of his counsel, each of

1	the following four wells is listed as part of the District's water system in the
2	information provided: Well 2, Well 3, Well 3R, and Well 5. Under Item 5 of the April
3	29, 2016 letter, a collapsed well is discussed. Based on my site visit, Well 3 is the
4	well that the District alleges collapsed. The District owns a total of three
5	wells/boreholes: "Well 2," "Well 3/3R" (Well 3 was altered to "Well 3R" and is
6	currently a well borehole and not a water supply well), and "Well 5."
7	(Well 2)
8	This well has no Water Supply Well Report on file with OWRD. It is located on the
9	property at 2351 SW Buckman Road, which property I understand belongs to Mr.
10	Keith Ironside. The completion of Well 2 predates June 1973 based upon the map of
11	the Belford Subdivision Water System Design - Distribution (Kent W. Cox,
12	Consulting Engineer Sheet 1 of 3, June 1973). Because there was no Water Supply
13	Well Report available and it was not part of the scope for my site visit on October 28,
14	2016, I cannot make a determination as to the depth of the borehole.
15	(Well 3)
16	Well 3 was completed in 1973 as shown on OWRD Water Supply Well
17	Report CLAC_03814, a true and correct copy of which report is attached as Exhibit
18	102. The well was drilled through 8 feet of topsoil, then broken rock to 85 feet, and
19	lastly thru 515 feet of relatively competent basalt bedrock to a total depth of 600 feet
20	as described in Exhibit B. Well 3 was completed with an 8-inch casing down to 91
21	feet bgs. Static water level in Well 3 in 1973 was found to be 352 feet below ground
22	surface (bgs). Well 3 is listed as part of the District's water system in the information
23	provided to me (Jennie Bricker letter dated April 29, 2016 in response to PUC Staff
24	Data Request Nos. 01-13). Under Item 5 of the April 29, 2016, Well 3 is identified
25	

as the conapsed wen with some apparent confusion as to who owns the wen (1 have
been provided no records indicating Keith Ironside is the owner of the well).
(Well 3R)
Well 3 was altered on March 15, 2016 by Vance Wagner of Olsen-Pulliam Well
Drilling as shown on OWRD Water Supply Well Report CLAC_72134, a true and
correct copy of which is attached as Exhibit 102. The well casing was marked as
Well #L118524. Water Supply Well Report CLAC_72134 denotes that the 8-inch
diameter borehole during alteration was drilled out and cleared to 600 feet. It notes
that the borehole had caved at 385 feet prior to alteration. It then states that a well
casing with a 6.5-inch outer diameter (OD). This is a 6-inch inner diameter (ID)
casing of 0.25-inch thick steel walls for a total OD of 6.5 inches. This casing is listed
on the Water Supply Well Report as being outfitted with a drive shoe attached on the
inside. The report for Well 3R states that this casing got lodged at a depth of 340 feet
in the 8-inch diameter borehole, reportedly due to the borehole being crooked. Other
facts on the log demonstrate that the 6.5-inch OD casing was cutoff at a depth of 220
feet. The Water Supply Well Report states that alteration work was then abandoned
on March 15, 2016. It also states that a new well was drilled.
(Well 5)
Well 5 is a new well started on March 15, 2016 and completed by Olsen-Pulliam
Well Drilling on March 31, 2016 as described on Water Supply Well Report
CLAC_72170, a true and correct copy of which is attached as Exhibit 102. The well
has been given OWRD Well # L118525. Well 5 is located roughly 5 feet laterally
from Well 3/3R and is 600 feet deep. Well 5 borehole was drilled through basalt
material that appears to be essentially the same as that on Water Supply Report for

1		CLAC_03814 for Well 3 (Exhibit 102). Static water level in Well 5 was 355.7 feet
2		bgs on March 31, 2016.
3	Q:	Could You Please Describe The Other Nearby Wells Which Are Not A Part Of
4		The District's Water System?
5	A.	I identified three additional wells within a 400 foot radius of the District's wells. I
6		will refer to these additional wells as "Well 1," "Well 4," and "Well 6."
7		(Well 1)
8		An existing well at 2505 SW Buckman Road. Like the District's Well 2, this well
9		does not have Water Supply Well Reports filed with the OWRD and its completion
10		predates June 1973 based upon the map of the Belford Subdivision Water System
11		Design – Distribution (Kent W. Cox, Consulting Engineer Sheet 1 of 3, June 1973).
12		(Well 4)
13		Well 4 was drilled on September 7, 2000 and is located at 2450 SW Buckman Road
14		which is indicated on its Water Supply Well Report CLAC_56106 (Exhibit 102) as
15		owned by a Bill Renz. Ownership and location of the well was confirmed in the field
16		by Intervenor Mel Kroker.
17		(Well 6)
18		Well 6 was drilled on June 20, 2016 and is located at 2391 SW Buckman Road. I was
19		told by Intervenor Mel Kroker that the well is owned by the Belridge Water LLC, an
20		entity created by the Don Rushmer. The ownership and construction of the well is
21		confirmed by Water Supply Well Report CLAC_72275 (Exhibit 102).
22		Each of the wells with well completion logs (Well Nos. 3/3R, 4, 5, and 6) is described
23		as being completed into basalt with notations of grey/brown coloration, some bands
24		as porous (taken as porphyritic basalt with closed vesicles rather than porous as
25		interconnected pores are not found in basalt bedrock), and internal fractured zones

1 within the basalt which are characteristic of water producing intervals in the basalt 2 aguifers of the Columbia River Basalt Group. Static water levels in each of these 3 wells were measured between 352 feet bgs to 370 feet bgs when they were 4 constructed according their respective Water Supply Well Reports. 5 Q: What Were The Results Of Your Site Visit On October 28, 2016? 6 A: I was able to take a physical inventory of the number, types and general conditions of the Mountain Home Water District's Wells and Pump House (a pump house is the point from 8 which water supply is controlled and distributed to a water-supply system as contrasted to a 9 well house holding a well and that well's power supply). A description of my findings 10 follows. 11 (Well 3R) 12 Well 3R was found to be located in a roofed, access controlled, pump-house for the 13 Mountain Home Water District that is roughly 10 feet by 16 feet in dimension with a 14 poured concrete floor. Well 3R is located approximately 1-foot inside an exterior wall 15 of the District's pump-house. At the surface Well 3R has an 8-inch ID thin-walled 16 steel casing rising approximately 15 inches above the concrete floor (see photos in 17 Exhibit 103). The wellhead was found to be outfitted with a well-casing adapter 18 consisting of two semi-circular steel plates top and bottom with a rubber bushing 19 between them. Upon inspection air was found to be rushing out of the wellhead 20 through the openings in the adapter. The adapter has a ½ inch diameter threaded 21 opening that had no bolt or cap on or in it that day. This well-casing adapter was 22 seated in the riser pipe but was found to be not tightened down to engage the rubber 23 bushing that day. This wellhead casing adapter was removed for my inspection of 24 Well 3R. The inspection consisted of lowering a clean well-depth sounding probe 25 twice, the first time to measure the static water level and the second to identify the

total depth of the well. Water level was measured using blue carpenter's chalk on the sounding probe cable; static water level in Well 3R was measured at 362.1 feet below top of casing (TOC). The total depth of Well 3R was then sounded by lowering the weighted cable, marked in 0.25-foot increments, until tension decreased and then raising the cable gently to feel the transition of the weight lifting off the bottom and the corresponding increase in tension. Depth of Well 3R was estimated to be 600.15 feet below TOC. In addition observations were made during the well depth sounding of changes in the tension on the weighted sounding probe cable; one decrease in tension was noted during cable descent at 372 feet below TOC and then increases in cable tension were noted during sounding cable removal at depths of 476 feet below TOC and then continuously from 337 where cable tension increased and remained until 202 feet below TOC where the cable tension decreased notably. (Mountain Home Water District Pump House) The pump house for the Mountain Home Water District contains two pressureregulation tanks that are configured to the original outbound water pipe along with two new outbound pipes which Mr. Ironside reported are for new home-service connections. These pressure regulation tanks are connected by electronic pressure gauge to a well pump-controller. The pump controller is currently connected to Well 5 and appears to turn Well 5 on when water is needed to maintain system pressure (Well 5 cycled on and off during my time in the pump house). Well 5 is piped into the pump house to the pressure regulation tanks which control the pressure of the water in the District's water distribution system. See photos in Exhibit 103. Relic traces of the original tank concrete saddles were observed on the floor which confirmed the location of the original 2-inch steel vertical outlet line shown on the Plan drawing entitled Belford Subdivision Water System Design – Details (Kent W. Cox,

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 Consulting Engineer Sheet 3 of 3, June 1973). That active 2-inch vertical steel pipe 2 porting through the floor is shown on the system plan drawings as connecting to a 6-3 inch diameter supply line for the Mountain Home Water District. Two additional 2-4 inch diameter PVC sleeves porting through the floor were noted that correspond to 5 points on this same plan drawing sheet 3 of 3 for future water system connections. 6 (Well 5) 7 Well 5 was found to be located approximately 3 feet outside the wall for the District's 8 pump house on the same wall as Well 3R, placing it approximately 5 feet from Well 9 3R. Well 5 is installed using a pitless adapter rising perhaps 2-feet above ground 10 surface. As noted previously Well 5 is controlled by the pump system inside the 11 building that was reportedly used for Well 3 prior to its alleged collapse and 12 subsequent alteration to Well 3R. A photo of the Well 5 wellhead is provided in 13 Exhibit 103. 14 (Well 2) 15 Well 2 was located in the yard of 2351 SW Buckman Road. The wellhead is located 16 perhaps 75 feet east-southeast of the District's pump-house and appeared to be 17 completed with a modern pitless adapter at the ground surface. A long section of 1.5 18 inch ID PVC piping, perhaps 70 feet in length, was observed laying in the yard of 19 2351 SW Buckman Road between the Well 2 well head and pump house that was not 20 in use but reportedly had been used to act as an intertie to the District's pump house 21 by tieing into the plumbing at a separate pump house for Well 2 to meet the pressure 22 regulation demands of the District's distribution system. On the day of inspection 23 Well 2 was configured to supply water out a separate supply line to an unidentified 24 water use. 25 (Other Observations During the Site Visit)

1 The wellheads for Well 4 and Well 6 were observed as a matter of record during my 2 site visit. Each well is outfitted with a pitless adaptor. In addition the location of the 3 Well 6 pump house was noted and the alignment of the piping from it that currently 4 serves the homes at 2425 and 2395 SW Buckman Road which were reported to have 5 been previously served by the Mountain Home Water District. 6 What Is The Significance, If Any Regarding Your Assessment Of Each Well? O: 7 A: (Well 3/3R) 8 Well 3R was found to be open over the entire interval of the original borehole. Minor 9 obstructions were denoted by the behavior of the sounding tape. The drag felt on the 10 sounding tape from 337 feet to 202 feet may be due to the bottom weight dragging 11 along the sidewall of the 6.5-inch OD steel casing that is reportedly jammed into the 12 original borehole at an angle due to the borehole having irregular vertical alignment. 13 It is our professional opinion that the Well 3R alteration work conducted by Olsen-14 Pulliam Well Drilling on March 15, 2016 was not in accord with Oregon well 15 construction standards¹ and ended up compromising the utility of the well borehole 16 unnecessarily. Furthermore attempting to install a heavy-gauge steel liner of 6.5-inch 17 OD into a 600-foot deep 8-inch ID borehole was inappropriate as it lacked reasonable 18 lateral tolerances and predictably did not meet with success. Further the 6.5-inch OD 19 steel well casing appears to have been cutoff at a depth greater than 200 feet based on 20 our field findings and Water Supply Well Report CLAC 72134 with its drive shoe left 21 in place. 22 Oregon Administrative Rules (OAR) 690-210-0155 (1) - Additional Standards for Artesian 23 Water Supply Wells calls for a borehole to be 4-inches larger than the nominal diameter of the permanent well casing and the attempt made used a borehole only 2-inches larger than 24 the nominal diameter and due to the heavy wall of the casing used the borehole was only 1.5-

25

inches larger than the casing outer diameter.

Despite these mistakes by Olsen-Pulliam Well Drilling it may still be possible to construct an operable well into the borehole for Well 3R by installing a 4-inch diameter PVC liner to act as a pump protector within the open borehole below the groundwater table. However, the overall suitability of Well 3R to act as a water supply well cannot be determined without a video logging of the borehole. It is likely that video logging of Well 3R could reasonably be accomplished to assess the possibility of bringing the well into service by installing an appropriate liner for pump protection and using the borehole for an 8-inch diameter well. (Well 5) Well 5 as configured is serving as a replacement for Well 3/3R in supplying water for the customers of the Mountain Home Water District. Our field findings for Well 5 and its configuration to the water-supply pump house for the Mountain Home Water District and electronic controllers indicate that it is a suitable replacement. The Water Supply Well Report CLAC_72170 indicates that the well borehole is capable of producing upwards of 100 gallons per minute with the proper pump system. Notably Well 5 is constructed to Oregon Well Construction Standards by placing a 6-inch nominal diameter pipe in a 10-inch diameter borehole. In my professional opinion Well 5 is the functional equivalent of Well 3 and thus the only benefit to rehabilitating Well 3R to function as a supply well would be to enhance water-supply reliability for the District. Should one or other of Wells 5 or Well 3R need to be taken out of service for subsequent maintenance or repairs. (Well 2) Well 2 is a non-conforming well and should not be used for water supply without extensive and repeated testing for water quality. Without demonstration of how the well is constructed (which may be possible using video logging tools), the water

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1		quality in the well should be considered at risk of contamination. Fecal bacteria or
2		other pathogens could enter the borehole, and given the observed configuration of the
3		wellhead and pressure tanks, backflow preventers would need to be installed in the
4		supply lines.
5		(Ground water source: Well Nos. 3/3R, 4, 5, and 6)
6		It is my professional opinion that each of the 4 existing wells, 3R, 4, 5, and 6 with
7		well logs are completed in the same confined artesian basalt aquifer within the
8		Columbia River Basalt Group beneath Pete's Mountain. The static groundwater
9		elevation I measured in Well 3R on October 28, 2016 of 362.1 feet below TOC is
10		quite similar to the 352 feet bgs measured in June 1973. Thus the aquifer does not
11		appear to have been over-pumped for the past 43 years.
12	Q:	Do You Have Any Other Opinions Regarding The District's Use Of
13		Groundwater Wells? Are Your Summary Recommendations For The District
14		Operational?
15	A:	(Alteration of Well 3R and Completion of Well No. 5)
16		As to the steps to be taken in regard to Wells 3R and Well 5, I make no specific
17		recommendations, but offer those observations provided above that Well 5 can serve
18		the District in the same way as Well 3 did and that rehabilitating Well 3R back to a
19		legal and functioning well would provide the District with greater supply certainty
20		during maintenance periods. The potential liability for the needless damage done by
21		Olsen-Pulliam Drilling when attempting an improper alteration to then Well 3 is a
22		matter to be addressed by the District and District's legal counsel.
23	Q:	Does This Conclude Your Testimony?
24	A:	Yes.
25		

1	CERTIFICATE OF FILING AND SERVICE
2	
3	I hereby certify that on the date shown below, I filed the original and one (1)
4	copy of the foregoing Testimony of John Lambie by electronic transmission and
5	first class mail, postage prepaid, on:
6	Filing Center Public Utility Commission of Oregon
7	PO Box 1088 Salem, OR 97308-1088 PUC.FilingCenter@state.or.us
8	
9	I further hereby certify that on the date shown below, I served a true and
10	correct copy of the foregoing Testimony of John Lambie by first class mail, postage
11	prepaid, on:
12	Jennie L. Bricker Celeste Hari Celeste Hari
13	Jennie Bricker Land & Water Law 818 SW Third Ave, PMB 1517 Portland, OR 97204 Public Utility Commission of Oregon PO Box 1088 Salem, OR 97308-1088
14	Sommer Moser
15	PUC Staff – Department of Justice
16	1162 Court St. NE Salem, OR 97301
17	by first class mail, postage prepaid.
18	by facsimile transmission and first class mail, postage prepaid.
19	by electronic transmission.
20	by electronic transmission and first class mail, postage prepaid.
21	DATED: November 2, 2016.
22	
23	/s/ Peter D. Mohr Peter D. Mohr, OSB # 013556
24	Attorney for Mel and Connie Kroker, Intervenors
25	

CERTIFICATE OF SERVICE

JORDAN RAMIS PC
Attorneys at Law
PO Box 230669
Portland OR 97281
Telephone: 503.598.7070 Fax: 503.598.7373
53364-74986 2437529_1\mee/11/2/2016

WELL 3

with at least one entry for each change of form position of Static Water Level and indicate pro-	well. surface. are inch. below es pleted we and stru um and s atton. Rej.	Date 6 Date Date 11 595	W.M. 18-73 8** 5 nt. materials:
STATE ENGINEER Permit : sove this line) SALEM, OREGON (10) LOCATION OF WELL: County Clasicans Driller's well : N.W. 14 N.W.4 Section 33 T. 25 Bearing and distance from section or subdivided in the section of section of static with at least one entry for each change of form position of Static Water Level and indicate pro-	well. surface. are inch. below es pleted we and stru um and s atton. Rej.	Date 6 Date Date 11 595	W.M.
(10) LOCATION OF WELL: County Clackenss Driller's well r N.W. 14 N.W. 14 Section 33 T. 25 Bearing and distance from section or subdivided by the section of section of static water was first found by the section of section of static water Level and indicate prosition of Static Water Level and indicate procession of Static Water Level and indicate prosition of Static Water Level and indicate procession of Static Water Level and Indica	surface. are inch. below es pleted we and stru um and s atton. Rej.	Date 6 Date Date sing 11 595	W.M
(10) LOCATION OF WELL: County Clasicanas Driller's well : N.W. 14 N.W. 45 Section 33 T. 25 Bearing and distance from section or subdivided in the section of static with at least one entry for each change of form position of Static Water Level and indicate pro-	surface. are inch. below es pleted we and stru um and s atton. Rej.	Date 6 Date Date sing 11 595	W.M
County Clackenas Driller's well r. N.W. 14 N.W. 14 Section 33 T. 28 Bearing and distance from section or subdiviction of Static level 352 Artesian pressure (12) WELL LOG: Diameter of well Depth drilled 600 Formation: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pressure of Static Water	R. 1E Well. surface. are inch. below es pleted we and stru um and s atton. Rej	Date 6 Date Date 11 595	89 materials
County Clackers Driller's well r N. W. W. W. W. Section 33 T. 25 Bearing and distance from section or subdivice (11) WATER LEVEL: Completed to Depth at which water was first found but Static level 352 ft. below land Artesian pressure lbs. per square (12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of compromation: Describe color, texture, grain size and show thickness and nature of each strate with at least one entry for each change of form position of Static Water Level and indicate pressure of the second strate with at least one entry for each change of form position of Static Water Level and indicate pressure the second strate with at least one entry for each change of form position of Static Water Level and indicate pressure the second strate with at least one entry for each change of form position of Static Water Level and indicate pressure the second strategy of t	R. 1E Well. surface. are inch. below es pleted we and stru um and s atton. Rej	Date 6 Date Date 11 595	89 materials
County Clackers Driller's well r N. W. W. W. W. Section 33 T. 25 Bearing and distance from section or subdivice (11) WATER LEVEL: Completed to Depth at which water was first found but Static level 352 ft. below land Artesian pressure lbs. per square (12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of compromation: Describe color, texture, grain size and show thickness and nature of each strate with at least one entry for each change of form position of Static Water Level and indicate pressure of the second strate with at least one entry for each change of form position of Static Water Level and indicate pressure the second strate with at least one entry for each change of form position of Static Water Level and indicate pressure the second strate with at least one entry for each change of form position of Static Water Level and indicate pressure the second strategy of t	R. 1E Well. surface. are inch. below es pleted we and stru um and s atton. Rej	Date 6 Date Date 11 595	Sn materials
Bearing and distance from section or subdivi- (11) WATER LEVEL: Completed of Depth at which water was first found but Static level 352 ft. below land Ariesian pressure lbs. per squared (12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of completed and show thickness and nature of each strate with at least one entry for each change of form position of Static Water Level and indicate pressure and indicate pressure of static water Level and indicate pressure of the static water level water level and indicate pressure of the static water level water level and indicate pressure of the static water level water level and indicate pressure of the static water level water level and indicate pressure of the static water level w	R. 1E Well. surface. are inch. below es pleted we and stru um and s atton. Rej	Date 6 Date Date 11 595	Sn materials
Bearing and distance from section or subdividual content of the completed of the content of the	well. surface. are inch. below es pleted we and stru um and s ation. Rej	Date 6 Date Date 11 595	Sn materials
(11) WATER LEVEL: Completed to Depth at which water was first found has Static level 352 ft. below land Artealan pressure lbs. per squared (12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of composition: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pro-	well. surface. are inch. below es pleted we and stru um and s ation. Rej	Date 6 Date asing	materials
Depth at which water was first found his Static level 352 ft. below land Artesian pressure lbs. per squ (12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of com Formation: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pri	surface. are inch. below capleted we and struum and attion. Rej	Date asing	materials
Depth at which water was first found his Static level 352 ft. below land Artesian pressure lbs. per squ (12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of com Formation: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pri	surface. are inch. below capleted we and struum and attion. Rej	Date asing	materials
Depth at which water was first found his Static level 352 ft. below land Artesian pressure lbs. per squ (12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of com Formation: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pri	surface. are inch. below capleted we and struum and attion. Rej	Date asing	materials
Depth at which water was first found his Static level 352 ft. below land Artesian pressure lbs. per squ (12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of com Formation: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pri	surface. are inch. below capleted we and struum and attion. Rej	Date asing	materials
Artesian pressure Ibs. per square (12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of comparison: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pro-	surface. are inch. below cs pleted we and stru um and s ation. Res	Date asing	materials
Artesian pressure Ibs. per square (12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of companion: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pro-	below ca pleted we and stru um and a ation. Re	Date asing	materials
Artesian pressure Ibs. per square (12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of companion: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pro-	below ca pleted we and stru um and a ation. Re	Date asing	materials
(12) WELL LOG: Diameter of well Depth drilled 600 ft. Depth of commercial formation: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pro-	helow ca pleted we and stru um and a ation. Re	using	materials
Depth drilled 600 ft. Depth of com Formation: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pri	and stru um and s ation. Re	ature of	materials
Depth drilled 600 ft. Depth of com Formation: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pri	and stru um and s ation. Re	ature of	materials
Formation: Describe color, texture, grain size and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pri	and stru um and s ation. Re	cture of	materials
and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pri	um and a ation. Re		
and show thickness and nature of each strat with at least one entry for each change of form position of Static Water Level and indicate pri	um and a ation. Re		
position of Static Water Level and indicate pro	ation. Rei incipal wo		
- A Maria V A Ma	archine me	port each	chango i ina strata
WATERTAT.		1	
	From	To	BWL
Clawarad	0	8	
를 보고 있는 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	8	84	
나는 사람들이 가지막은 사람들은 아이들은 아이들이 가지 않는 것이 없는 것이 없었다.	-		100
			1
			1
		13-3	
Reck-basalt-gray-hard	,	100	
Beck-blk-brewn	1390	418	
Reck-blk-red	418_	432_	
Beck-baselt-gray-hard	432	448	
Beck-clayseaus-yellew-water	448	453	
	453	W74	1
	474	530	
	1 .		
		1	
		WO K	1
		13/3	+
Sandstone-greenish-water	1562		+
HOek-blk	1593_	600_	1352
Work started 6-10 193 Comple	eted 6	-26	1873
			1273
Date and mining morning worker out of Arm			194 /
Drilling Machine Operator's Certification	1:		
This well was constructed under m	y direc	t supe:	rvision
Materials used and information reporte	1 above	are tru	e to m
	,		
[Signed]	Date b	- ₹5	, 1973
나이는 사람이 가지를 잃었는데 가게 하는 것 같아 가게 살아왔다면 하는데 하는데, 그	59	5	America 1
watering machine Operator a Intense 140			
Water Wall Controctants Continue			
그렇게 하는 사람들이 얼마나 되었다. 그 그 살아 없는 사람들이 되었다.		100	
		and this	report i
O & W Tool 174ma & Gannile	T _		
Name Sen Arilling & Dapply			
부분하는 하고 그림 바다를 가입니다. 호텔들이 사용했다. 사용을 하는 것은 점점 하다 그 것이다.			
Address 399 S.E. Walnut, Canby	Ora.	9701	5
Volume /// // The man	1	_	
	tractor)		
hor	4 05		ń
	Rock-weatherd-brewn Reck-brewn Reck-w/crevis-br-clayseans-bl Reck-bassit-gray-hard Reck-blk-brewn Reck-blk-brewn Reck-blk-red Reck-bassit-gray-hard Reck-bassit-gray-hard Reck-bassit-gray-hard Reck-br-red Reck-bassit-gray-hard Reck-bassit-gray	with at least one entry for each change of formation. Reposition of Static Water Level and indicate principal with the position of Static Water Level and indicate principal with the position of Static Water Level and indicate principal with the position of Static Water Level and indicate principal with the position of Static Water Level and indicate principal with the position of Static Water Level and the position of Static Water Well Contractor's Certification: This well was drilled under my jurisdiction and the best of my knowledge and belief. Name Static Water Well Contractor's Certification: This well was drilled under my jurisdiction and true to the best of my knowledge and belief. Name Static Water Well Contractor's Certification: This well was drilled under my jurisdiction and true to the best of my knowledge and belief. Name Static Water Well Contractor's Certification: This well was drilled under my jurisdiction and true to the best of my knowledge and belief. Name Static Water Well Contractor's Certification: This well was drilled under my jurisdiction and true to the best of my knowledge and belief. Name Static Water Well Contractor's Centractor's Centr	Clay-red Reck-weatherd-brenn Reck-brenn Reck-weith-br-blk-green Reck-w/crevis-br-clayseens-bl 322 365 Reck-w/crevis-br-clayseens-bl 322 365 Reck-basalt-gray-hard Reck-blk-brenn Reck-blk-red Reck-basalt-gray-hard Reck-bas

WELL 3R

Intervenors / 102 Lambie / 2 CLAC 72134

CLAC 72134

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

WELL I.D. LABEL# L	118524		
START CARD#	1029859		
ORIGINAL LOG#	CLACKAMAS	3814	

(as required by ORS 537.765 & OAR 690-205-0210)	ORIGINAL LOG # [CLACKAMAS 3814
LAND OWNER Owner Well LD.	
rst Name KEITH Last Name IRONSIDE	(9) LOCATION OF WELL (legal description)
ompany	County CLACKAMAS Twp 2 S N/S Range! E E/W WI
ddress 2323 SW BUCKMAN ROAD	Sec 33 NW 1/4 of the NW 1/4 Tax Lot 2100
ty WEST LINN State OR Zip 97068	Tax Map Number Lot
TYPE OF WORK New Well Deepening Conversion	It at " or DMS or DD
Alteration (complete 2a & 10) Abandonment(complete 5a)	Long "or DMS or DD
PRE-ALTERATION Dia + From To Gauge Sti Pistc Wid Thrd	Street address of well Nearest address
Casing: 8 1 91 250	
Material From To Amt sacks/bs	2323 SW BUCKMAN ROAD WEST LINN OR 97068
Seal: Cement 0 89 34 Sacks	
DRILL METHOD	(10) STATIC WATER LEVEL
■ Rotary Air	Date SWL(psi) + SWL(ft)
Reverse Rotary Other	Existing Well / Pre-Alteration 06-16-1973 350 350 350
PROPOSED USE Domestic Irrigation Community	Flowing Artesian? Dry Hole?
PROPOSED USE Domestic Irrigation Community Industrial/ Commercial Livestock Dewatering	
	WATER BEARING ZONES Depth water was first found
ThermalInjectionOther	SWL Date From To Est Flow SWL(psi) + SWL(ft)
BORE HOLE CONSTRUCTION Special Standard (Attach copy	
Depth of Completed Well 600 ft.	
BORE HOLE SEAL sacks/	
Dia From To Material From To Amt lbs 12 0 89 Cement 0 89 34 S	
12 0 89 Cement 0 89 34 S Calculated	<u> </u>
Calculated	(11) WELL LOG Ground Elevation
How was seal placed: Method A B XC D E	Material From To
Other	CLEANED HOLE OUT, WAS CAVED IN AT
Backfill placed from ft. to ft. Material	385 FEET HOLE WAS ORIGINALLY DRILLED
Filter pack fromft. toft. MaterialSize	CROOKED AND 6" CASING WOULD NOT GO
Explosives used: Yes Type Amount	PAST 340 FEET ABANDONED ALTERATION AND DRILLED
ABANDONMENT USING UNHYDRATED BENTONITE	A NEW WELL.
Proposed Amount Pounds Actual Amount Pounds	ORIGINAL STATE NO. WAS 25/1E - 33
Troposo Antonia	CLACK #03814
Casing Liner Dia + From To Gauge Stl Plstc Wld Thrd	OWNER: DALE BELFORD RECEIVED BY OV
(auge 5t 13t 71t 71t 71t 71t 71t 71t 71t 71t 71t 71	
	RECEIVED BY OWRD
	APR 1 8 2018
	MAY 16 2016
Shoe X Inside Outside Other Location of shoe(s) 340	SALEM, OR
Temp casing Yes Dia From To	
PERFORATIONS/SCREENS	SALEM, OR
Perforations Method	
Screens Type Material	Date Started03-07-2016 Completed 03-15-2016
Perf/S Casing/ Screen Scrn/slot Slot # of Tele/	
creen Liner Dia From To width length slots pipe size	
	I certify that the work I performed on the construction, deepening, alteration, abandonment of this well is in compliance with Oregon water supply we
	construction standards. Materials used and information reported above are true
	construction standards. Materials used and information reported above are true
WELL TESTS: Minimum testing time is I hour	construction standards. Materials used and information reported above are true the best of my knowledge and belief.
	construction standards. Materials used and information reported above are true the best of my knowledge and belief.
Pump Bailer Air Flowing Artesian	construction standards. Materials used and information reported above are true the best of my knowledge and belief. License Number Date Signed
	construction standards. Materials used and information reported above are true the best of my knowledge and belief. License Number Date Signed (bonded) Water Well Constructor Certification
Pump Bailer Air Flowing Artesian	construction standards. Materials used and information reported above are true the best of my knowledge and belief. License Number Date Signed (bonded) Water Well Constructor Certification I accept responsibility for the construction, deepening, alteration, or abandonm
Pump Bailer Air Flowing Artesian	construction standards. Materials used and information reported above are true the best of my knowledge and belief. License Number Date Signed (bonded) Water Well Constructor Certification
Pump Bailer Air Flowing Artesian Yield gal/min Drawdown Drill stem/Pump depth Duration (hr)	construction standards. Materials used and information reported above are true the best of my knowledge and belief. License Number Date Signed (bonded) Water Well Constructor Certification I accept responsibility for the construction, deepening, alteration, or abandonm work performed on this well during the construction dates reported above. All w
Pump Bailer Air Flowing Artesian Yield gal/min Drawdown Drill stem/Pump depth Duration (hr) Temperature °F Lab analysis Ves By	construction standards. Materials used and information reported above are true the best of my knowledge and belief. License Number Date Signed (bonded) Water Well Constructor Certification I accept responsibility for the construction, deepening, alteration, or abandonm work performed on this well during the construction dates reported above. All we performed during this time is in compliance with Oregon water supply to the construction dates.
Yield gal/min Drawdown Drill stem/Pump depth Duration (hr)	construction standards. Materials used and information reported above are true the best of my knowledge and belief. License Number Date Signed (bonded) Water Well Constructor Certification I accept responsibility for the construction, deepening, alteration, or abandonm work performed on this well during the construction dates reported above. All w performed during this time is in compliance with Oregon water supply construction standards. This report is true to the best of my knowledge and belied License Number 1738 Date 04-12-2016
Pump Bailer Air Flowing Artesian Yield gal/min Drawdown Drill stem/Pump depth Duration (hr) Temperature °F Lab analysis Ves By	construction standards. Materials used and information reported above are true the best of my knowledge and belief. License Number Date Signed (bonded) Water Well Constructor Certification I accept responsibility for the construction, deepening, alteration, or abandonm work performed on this well during the construction dates reported above. All w performed during this time is in compliance with Oregon water supply w construction standards. This report is true to the best of my knowledge and belief

WELLY SEP (CLAC 56106

STATE OF OREGON

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 SALEM, OREGON

Intervenors / 102

(START CARD) # 133795

(1) OWNER: Well Number: 01	(9) LOCATION OF WELL by legal description:
Name Bill Renz	County Clackamas Latitude Longitude Township 2SOUTHN or S. Range 1EAST E or W. of WM.
Address 2385 SW Buckman Rd. City West Linn State OR Zip 97068	Section 33 NW 1/4 NW 1/4
	Tax lot 2104 Lot Block Subdivision Street Address of Well (or nearest address) 2450 SW Buckman Rd.,
(2) TYPE OF WORK:	West Linn, OR
X New WellDeepeningAlteration (repair/recondition)Abandonment	(10) STATIC WATER LEVEL:
(3) DRILL METHOD:	370 ft. below land surface. Date 9/1/00
X Rotary Air Rotary Mud Cable Auger Other	Artesian pressure Ib. per square inch. Date (11) WATER BEARING ZONES:
(4) PROPOSED USE:	Depth at which water was first found 395
X Domestic Community Industrial Irrigation Thermal Injection Livestock Other	From To Estimated Flow Rate SWL 395 473 30 370
(5) BORE HOLE CONSTRUCTION:	
Special Construction approval Yes XNo Depth of Completed Well 480 ft. Explosives used Yes XNo Type Amount HOLE SEAL Amount	(12) WELL LOG:
Diameter From To Material From To sacks or pounds 10 0 18.5 Bentonite 18.5 0 8 sacks	Ground elevation
6 18.5 480	Material From To SWL
	Soil, Brown 0 6
	Basalt, Brown & Gray Soft 6 11 Basalt, Gray w/ Brown @ times 11 75
	Basalt, MC, Porous & Fractured 75 86
How was seal placed: Method A B C D E	Basalt, Gray 86 135 Basalt, Gr.&Br, Fractured 135
X Other poured Backfill placed from ft. to ft. Material	w/semi-broken 156
Gravel placed from ft. to ft. Size of gravel	Basalt, Gray w/ Brown @ Times 156 170
(6) CASING/LINER:	Basalt, Gray & Brown 170 188 Basalt, Gray w/ Brown @ Times 188 266
Diameter From To Gauge Steel Plastic Welded Threaded	Basalt, Gray & Brown, Fractured 266 280
Casing: 6 +1.5 118.5 .250 X	Basalt, Gray & Brown 280 310
	Basalt, Gray & Brown, Porous 310 318 Basalt, Gray & Brown 318 395
	Basalt, MC, Porous 395 422 370
Liner: 4 6 480 160#	Basalt, Gray & Brown, Fractured 422 431 370 Basalt, Gray, Semifractured 431 437 370
Final location of shoe(s) None	Basalt, MC, Fractured 437 446 370
(7) PERFORATIONS/SCREENS:	Basalt, MC, Porous 446 468 370
X'Perforations Method Saw	Basalt, Gray & Brown, Fractured 468 473 370 Basalt, Gray w/ Brown @ Times 473 480
Screens Type Material	Dasari, Gray W. Drown
Slot Tele/pipe From To size Number Diameter size Casing Liner	
461 479 1/8×3 80	Date started 8/30/00 Completed 9/1/00
	(unbonded) Water Well Constructor Certification:
	I certify that the work I performed on the construction, alteration, or abandonment
(8) WELL TESTS: Minimum testing time is 1 hour	of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to my best knowledge and
Pump Bailer X Air Flowing Artesian	belief.
	WWC Number 1601
Yield gal/min Drawdown Drill stem at Time	Signed ///ane 0 200 Date 9/7/2000
30 475 1 hr.	/honded Water Well Constructor Cortification:
	(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
Temperature of Water 57.2 Depth Artesian Flow found Was a water analysis done? Tyes By whom	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.
Was a water analysis done? Yes By whom Did any strata contain water not suitable for intended use? Too little	WWC Number 1592
Salty Muddy Odor Colored Other	Signed Thus Change Date 9-7-2000
Depth of strata:	SOON CONSTRUCTOR THIRD CODY CHETOMER
ODICINAL & FIRST CORY - WATER RESOURCES DEPARTMENT S	ECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER

WELL 5 Intervenors / 102 CLAC 72170 WELL D. LABEL# 1/ 118525

STATE OF OREGON WATER SUPPLY WELL REPORT

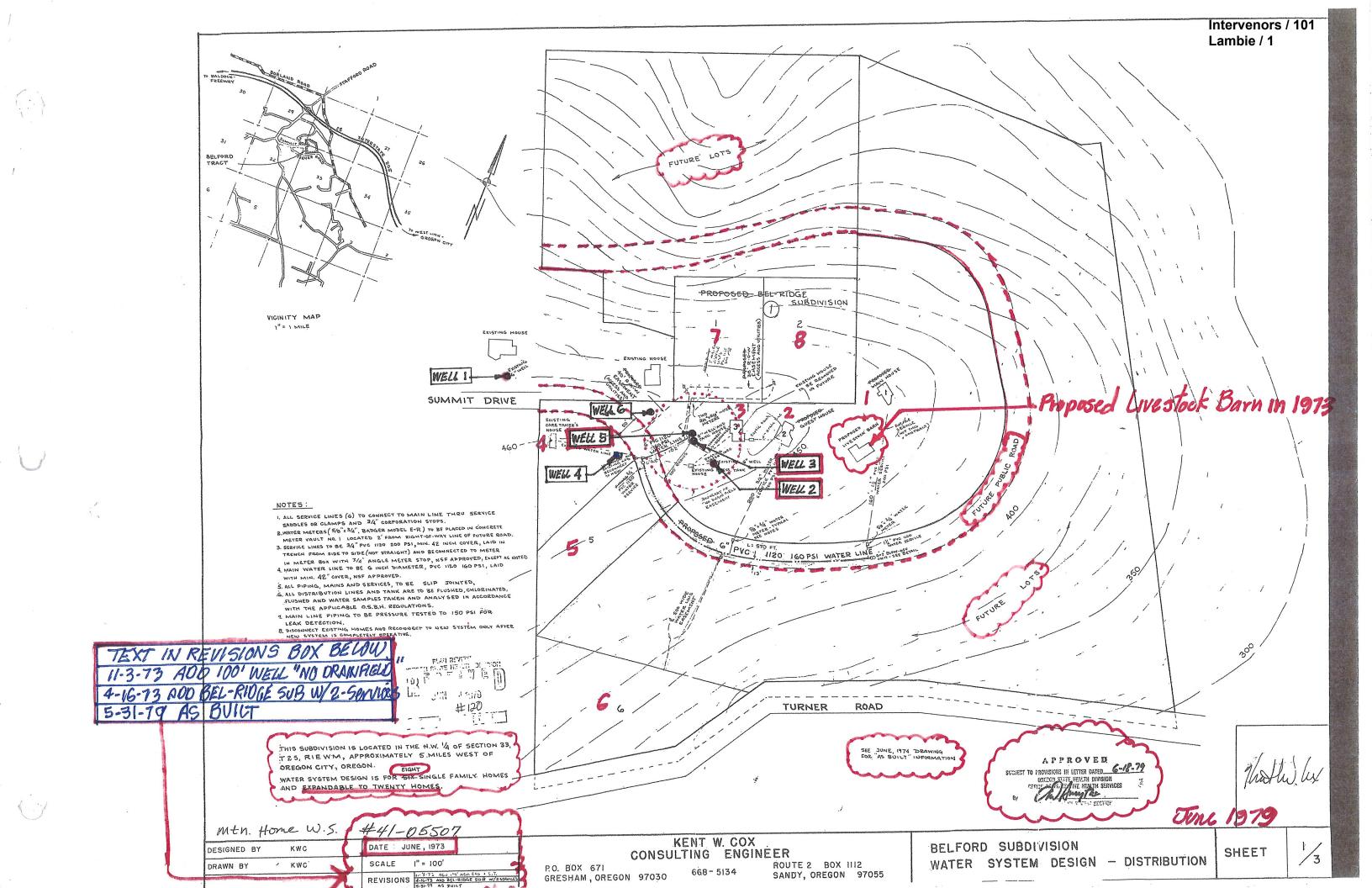
	- Managaran	
WELL I.D. LABEL# L	118525	
START CARD#	201805	
ORIGINAL LOG#		

(as required by ORS 537.765 & OAR 690-205-0210)			UKIU	INAL LUG		 -	
LAND OWNER Owner Well I.D.					()LAC"	72170
irst Name KEITH Last Name IRONSIDE		(9) LOCATION OF WELL (legal description)					
Company	,	County CLACKAMAS Twp 2 S N/S Range 1 E E/W WM					
Address 2323 SW BUCKMAN ROAD	.	Sec 38 NW 1/4 of the NW 1/4 Tax Lot 2100					0
ity WEST LINN State OR Zip 97068	l·	Tax Map Number			I	_ot	
I TE OF WORK	Cision	Lat		" or			DMS or DD
Alteration (complete 2a & 10) Abandonment(co	mniete sai I	Long°	,	" or			DMS or DD
PRE-ALTERATION Dia + From To Gauge Stl Plstc Wld Thrd			et address o		Nearest add	dress	
Casing: Casing		2323 SW BUCKMAN ROAD WEST LINN OR 97068					
Material From To Amt sacks/lbs		2323 SW BUCK	MAN KUA	D WEST LINE	1 OK 3 100	0	
Seal:							
DRILL METHOD		(10) STATIC	WATE		ate SW	m zamasa - uku	CHA (A)
Rotary Air Rotary Mud Cable Auger Cable Mud		Existing Wel	L/ Pre-Alte		are 2M	L(psi) +	SWL(ft)
Reverse Rotary Other		Completed W		03-31-2	016	一一一一	355.7
PROPOSED USE Domestic Irrigation Community		<u> </u>	Flowi	ng Artesian?	Dry	Hole?	
Industrial/Commercial Livestock Dewatering		WATER BEARIN	C ZONES	Denth		first found _	490
Thennal Injection Other		SWL Date	From			SWL(psi)	
						ra ser claus	,
BORE HOLE CONSTRUCTION Special Standard (Attach copy)	3/81/16	490	600	100		355.7
Depth of Completed Well 593 ft.							——
BORE HOLE SEAL Dia From To Material From To A	sacks/ Amt lbs						
Dia From To Material From To A 10 0 593 Bentonite 0 4	4 S						$H \longrightarrow$
Calculated	4			1			LLI
	118 S	(11) WELL L	OC.				
Calculated	10	(11) WELL L	OG	Ground Elev	ation		
How was seal placed: Method A B XC D	∐E		<u>Material</u>			From 0	To
Other POURED IN PEA GRAD	7E1	TOP SOIL BROWN CLAY				<u></u>	13
Backfill placed from 490 ft. to 593 ft. Material PEA GRAN	<u>'</u>	BROKEN GRA	***************************************	·		13	87
Filter pack from ft. to ft. Material Size		MEDIUM HAR				87	115
Explosives used: Yes Type Amount		MEDIUM HARD BLACK BASALT 115					127
(a) ABANDONMENT USING UNHYDRATED BENTONI	ITE	SOFT GRAY B	***************************************		DCLAY	127	142
Proposed Amount Pounds Actual Amount Pour	nds	MEDIUM HAR			800 1 5 7 8	142	178
CASING/LINER_		MEDIUM HAR		IASALI WIIH	SEAMS	178	267
Casing Liner Dia + From To Gauge Stl Plstc	Wld Thrd	OF GRAY CLA HARD GRAY E				267	370
	× _	HARD GRAY E	ASALT FI	RACTURED A	T TIMES	370	490
		GRAYISH GRE HARD GRAY E	EN BASA	II.	500//	W(\$)	570
	H	HARD GRAY E	BASALTH	EUEIVE	JOIL	77 576	600
RAHHHHRX							
Shoe Inside Outside Other Location of shoe(s) 5	ILJ LJ			MAY	8 201	f	
	293			181/73			1
Temp casing Yes Dia From To							
PERFORATIONS/SCREENS KNIFF				SAL	EM, OF		
Perforations Method AIR MAIL		Date Started	3.15.2016	,	omalete.	<u>1 03-31-2016</u>	- 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19
Screens Type Material Perf/S Casing/Screen Scm/slot Slot #01	f Tele/						
creen Liner Dia From To width length slot							VED BY OV
Perf Casing 6 520 593 .125 2 400	0	I certify that th	e work I p	erformed on the	e construc	tion, deepen	ing, alteration, or
		abandonment of	of this well	II IS IN COMP	nance with	i Oregon W	ater supply well
		the best of my k	nowledge:	and belief.	na mattiitäi		KZ T ZOIO
		License Numbe			Date		
NAME OF THE PROPERTY OF THE PR		I Jacob I talifor	·			0	ALEM, OR
8) WELL TESTS: Minimum testing time is 1 hour	A stonis-	Signed				J/	TLLIVI, UT
Pump Bailer Air Flowing		(bonded) Wate	- Wall Co-	stemates Cart	fination	,	
Yield gal/min Drawdown Drill stem/Pump depth Duration 100 590 2						in in the second second	
100 590 2		I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work					
							ater supply wel
Temperature 53 °F Lab analysis Yes By							ledge and belief.
		License Numbe	г 1738		Date 04	-15-2016	
Water quality concerns? Yes (describe below) TDS amount 114 From To Description Amount	Units			ı. I			
	4	Signed	me:	Wigner			
		Contact Info (or	otional) Ol	SEN-YULLIA	M WELL I	DRLG 503-6	6S-3353
		Contact Info (or	otional) Ol	SEN-PULLIA	M WELL I	DRLG 503-6	65-3353
OBIGINAL WATER R	CECHIDACE L	VEDA DITMENIT					

CLAC 72275

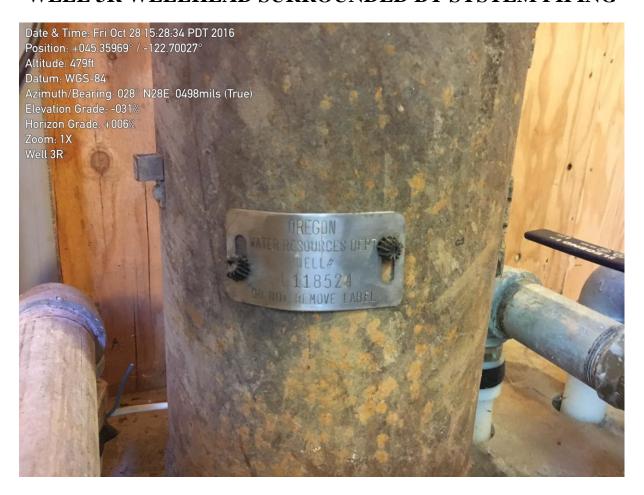
Westerberg Drilling, Inc. WELL I.D. LABEL# L 120278 36728 S. Kropf Rd. STATE OF OREGON START CARD# 213213 WATER SUPPLY WELL REPORT Molalia, OR 97038 **ORIGINAL LOG#** (as required by ORS 537.765 & OAR 690-295-0210) (1) LAND OWNER Owner Well I.D. First Name Last Name (9) LOCATION OF WELL (legal description) Company Belridge Water LLC
 County
 CLACKAMAS
 Twp 2
 S
 N/S
 Range 1

 Sec
 33
 NW
 1/4 of the
 NW
 1/4
 Tax Lot
 Address 2391 SW Buckman Rd. 1/4 Tax Lot 1604 State OR West Linn Zip. City -Tax Map Number New Well Deepening (2) TYPE OF WORK DMS or DD Lat Alteration (complete 2a & 10) Abandonment(complete 5a) " or DMS or DD (2a) PRE-ALTERATION Street address of well (Nearest address Next to 2395 SW Buckman Rd, West Linn, OR 97068 Seal: (10) STATIC WATER LEVEL (3) DRILL METHOD SWL(psi) SWL(A) X Rotary Air Rotary Mud Cable Auger Cable Mud Existing Well / Pre-Alteration Reverse Rotary Other Completed Well 06-15-2016 Flowing Artesian? Dry Hole? (4) PROPOSED USE Depth water was first found 110 Industrial/Commercial Livestock Dewatering WATER BEARING ZONES Thermal Injection X Other Shared Well + SWL(ft) **SWL Date** Est Flow SWL(psi) To (5) BORE HOLE CONSTRUCTION Special Standard (Attach copy) 110 Oribble Depth of Completed Well 545 185 195 Oribble 457 **BORE HOLE** SEAL 06-15-2016 441 3-4 sacks From Material From To Amt Ibs 470 515 30 359.2 06-15-2016 25 13 S 10 Calculated 10.5 6.25 240 545 70 Cement 240 (11) WELL LOG 60 **Ground Elevation** B XC □D From To How was seal placed: Method ___A X Other Bentonite Poured & Probed Clay Brown Firm ft. Material Backfill placed from ft. to 12 Weathered & Broken Rock Brown & Red 8 ft. Material Filter pack from ft. to 65 Basalt Weathered & Fractured Grey & Brown Explosives used: Yes Type. Amount 65 87 Cinders Red & Brown Basalt Grey & Brown 172 87 (5a) ABANDONMENT USING UNHYDRATED BENTONITE 172 176 Basalt Grey Broken with Large Fractures **Pounds Actual Amount** 176 185 Basalt Grey & Brown Hard with Fractures (6) CASING/LINER Casing Liner Dia Basalt Brown More Weathered Medium 185 210 Gauge From Basalt Grey & Brown Medium Hard 210 235 XX X 1.25 240 .250 6 Basalt Grey & Brown Hard 235 320 545 320 Basalt Grey with Green & Brown Medium Hard 365 Basalt Grey & Brown Weathered Medium Hard 365 418 418 441 Basalt Grey Hard 441 457 Basalt Grey & Brown Weathered & Pourous Basalt Very Weathered Brown 457 Location of shoc(s) 240 466 Shoe Inside X Outside Other 466 500 Basalt Grey & Brown Dia_10 Temp casing X Yes _ From <u>+1</u> Basalt Grey & Brown Weathered 500 525 (7) PERFORATIONS/SCREENS
Perforations Method Saw Basalt Grey Mildly Fractured Completed <u>06-15-2016</u> Date Started06-I0-2016 Material Tele/ # of Perf/S Casing/ Screen Scm/slot Slot (unbonded) Water Well Constructor Certification slots Dia width length pipe size creen Liner I certify that the work I performed on the construction, deepening, alteration, or .25 240 4.5 Perf Liner abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief. License Number (8) WELL TESTS: Minimum testing time is I hour Signed O Flowing Artesian O Bailer Air O Pump (boaded) Water Well Constructor Certification
I accept responsibility for the construction, deepening, alteration, or abandonment Duration (hr) Drill stem/Pump depth Yield gal/min 545 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 RECEIVED BY OWRD construction standards. This report is true to the best of my knowledge and belief. Lab analysis Yes By Temperature 56 Yes (describe below) TDS amount 152 License Number Water quality concerns? Contact Info (optional) CALGINAL - WATER RESOURCES DEPARTMENT



PHOTOS FROM SITE VISIT TO 2351 SW BUCKMAN ROAD, WEST LINN, OREGON OCTOBER 28, 2016

WELL 3R WELLHEAD SURROUNDED BY SYSTEM PIPING



WATER SYSTEM PRESSURE REGULATING TANKS (NOTE ORIGINAL WATER EXIT LINE THRU FLOOR IN LOWER LEFT,

PRESSURE GAUGE BETWEEN TANKS WAS READ AT 70 PSI



WELL HOUSE PUMP CONTROLLER FOUND TO CONTROL PUMP IN WELL 5 ON SITE VISIT OCTOBER 28, 2016



CLOSE UP VIEW OF ELECTRONIC PUMP CONTROLLER



WELL 5 POWER SUPPLY FROM INSIDE PUMP HOUSE VIA WELL CONTROLLER AND INBOUND WATER LINE TO PUMP HOUSE



WELL 5 NEW OUTBOUND WATER-LINES AND FLOOR PENETRATIONS

(NOTE PIPELINE FLOW IS LEFT TO RIGHT,

PIPELINE EXISTING PHOTO TO THE RIGHT GOES TO ORIGINAL SUPPLY SYSTEM PIPING AND PRESSURE REGULATION TANKS)

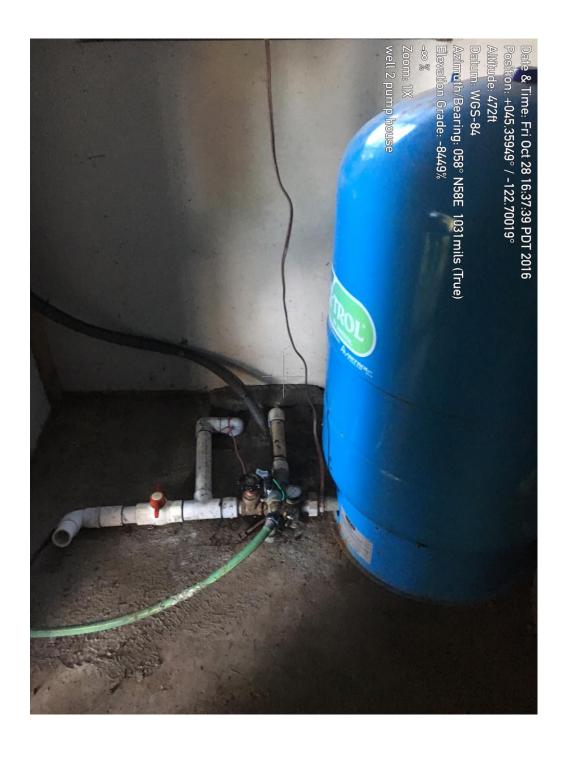


WELL 5 PITLESS ADAPTER WELLHEAD



WELL 2 PUMP HOUSE INLET LINE AND OUTLET LINES
(NOTE RED BALL VALVE TO ABANDONED TEMPORARY LINE,

LONG LENGTH OF 1.5 INCH ID PVC LINE WAS NOTED IN YARD THAT REPORTEDLY INTERTIED WELL 2 TO WELL 3 DISTRIBUTION SYSTEM)



WELL 2 PUMP HOUSE OUTLET LINE

(NOTE GARDEN HOSE EXITS VIA HOLE IN WALL REPORTEDLY USED

FOR TEMPORARY INTERTIE TO WELL 3)



BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 1769

In the Matter of

MOUNTAIN HOME WATER DISTRICT,

Application to Abandon Water Service And Abandon Water Utility

Reply Testimony of Mel Kroker

on behalf of

Mel and Connie Kroker, Intervenors

November 2, 2016

1	Q:	Please state your name and address.

- 2 A. My name is Mel Kroker. My address is 2333 SW Turner Road, West Linn, OR.
- 3 Q. On whose behalf are you testifying for in this proceeding?
- 4 A. I am testifying on behalf myself and my wife, Connie Kroker, as Intervenors.
- 5 Q: What is your occupation and educational background?
- 6 A: I have been a registered Architect in the State of Oregon for 45 years. My experience 7 over these years spans thousands of projects in City Planning, College Campus Master 8 Plans, neighborhood scale Planned Unit Developments, Schools at all levels, high rise 9 office buildings, large apartment complexes, homes for the richest man in the State of 10 Oregon and home plans for hundreds of single family residences. From 2006 to today I 11 have been employed as a Technical Consultant for The Façade Group, a local company with offices on both the East and West coasts. My most recent project is the review of 12 13 thousands of pages of drawings and documents for the ongoing additions to the Nike World Campus in Beaverton, Oregon. 14
- I designed the preliminary land plan Dale Belford used to assemble the proposed 20 lot,
 25 acre subdivision in 1973 and all six of the homes that were connected to the Mountain
 Home Water Utility on the day the Application for Abandonment was filed April 01,
 2016.

19 **Q.** What are your interests in this proceeding?

A: We intervened in the present action as long-standing customers of the water system under threat of losing our water supply. We purchased our property in 1974 to allow construction of our home in 1976 and have an enforceable right to receive water from the water system, previously referred to as the Bel-Ridge Water Utility. We could not have received a building permit to construct our home without a connection to this specific public water system. My property has received water from the water system for 42 years.

1

1	Q:	What is the purpose of your reply testimony?	
2	A:	My testimony addresses the proposed abandonment of the public water system,	
3		ownership of the water system and related interests, property, and my knowledge of the	
4		history of the water system. I respond to portions of the Mountain Home Water District's	
5		Application.	
6	Q:	Petitioner alleges in its Application that the name of the owner or officer of the	
7		Mountain Home Water District is Keith Ironside. Does the Petitioner's Application	
8		express some justification for making such a determination?	
9	A:	No. I was in disagreement with this statement of ownership and felt it was unclear who	
10		the owner of the District and water system was.	
11	Q:	Since it was unclear to you who the owner of the District and water system was, did	
12		you pursue this matter via a data request in order to attempt to obtain more	
13		information?	
14	A:	Yes. We analyzed the issue through our Data Request 2. A true copy of the District's	
15		Responses to Intervenors Data Requests 1-21 is attached hereto as Exhibit 201.	
16	Q:	What was asked and how was it answered?	
17	A:	The question: "Documents confirming the District's title ownership in and to the	
18		District's 'water system' (as such term is defined under OAR 860-036-0010(28))".	
19			
20		Petitioner's answer:	
21		"The Company has located no documents directly responsive to this request.	
22		However, the Company's property tax returns for tax years 2009, 2010, 2011 (we	
23		were unable to locate the form for this year), 2012, 2013, and 2014 are attached as	
24		Exhibit 27. In addition, deeds filed in the Clackamas County Records in the chain	
25		of title for the property at 2323 SW Buckman Road, which are publically	

available, state that "This property includes the Bel-Ridge Water Utility." Keith
Ironside and the Gladys Beddoe Credit Shelter Trust are the owners of the
property, not the District. "

4 Q: Do you agree with that answer?

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A:

5 **A:** The last sentence should be clarified. Otherwise I disagree.

Q: Would you please explain how it should be clarified and your disagreement?

My right to use the first public water system, which was the Bel-Ridge Water Utility, was conveyed to me from Dale Belford in 1974 by Deed 74-35545. A true copy of this Deed is attached hereto as Exhibit 202. The water was sourced from the original well into pipes installed along a portion of a 50 foot wide access drive and across land owned by Dale Belford through easement No. 74-6127. A true copy of this easement is attached hereto as Exhibit 203. The District's original well (well "3") is identified in the OWRD Records under water supply record CLAC 03814 and the location of which is identified as Well 3 on that map attached hereto as Exhibit 204. The attached map was prepared by me for illustrative purposes only. Mr. Belford constructed the Bel-Ridge Water Utility in 1973. On March 23, 1979 and June 25, 1979, many acres of land and the Bel-Ridge Water Utility were sold to Gladys Beddoe and Keith Ironside through numerous contracts and deeds.. On April 15, 2013, Keith Ironside filed Partition Plat Number 2013-015 in compliance with Conditions of Approval for Clackamas County Planning File No. Z0245-11-M completed on August 09, 2011. A true copy of this partition plat is attached hereto as Exhibit 205. This partition plat changed ownership of the District property into two parcels – Parcel 1 and Parcel 2. Parcel 1 remains as Tax Lot 2100, which is half owned by the Gladys Beddoe Credit Shelter Trust and half owned by Keith Ironside individually. It retains the Tax Account #00395539 at 2323 SW Buckman Road, West Linn, OR 97068. However, the new configuration of Tax Lot 2100 now contains 95% of

1	the MHWD water distribution system. The remaining portion of this water system
2	consisting of the District's original well (well "3") and the replacement well which is
3	identified in the OWRD records under water supply report CLAC 72134 (which is
4	identified as "well 5" on the Exhibit 204) is located on Parcel 2 of Partition Plat Number
5	2013-015. Parcel 2 becomes Tax Lot 2107, half owned by the Gladys Beddoe Credit
6	Shelter Trust and half owned by Keith Ironside individually. Therefore, the pumphouse
7	for the District's original well and the newly completed replacement well is now located
8	on Tax Lot 2107. Tract "A" remains as Tax Lot 1604, half owned by the Gladys Beddoe
9	Credit Shelter Trust and half owned by Keith Ironside individually.
10	Then it appears on April 22, 2013, in Deed 2013-027244, Keith Ironside as Trustee of the
11	Gladys Beddoe Credit Shelter Trust, conveyed the Trust's half interest in Parcel 1,
12	Partition Plat No. 2013-015, to himself, thereby making him full owner of Parcel 1. A
13	true copy of Deed 2013-027244 is attached hereto as Exhibit 206. As a result, Tax Lots
14	2100 and 1603 at 2323 SW Buckman Road, West Linn, OR became owned 100% by
15	Keith Ironside. However, on the same date, April 22, 2013, in Deed 2013-027245, Keith
16	Ironside conveyed his 100% ownership of Parcel 1, Partition Plat No. 2013-015 to his
17	daughter, Valerie Meyer. A true copy of Deed 2013-027245 is attached hereto as Exhibit
18	207.
19	It appears that after this deed transfer, Valerie Meyer now owns 95% of the water
20	distribution system, and Keith Ironside and the Gladys Beddoe Credit Shelter Trust own
21	Tax Lot 2107 where the Pump house, the well (well "2") constructed prior to the original
22	well, well 3, and the new replacement for well 3 are located. See map attached as Exhibit
23	204 which his offered for illustrative purposes only. Hence, title interests in and to the
24	water system has occurred with no notice to or consideration by the PUC and well prior
25	to the application for abandonment.

1	Q:	You state that "Mr. Belford constructed the Bel-Ridge Water Utility in
2		1973." Please explain your knowledge of the construction of this utility.
3		I am an architect and was a part of the Architectural Partnership, Meyers and Kroker
4		("Partnership"), which designed a proposed 25 lot subdivision which the Bel-Ridge
5		Water Utility was constructed to serve. The Partnership also designed a home for Mr.
6		Belford and his daughter. The Bel-Ridge Water Utility also served two lots in the Bel-
7		Ridge replat No. 2035 in 1974.
8		In 1979, Petitioner purchased Mr. Belford's property which included the Bel-Ridge Water
9		Utility's well pump house with equipment and the distribution system. The purchase
10		conveyed an equal right to use the water produced by the Bel-Ridge Water Utility to the
11		Petitioner's two houses along with 4 other customers. The original Bell-Ridge Water
12		Utility had 6 connections that were expanded to 7 when the original drawings were
13		submitted to the State Health Department in 1974. The Bel-Ridge Water Utility later
14		became the Mountain Home Water District in 1979 with a doing business as (DBA) filed
15		in 1980.
16	Q:	Earlier you stated that you have an "enforceable right to receive water from the
17		water system." Please explain how you came to understand that you have this right?
18	A:	My wife and I signed a real estate contract with G. Dale Belford to purchase the property
19		for our home on December 01, 1974 which was recorded December 24, 1974 at number
20		74-35545 in Clackamas County. Upon our completion of performance of the contract,
21		we expressly acquired the right to receive water from the Bell-Ridge Water which was
22		also owned by the seller, G. Dale Belford. A true and correct copy of the contract is
23		attached hereto as Exhibit 208. In addition, a true and correct copy of the deed to our
24		property is attached hereto as Exhibit 202. The purpose of the well was to supply the
25		water to the proposed 25 lot Subdivision being developed by Mr. Belford along with a

1		smaller 2 lot Subdivision to the North named "The Bel-Ridge Subdivision." The original
2		2 lots of the Bel-Ridge Subdivision are now owned by Robert Wiest at 2375 SW
3		Buckman Road and Don Rushmer at 2395 SW Buckman Road.
4		Each lot in the proposed subdivision was going to be approximately one acre. Our lot was
5		larger at 1.945 acres and is accessed from the bottom of the hill from SW Turner Road.
6		As part of the sale, Mr. Belford granted a restrictive easement through his land for the
7		water line serving our property from a 6" water main location in the 50 foot wide private
8		access drive. The easement was recorded on March 14, 1974 in the Clackamas County
9		records number 74-6127. The restrictive easement also includes a water line easement
10		across Mr. Belford's property he acquired in bargain and sale deed recorded at 73-39756.
11		Part of that property is now owned by Elizabeth Kelley at 2385 SW Buckman Road.
12		While many elements of the Mountain Home Water District's system has changed over
13		time, well 3, the water main, the restrictive easement, the water line and the basic source
14		of the water in the system remains today as does our legal right to use such water based
15		on our original contract with G. Dale Belford.
16	Q:	Petitioner alleges in its Application that the well has "failed and cannot be
17		repaired." Does the Petitioner's Application express justification for making such a
18		determination?
19	A:	The Petitioner states that the water system experienced a loss of water pressure; however
20		no information has been provided confirming the extent of any loss in water pressure and
21		whether the well actually failed on its own. Nor has Petitioner shown the original well to
22		this day as inoperational.
23	Q:	Since it was unclear to you, did you pursue this matter via a data request in order to
24		attempt to obtain more information?
25		

1	A:	Yes. We analyzed the issue through our Data Requests 3(c), (d), 6 and 7. See Exhibit	
2		201.	
3	Q:	What was asked in Data Request 3(c) and how was it answered?	
4	A:	The question: In reference to paragraph (d) of the District's Application for Termination,	
5		dated April 1, 2016, and submitted to the PUC, please provide: documents relating to the	
6		District's allegation that "in the summer of 2015, the [District's water] system	
7		experienced a loss of water pressure."	
8			
9		Petitioner's answer:	
10		The company has located no documents responsive to this request.	
11	Q:	Do you agree with that answer?	
12	A :	No. It does not appear feasible that the District would not have records of testing for	
13		water pressure in summer of 2015 when it alleged a loss of water pressure in the system.	
14	Q:	What was asked in Data Request 3(d) and how was it answered?	
15	A:	The question: In reference to paragraph (d) of the District's Application for Termination,	
16		dated April 1, 2016, and submitted to the PUC, please provide: Documents relating to the	
17		testing of the water pressure of the Districts' water system since 1973 including, but not	
18		limited to, where the pressure was tested and by whom.	
19			
20		Petitioner's answer:	
21		The Company objects to this request as duplicative, overbroad, and unduly	
22		burdensome. Without waiving the objection, the Company responds that it has no	
23		direct knowledge of the operation of the water system before 1979, when Keith	
24		Ironside purchased his property. In response to Staff Data Request Nos. 15-21, the	
25			

1		Company provided Exhibit 20, Advanced Leak Detection Invoice No. 1539. In
2		addition, the Company attaches a receipt dated October 15, 2007, as Exhibit 28.
3	Q:	Do you agree with that answer?
4	A:	No, as it does not provide documents relating to testing of the water pressure. Further, in
5		response to my Data Request 3(f), (g) and (h), the District failed to produce any
6		documentation confirming the existence of a "new well" having an adverse effect or
7		impact on the District's water system, or any other wells in the vicinity which may have
8		contribute to the loss of water pressure in well 3 at the time of the alleged loss of water
9		pressure. See Exhibit 201.
10	Q:	What was asked in Data Request 6 and how was it answered?
11	A:	The question: Please explain the District's allegation that the [original] Well has "failed
12		and cannot be repaired," and provide all documents relating to such allegation.
13		
14		Petitioner's answer:
15		The Company objects to this request as duplicative. Without waiving the
16		objection, the Company responds that it abandoned attempts to clear the well at
17		the recommendation of the well driller. The documents referenced in and
18		attached to the response to DR No. 5, above, are responsive to this request.
19	Q:	Do you agree with that answer?
20	A:	No. The District's allegation that well 3 had "failed and cannot be repaired" is not
21		supported by the District's response. Please see the testimony of John Lambie on behalf
22		of Mel and Connie Kroker, Intervenors, confirming that well 3 did not "fail" and was and
23		remains available for future operations.
24	Q:	Would you please explain your disagreement?
25		

1	A:	In 1973 the original 600 foot deep well was tested at 75 gallons a minute with a static	
2		water level of 352 feet. On March 31, 2016, the Petitioner replaced the original well with	
3		a new one only a few feet away in the same aquifer down to the same 600 foot level and	
4		connected it to the existing water distribution system in use for 42 years. The new well	
5		tested at 100 gallons a minute with a static water level of 355 feet. The District's water	
6		system was fully operational on the date the Application for abandonment was filed with	
7		the PUC on April 1, 2016.	
8		Pursuant to its response to Data Requests, the Petitioner constructed a "replacement well"	
9		for the water system. I should be able to continue to receive water from this replacement	
10		well as it was constructed as a "replacement well" for the original well (well "3") that had	
11		allegedly "failed." Well 3 has yet to be abandoned and the new replacement well (well	
12		"5" on the map attached as Exhibit 204) was completed to replace the District's original	
13		well 3. Therefore, ownership and control of the new well must remain with the District	
14		for the exclusive benefit of water customers such as myself still entitled to water from the	
15		District.	
16	Q:	What was asked in Data Request 7 and how was it answered?	
17	A:	The question: Please explain the District's allegation that the Well is no longer	
18		"operational," and provide all documents relating to such allegation.	
19			
20		Petitioner's answer:	
21		The Company objects to this request as duplicative. Without waiving the	
22		objection, the Company responds that it abandoned attempts reinstall a pump in	
23		the well at the recommendation of the well driller. The documents referenced in	
24		and attached to the response to DR No. 5, above, are responsive to this request.	
25	Q:	Do you agree with that answer?	

1 A: The original well (well "3") is an operational well and could be made operational again. 2 O: Petitioner also alleges in its Application that customers have many alternative 3 options, including drilling one or more shared wells, or arranging water delivery 4 from an existing well on adjacent property. Do you agree that these other options 5 are viable? 6 A: Yes, although with clarifications. Two of the 4 affected customers have elected to 7 construct a shared well that required the purchase of additional land outside of their lots 8 from the Petitioner. Each of the affected customers 4 lots contain natural features such as 9 steep slopes, storm water drainage systems several structures, septic sewer systems with 10 primary and alternate drain fields and a host of setback limitations for locating a well 11 clear of all of these elements. Many of these same elements exist on adjacent properties 12 which further limit the location of a new well regardless of property size. Well drilling 13 trucks weighing 63,000 lbs. or more cannot be moved up or down steep slopes in natural terrain or around tight corners in side yard setbacks to access open spaces below existing 14 15 homes situated next to the street on the high side of the property. Further the cost of this process would cost my wife and me upwards of \$75,000 which is 16 17 far greater than paying a share of the cost for repair of well 3. My wife and I should not 18 have to pay for the cost of the replacement well (well "5") as the completion of such well 19 was not necessary. For further discussion of the continued usability of well 3, please see 20 the testimony of John Lambie on behalf of Mel and Connie Kroker, Intervenors. 21 Please explain further the cost of repair or replacement of the existing water system. Q: 22 The cost for replacement of the water system's well was \$69,000. I would have been A: happy to spend $1/6^{th}$ that amount to stay on the water system. Petitioner stated that the 23 24 District is unable to financially continue to fund the operation and maintenance of the 25 water system due to customers being in arrears. I have always paid bills as requested and

1		on time. Any financial constraint on the part of the Petitioner appears to be from
2		mismanagement of the District, something which should not be the cause for approval for
3		abandonment of the water system.
4	Q:	Are you providing any exhibits with your testimony?
5	A:	Yes
6	Q:	Does this complete your reply testimony?
7	A:	Yes.
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

1 CERTIFICATE OF FILING AND SERVICE 2 I hereby certify that on the date shown below, I filed the original and one (1) copy 3 of the foregoing **Testimony of Mel Kroker** by electronic transmission and first class 4 mail, postage prepaid, on: 5 Filing Center Public Utility Commission of Oregon 6 PO Box 1088 Salem, OR 97308-1088 7 PUC.FilingCenter@state.or.us 8 I further hereby certify that on the date shown below, I served a true and correct 9 copy of the foregoing **Testimony of Mel Kroker** by first class mail, postage prepaid, on: 10 Jennie L. Bricker Celeste Hari 11 Jennie Bricker Land & Water Law **Public Utility Commission of Oregon** 818 SW Third Ave, PMB 1517 PO Box 1088 12 Portland, OR 97204 Salem, OR 97308-1088 13 Sommer Moser PUC Staff – Department of Justice 14 1162 Court St. NE Salem, OR 97301 15 |X|by first class mail, postage prepaid. 16 by facsimile transmission and first class mail, postage prepaid. 17 by electronic transmission. 18 by electronic transmission and first class mail, postage prepaid. 19 DATED: November 2, 2016. 20 21 /s/ Peter D. Mohr Peter D. Mohr, OSB # 013556 22 Attorney for Mel and Connie Kroker, Intervenors 23 24

25

Jennie Bricker Land & Water Law

818 SW Third Avenue, PMB 1517 Portland, Oregon 97204

Email: jennie@jbrickerlaw.com
Telephone: 503-928-0976

October 24, 2016

Peter D. Mohr Jordan Ramis PC Two Centerpointe Drive, 6th Floor Lake Oswego, OR 97035

Re: UM 1769

Response to Data Request Nos. 1-19

Following are responses by the Mountain Home Water District (the "District," or the "Company") to Data Request Nos. 1-19, dated October 10, 2016, from intervenors Mel and Connie Kroker.

1. Formation and operating documents for Mountain Home Water District.

<u>Company Response</u>: Mountain Home Water District was registered as an assumed business name in 1980. We are not in possession of the registration document, but a copy is publically available at the Corporation Division of the Oregon Secretary of State, Registry Number 197578-55. A copy of the emergency response plan for the water system is attached as **Exhibit 26**. Operating instructions for the well and pump are housed inside the pump house. If you would like to inspect those documents, we will make arrangements for access.

PAGE 1 - MOUNTAIN HOME WATER DISTRICT RESPONSE TO DR NOS. 1-19

2. Documents confirming the District's title ownership in and to the District's "water system" (as such term is defined under OAR 860-036-0010(28)).

Company Response: The Company has located no documents directly responsive to this request. However, the Company's property tax returns for tax years 2009, 2010, 2011 (we were unable to locate the form for this year), 2012, 2013, and 2014 are attached as Exhibit 27. In addition, deeds filed in the Clackamas County Records in the chain of title for the property at 2323 SW Buckman Road, which are publically available, state that "This property includes the Bel-Ridge Water Utility." Keith Ironside and the Gladys Beddoe Credit Shelter Trust are the owners of the property, not the District.

- 3. In reference to paragraph (d) of the District's Application for Termination, dated April 1, 2016, and submitted to the PUC, please provide:
 - a. Documents relating to the construction of the well (hereinafter, the "Well") described in the first sentence as the "well serving the District's customers [which allegedly] failed and cannot be repaired;"

<u>Company Response</u>: The Company objects to this request as overbroad and duplicative. Without waiving the objection, the Company responds that, in response to Staff Data Request Nos. 01-13, it provided **Exhibit 2**, the 1973 Water Well Report for the original well.

b. Documents relating to the District's allegation that the "original drillers installed 90 feet of casing, leaving the Well open from 90 to 600 feet;"

<u>Company Response</u>: The Company objects to this request as duplicative. Without waiving the objection, the Company responds that the documents referenced in and attached to the response to DR No. 5, below, are responsive to this request.

c. Documents relating to the District's allegation that "in the summer of 2015, the [District's water] "system experienced a loss of water pressure;"

<u>Company Response</u>: The Company has located no documents responsive to this request.

 Documents relating to the testing of the water pressure of the Districts' water system since 1973 including, but not limited to, where the pressure was tested and by whom;

<u>Company Response</u>: The Company objects to this request as duplicative, overbroad, and unduly burdensome. Without waiving the objection, the Company responds that it has no direct knowledge of the operation of the water system before 1979, when Keith Ironside purchased his property. In response to Staff Data Request Nos. 15-21, the Company provided **Exhibit 20**, Advanced Leak Detection Invoice No. 1539. In addition, the Company attaches a receipt dated October 15, 2007, as **Exhibit 28**.

e. Documents the District possessed as of April 1, 2016 confirming the existence of a "new well" (as alleged in the application) in the vicinity of the existing Well that supplied water to the District's water system;

Company Response: The Company has located no documents responsive to this request.

f. Documents relating to the District's allegation that the referenced "new well" had an adverse effect or impact on the District's water system, resulting in a "loss of water pressure;"

Company Response: The Company has located no documents responsive to this request.

g. Documents the District possessed as of April 1, 2016 confirming the existence of "other wells" (as alleged in the application) in the vicinity of the Well;

Company Response: The Company has located no documents responsive to this request.

h. Documents relating to the District's allegation that the referenced "other wells" had an adverse effect or impact on the water system, resulting in a "loss of water pressure;"

Company Response: The Company has located no documents responsive to this request.

4. Documents relating to Steve's Pump Service's service, inspection and work performed on the Well which shall include, but not be limited to, all documentation relating to Steve's Pump Service's recommendation that the pump in the Well be lowered from 397 feet below ground surface ("BGS") to 405 feet BGS.

<u>Company Response</u>: The Company objects to this request as overbroad and duplicative. Without waiving the objection, the Company responds that in response to Staff Data Request Nos. 15-21, it provided **Exhibit 16**, an invoice from Steve's Pump Service.

- 5. Documents relating to Olsen Well Drilling's service, inspection and work performed on the Well which shall include, but not be limited to, all documents relating to Olsen's:
 - a. Clearing of the alleged cave-in of the Well;
 - b. Attempted installation of the 6-inch steel casing;
 - c. Determination of the angle of the initial construct of the Well;
 - d. Attempted re-drilling of the Well; and
 - e. Opinions and recommendations including cost analyses of drilling a new well.

Company Response: The Company objects to all parts of this request as overbroad and duplicative. Without waiving the objection, the Company responds that, in response to Staff Data Request Nos. 01-13, it provided **Exhibit 4**, the statement of well driller Vance Wagner; and **Exhibit 6**, page 1, the cost estimate and proposal from Ted Pulliam (Olsen's) Well Drilling for drilling a new well. Further, in response to Staff Data Request Nos. 15-21, the Company provided **Exhibit 13**, a statement from Ted Pulliam (Olsen's) Well Drilling; **Exhibit 14**, Invoice #829 from Ted Pulliam (Olsen's); and **Exhibit 15**, Invoice #828 from Ted Pulliam (Olsen's). In addition, the Company attaches the Water Supply Well Report, Start Card No. 1029859, as **Exhibit 29**.

6. Please explain the District's allegation that the Well has "failed and cannot be repaired," and provide all documents relating to such allegation.

<u>Company Response</u>: The Company objects to this request as duplicative. Without waiving the objection, the Company responds that it abandoned attempts to clear the well at the recommendation of the well driller. The documents referenced in and attached to the response to DR No. 5, above, are responsive to this request.

7. Please explain the District's allegation that the Well is no longer "operational," and provide all documents relating to such allegation.

<u>Company Response</u>: The Company objects to this request as duplicative. Without waiving the objection, the Company responds that it abandoned attempts reinstall a pump in the well at the recommendation of the well driller. The documents referenced in and attached to the response to DR No. 5, above, are responsive to this request.

8. Documents relating to water pressure in the District's water system from when the Well was completed in 1973 to the date of this request.

<u>Company Response</u>: The Company objects to this request as vague, overbroad, duplicative, unduly burdensome, and not relevant to any issue in this proceeding. Without waiving the objection, the Company responds that the documents referenced in and attached to the response to DR No. 3.d, above, are responsive to this request.

9. Documents relating to the referenced "smaller, private well located on the owner's property[,]" including, but not limited to, documents confirming the location, dimensions, static water level, current production capacity, future production capacity, and inspections of said well.

<u>Company Response</u>: The Company has located no documents responsive to this request.

10. Documents confirming the number of houses served by the Well.

Company Response: The property tax returns attached as **Exhibit 27** include statements of the "number of current users" of the water system. The number of current users has been reported as either 6 (2009, 2010, and 2012) or 4 (2011, 2013, 2014). To clarify, the Company's view is that the system has six *users* and four *customers*. The customers have for many years included the houses at 2391 SW Buckman Road, 2375 SW Buckman Road, 2385 SW Buckman Road, and 2333 SW Turner Road. The two additional users on the system are the houses located at 2323 SW Buckman Road and 2351 SW Buckman Road, a division of the property acquired by Keith Ironside and Gladys Beddoe in 1979. As of September 2016, the customers located at 2391 SW Buckman Road and 2375 SW Buckman Road have drilled their own, shared well and are no longer receiving water service from the Company.

11. Documents confirming the location of houses served by the Well.

<u>Company Response</u>: Please refer to the Company's response to DR No. 10, above. In addition, the documents referenced in the response to DR No. 16, below, are responsive to this request.

12. Please explain the District's allegation that each residential customer's property is capable of carrying an individual well of sufficient flow rate to meet the domestic water needs of such property, and provide all documents relating to such allegation.

<u>Company Response</u>: The Company's statement was based on conversations with the well driller, who did not provide a formal statement or other document, except the statement that the Company produced as **Exhibit 4** in its responses to Staff Data Request Nos. 1-13.

13. Please explain the District's allegation that the completion of a new well assuming a depth of 500 feet and a flow rate of approximately 20 gallons per minute would cost approximately \$30,000.00, and provide all documents relating to such allegation including, but not limited to, Olsen Well Drilling's estimate.

<u>Company Response</u>: The Company's statement was based on conversations with the well driller, who did not provide a formal estimate or other document. However, after the application was filed the Company obtained a drilling estimate from Westerberg Drilling Inc. for construction of a well at 2385 SW Buckman Road; that document is attached as **Exhibit 30**.

14. Documents confirming the total number, location, and well logs of all wells used by the District or its predecessors since 1963 to provide water to District customers.

Company Response: The Company objects to this request as vague, overbroad, duplicative, unduly burdensome, and not relevant to any issue in this proceeding. Without waiving the objection, the Company responds that it has no direct knowledge of the operation of the water system before 1979, when Keith Ironside purchased his property. In its response to Staff Data Request Nos. 1-13, the Company produced the water well report for Well No. 03814 as

Exhibit 2; the Company believes this well was the only source of supply for the water system until its failure in March 2016. The Company explained the use of the second, temporary well, which provided water to customers while the replacement well was under construction, in its response to Staff Data Request Nos. 2. In its response to Staff Data Request Nos. 15-21, the Company produced the water well report for Well I.D. No. L-118525, the replacement well, as

Exhibit 19. In addition, materials confirming registration of the replacement well with the Department of Water Resources are attached as Exhibit 31.

15. Documents related to all water test and/or reports, well inspection reports and repair schedules, and water meter test records related to the water system.

<u>Company Response</u>: The Company objects to this request as overbroad, unduly burdensome, and not relevant to any issue in this proceeding. Without waiving the objection, the Company attaches **Exhibit 32**, documents related to water quality testing. The most recent test report is attached as **Exhibit 1** to the Company's responses to Staff Data Request Nos. 01-13.

16. Documents describing and locating the entire water system plant.

Company Response: Keith Ironside purchased his property in 1979, after the water system was in place. Intervenor Mel Kroker, an architect, purchased his property in 1976 and was, Keith Ironside believed, in possession of the only known as-built plans for the water system. However, despite Keith Ironside's repeated requests for the plans, Mr. Kroker only produced them during the meeting convened on May 23, 2016 in this proceeding. Therefore, please refer to the plans marked "Bel-Ridge Water System As Built Plan," dated June 1974 (1 sheet), and the "Belford Subdivision Water System Design," dated June 1973 (3 sheets), contained in the package produced by Mel Kroker on May 23, 2016.

Documents relating to communications with customers regarding water quality or water pressure and any corrective actions taken.		
<u>Company Response</u> : The Company has located no documents responsive to this request.		

18.	Documents relating to communications with customers regarding operation of the water system including, but not limited to, wells identified and used as a backup water supply.				
Com	<u>Company Response</u> : The Company has located no documents responsive to this request.				

19. Please provide copies of your responses to Staff Request No. 14, as well as your responses to any subsequent data requests from PUC Staff in this proceeding, excepting responses to PUC Staff Requests Nos. 15-21. This is an ongoing request.

<u>Company Response</u>: No "Staff Request No. 14" exists—Staff's data requests skipped from No. 13 to No. 15. The Company will electronically serve all future responses to the UM 1769 service list.

<u>/s/ Jennie L. Bricker</u>

Jennie L. Bricker, OSB No. 975240 Attorney for Mountain Home Water District

Direct Telephone: 503-928-0976 E-Mail: <u>jennie@jbrickerlaw.com</u>

818 SW Third Avenue, PMB 1517

Portland, OR 97204

cc: UM 1769 Service List (electronic only)

PAGE 20 - MOUNTAIN HOME WATER DISTRICT RESPONSE TO DR NOS. 1-19

Jennie Bricker Land & Water Law

818 SW Third Avenue, PMB 1517 Portland, Oregon 97204

Email: jennie@jbrickerlaw.com
Telephone: 503-928-0976

October 26, 2016

Peter D. Mohr Jordan Ramis PC Two Centerpointe Drive, 6th Floor Lake Oswego, OR 97035

Re: UM 1769

Response to Data Request Nos. 20-21

Following are Mountain Home Water District's responses to Data Request Nos. 20 and 21, each dated October 18, 2016, from intervenors Mel and Connie Kroker.

20. Please explain when the District proposes to complete abandonment of the well, which the District has alleged has failed on page 2, paragraph (d), in its Application for Termination, dated April 1, 2016, and provide all documents relating to such abandonment.

<u>Company Response</u>: As required under OAR 690-220-0035, the District will complete abandonment of the original well within one year of the date the replacement well became functional, on or about May 1, 2016. The District has no documents relating to such abandonment, but has requested a proposal from Olsen's Well Drilling and will provide that document to the parties when the District receives it.

Intervenors/201 Kroker/22

21. Intervenors request permission for entry upon all lands necessary in order to inspect the water system including, but not limited to:

1. The "smaller, private well" referenced on page 2, paragraph (e), of the District's

Application for Termination, dated April 1, 2016 ("Application");

2. The well the District alleges has failed on page 2, paragraph (d) of the Application;

The "replacement well," as referenced in the District's response to Staff Request 3.

No. 4.

Company Response: Intervenors have requested an inspection date of October 28, 2016, "at

any time between the hours of 8:00 a.m. and 5:00 p.m.," for a minimum of two hours. The

District will accommodate the request. Specifically, the District will make the water system

available for inspection from 3:00 p.m. to 5:00 p.m. on October 28, 2016, provided that

Intervenors' attorney is present. PUC Staff is also welcome to attend.

/s/ Jennie L. Bricker

Jennie L. Bricker, OSB No. 975240

Attorney for Mountain Home Water District

Direct Telephone: 503-928-0976

E-Mail: jennie@jbrickerlaw.com

818 SW Third Avenue, PMB 1517

Portland, OR 97204

cc:

UM 1769 Service List (electronic only)

Portland, Oregon 97210

Until a change is requested all tax statements shall be sent to the following add
Melvin R. and Connie M. Kroker

G. Dale Belford

4131 S. W. Hillsdale Portland, Oregon 97201

30 N. W. 23rd Place Portland, Oregon 97210

1-1-74

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, That. G. Dale Belford

hereinafter called the grantor, for the consideration hereinafter stated, to grantor paid by Melvin R. and Connie M. Kroker hereinafte

the grantee, does hereby grant, bargain, sell and convey unto the said grantee and grantee's heirs, successors and assigns, that certain real property, with the tenements, hereditaments and appurtenances thereunto belonging or appertaining, situated in the County of Clackamas and State of Oregon, described as follows, to-wit:

A tract of land located in the Northwest one-quarter of Section 33, Township 2 South, Range 1 East, Willamette Meridian, Clackamas County, Oregon, being in Lot 11 of the "Mapleheights" Subdivision, more particularly described as follows:

Beginning at the Southwest corner of said Lot 11; thence North 18° 03' 00" West 299.62 feet along the West line of said Lot 11; thence North 84° 31' 50" East 491.47 feet more or less to an angle point in Turner Road which bears South 72° 20' 00" West 166.33 feet from the Southeasterly corner of said Lot 11; thence from said angle point along the centerline of said Turner Road and the South line of said Lot 11, being one and the same; thence South 36° 48' 00" West 216.50 feet to an angle point in the centerline of said Turner Road; thence South 59° 18' 00" West 310.18 feet to the Point of Beginning. Containing therein 1.945 Acres.

To Have and to Hold the same unto the said grantee and grantee's heirs, successors and assigns forever.

And said grantor hereby covenants to and with said grantee and grantee's heirs, successors and assigns, that grantor is lawfully seized in fee simple of the above granted premises, free from all encumbrances

grantor is lawfully seized in fee simple of the abov	ve granted premises, free from all encumbrances
The true and actual consideration paid for	and that premises and every part and parcel thereof against the lawful claims those claiming under the above described encumbrances. In this transfer, stated in terms of dollars, is \$9,500.00 or includes other property or value given or promised which is
In construing this deed and where the contex changes shall be implied to make the provisions her In Witness Whereof, the grantor has executed	to the symbols (a), if not applicable, should be deleted. See ORS 93.030.) It so requires, the singular includes the plural and all grammatical reof apply equally to corporations and to individuals. It is instrument this 30th day of April 1976.
order of its board of directors.	signed and fal affixed by its officers, duly authorized thereto by
(if executed by a corporation, affix corporate seal))
STATE OF OREGON, County of Multnomah ss. Aptil 30 , 19 76	STATE OF OREGON, County of) ss. Personally appearedand
Personally appeared the above named G. Dale Belford	each for himself and not one for the other, did say that the former is the president and that the latter is the secretary of
and acknowledged the toregoing instru- ment to be his voluntary act and deed. OFFICIAL DELECTION X. Oliver	and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors; and each of
Notary Public for Oregon My commission expires: 3/6/78	Notary Public for Oregon My commission expires:
G. Dale Belford 4131 S. W. Hillsdale Portland, Oregon 97201 GRANTOR'S NAME AND ADDRESS Melvin R. and Connie M. Kroker 30 N. W. 23rd Place Portland Oregon 97210	Clerk, Ex-Officio Ex-Officio Clerk of Oregon, for meby cartify that was received for said county at ald county at All : 08 A

STATE OF OREGON)
County of Clackamss) 85.

I, George D. Poppen, County Clerk, Ex-Office Cle of the Circuit Court of the State of Oregon, it the County of Cleckamss, do hereby cartify the the within Instrument of writing was received and recorded in the records of said county

MAY

76 14236

25241.26 21-9-5 21-08-4 0330 LIWWI

Day Mark

15 M

DECLARATION OF CONDITIONS AND RESTRICTIONS

DECLARATION made this / f day of / herch, 1974, by G. DALE BELFORD, as owner in fee simple of that certain real property described in Instrument No. 73-39756, Recording Department, Clackamas County Courthouse. The purpose of this declaration is to subject said real property to a fifty foot wide easement, and a five foot wide water line easement, as follows:

A strip of land 50.00 feet in width, over a portion of the Northwest one-quarter of Section 33, Township 2 South, Range 1 East, Willamette Meridian, Clackamas County, Oregon, the centerline of said strip being 25.00 feet on each side and described as follows:

Beginning at the Northwest corner of Lot 11 of the "Mapleheights" Subdivision; thence along the line between said Lot 11 and Lot 6 of same said subdivision North 71° 56' 57" East 60.00 feet to the beginning of a tangent 175.00 foot radius curve to the right; thence Southeasterly along the arc of said curve 238.24 feet through a central angle of 78° 00' 00" to a point of reverse curvature with the arc of a 200.00 foot radius curve to the left; thence Southeasterly along the arc of said curve 225.15 feet through a central angle of 64° 30' 00" to a point of compound curvature with the arc of a 835.00 foot radius curve to the left; thence Easterly along the arc of said curve 411.70 feet through a central angle of 28° 15' 00" to a point of compound curvature with the arc of a 250.00 foot radius curve to the left; thence Northerly along the arc of said curve 373.06 feet through a central angle of 85° 30' 00"; thence North 28° 18' 03" West 163.47 feet to the beginning of a 215.00 foot radius curve to the left; thence Northwesterly along the arc of said curve 253.12 feet through a central angle of 67° 27' 13"; thence South 84° 14' 45" West 132.16 feet to the terminus point of said centerline of said strip, said point also being on the East line of said Lot 6 of said subdivision, bearing North 18° 03' 00" West 360.00 feet from the Southeast corner of said Lot 6.

For purposes of ingress and egress.

For a 5.00 foot wide water line easement, being 2.5 feet on each side of the following described center-line:

Beginning at the Northwesterly corner of Lot 11, "Mapleheights", a subdivision of record located in the Northwest one-quarter of Section 33, Township 2 South, Range 1 East, Willamette Meridian, Clackamas County, Oregon; thence along the North line of said Lot 11 North 71° 57' 00" East 380,92 feet; thence South 18° 03' 00" East 317.38 feet to the TRUE POINT OF BEGINNING; thence South 00° 56' 40" East 4.63 feet; thence South 07° 26' 50" West 120.90

DUFFY, STOUT, GEORGESON & DAHL 1404 STANDARD PLAZA PORTLAND, OREGON 97304

1 - Declaration

74 6127

feet; thence South 21° 27' 50" West 20.00 feet; thence South 27°13'24" West 20.05 feet; thence South 39° 41' 04" West 26.06 feet; thence South 05° 28' 10" East 56.39 feet to the terminus point of the centerline of said 5 foot wide easement which bears South 18° 03' 00" East 470.00 feet; thence North 84° il' 50" East 272.78 feet from the Northwest corner of said Lot 11, "Mapleheights".

IN WITNESS WHEREOF, G. Dalé Belford has executed this declaration the day and year first above written

G. Dale Belford

State of Oregon) ss
County of Multannial)

A Charles Service

narce 14 , 1974

Personally appeared the above named G. Dale Bulford and acknowledged the foregoing instrument to be his voluntary act and deed.

Bafore ma:

Notary Public for Oregon
My commission expires: 3-18-75

74 6127

STATE OF OREGON, County of Clackamas,

I, George D, Poppen, County Clerk, Ex-Officio Recorder of Conveyances and Ex-Officio Clerk of the Creuit Court of the State of Oregon, for the County of Clackamas, do hereby certify that the within instrument of witting was received for and recorded in the records of said county at

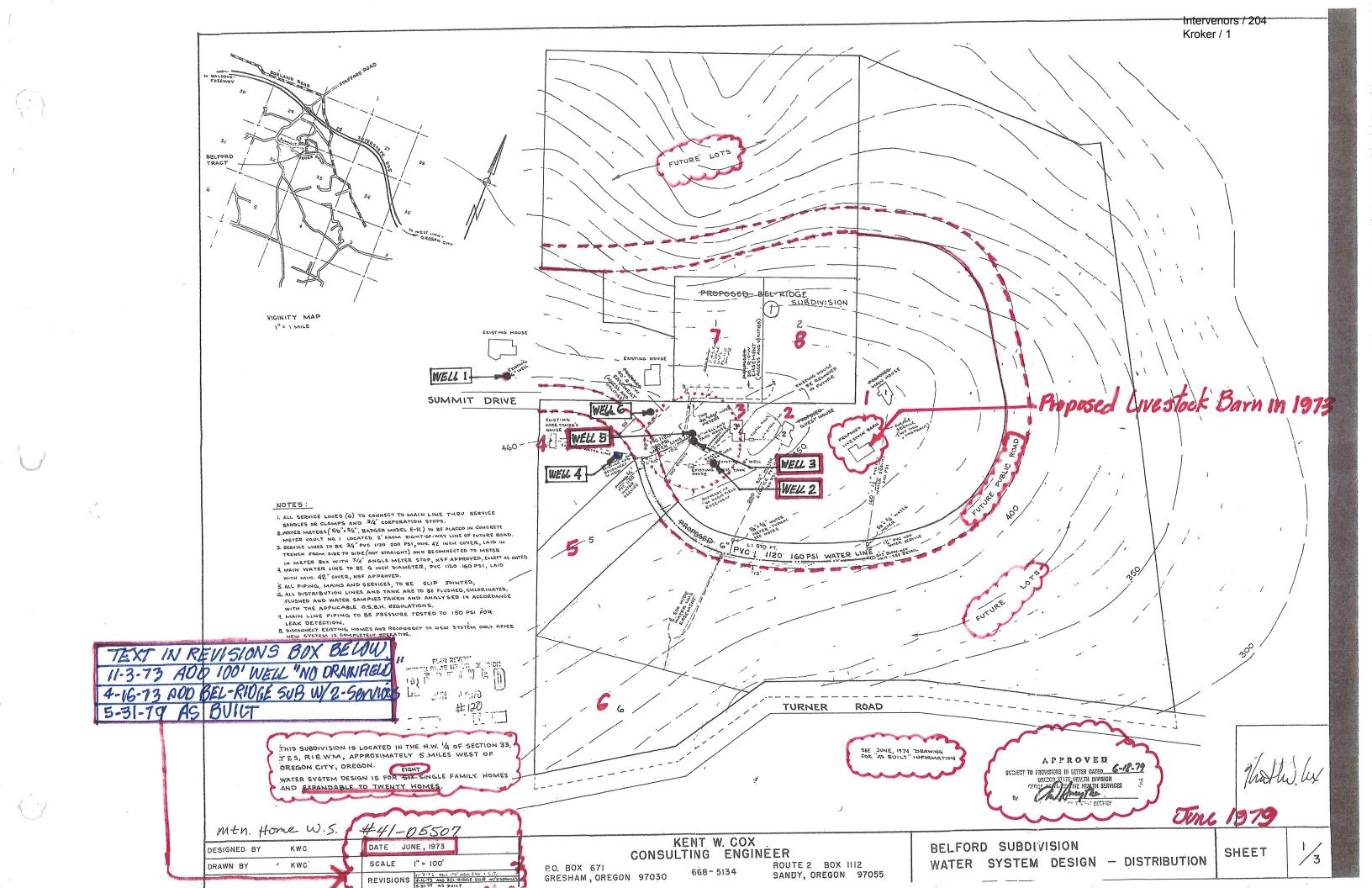
1974 MAR 14 PM 12 28

Winds my hand and seal afficients, POPPLN
(Gonde Cierk,
Recording Capitite GOUNT)

LAW OFFICE OF DUFFY, STOUT, GEORGEON & DAHL 1404 STAMBARD FLATA PORTLAND, OREGON 97504

2 - Declaration

9



Clackamas County Official Records Sherry Hall, County Clerk

2013-025702



\$88.00

04/15/2013 3:15:33 PM

PD-PAR Cnt=1 Stn=11 TINAJAR \$45.00 \$16.00 \$17.00 \$10.00

PARTITION PLAT

OWNER:

KEITH L IRONSIDE JR

KEITH L IRONSIDE JR-TRUSTEE

GLADYS BEDDOE CREDIT SHELTER-TRUST

CONSENT:

N/A

DATE:

April 15, 2013

PARTITION NUMBER: 2013-015

SURVEYOR'S CERTIFICATE

I, MICHAEL A. RADEMACHER, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF OREGON, CERTIFY AND SAY THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS THE LAND REPRESENTED ON THE ATTACHED PARTITION MAP, THE BOUNDARY BEING DESCRIBED AS FOLLOWS:

A REPLAT OF A PORTION OF LOT 11, "MAPLEHEIGHTS", PLAT NO. 286, AND OTHER PROPERTY, LOCATED IN THE SOUTHWEST ONE—QUARTER OF SECTION 28 AND THE NORTHWEST ONE—QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, CLACKAMAS COUNTY, OREGON, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INITIAL POINT, A 5/8"DIAMETER IRON ROD AT THE MOST EASTERLY CORNER OF TRACT "A", "BEL—RIDGE", A SUBDIVISION PLAT OF RECORD (NO. 2035) IN SAID CLACKAMAS COUNTY; THENCE ALONG THE SOUTH LINE OF "BEL—RIDGE", N71"57"00"E 243.28 FEET TO THE WESTERLY POINT OF THAT TRACT OF LAND DESCRIBED IN DEED TO KEITH L. IRONSIDE, JR., AND GLADYS M. BEDDOE, RECORDED MARCH 15, 1988, IN DOCUMENT NO. 88-09825, CLACKAMAS COUNTY DEED RECORDS; THENCE ALONG THE NORTHERLY LINE THEREOF, N60°28'58'E 75.61 FEET TO THE EAST LINE OF LOT 2, "BEL-RIDGE"; THENCE ALONG SAID EAST LINE AND IT'S NORTHERLY EXTENSION, N18"05"00"W, 319.43 FEET TO THE NORTH LINE OF THAT TRACT OF LAND DESCRIBED AS PARCEL II IN DEED TO KEITH L. IRONSIDE, JR., TRUSTEE OF THE GLADYS BEDDOE CREDIT SHELTER TRUST, RECORDED SEPTEMBER 29, 2005, IN DOCUMENT NO. 2005-095825, CLACKAMAS COUNTY DEED RECORDS; THENCE ALONG THE BOUNDARY OF SAID PARCEL II THE FOLLOWING EIGHT COURSES: NB4*14*47*E 126.86 FEET; THENCE 223.68 FEET ALONG THE ARC OF A 190.00 FOOT RADIUS CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 67*27'13" (THE LONG CHORD BEARS S62*01'37'E 210.99 FEET); THENCE S28*18'00'E, 163.47 FEET: THENCE 335.76 FEET ALONG THE ARC OF A 225.00 FOOT RADIUS CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 85°30'00" (THE LONG CHORD BEARS S14°27'00"W 305.46 FEET); THENCE S32°48'00°E 50.00 FEET; THENCE 424.02 FEET ALONG THE ARC OF A 860.00 FOOT RADIUS CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 28°15'00" (THE LONG CHORD BEARS S71°19'30'W 419.75 FEET); THENCE 253.29 FEET ALONG THE ARC OF A 225.00 FOOT RADIUS CURVE TO THE RIGHT, THROUGH A CENTRAL ANGLE OF 64*30*00" (THE LONG CHORD BEARS N62*18*00*W 240.13 FEET); THENCE 39.37 FEET ALONG THE ARC OF A 150.00 FOOT RADIUS CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 15°02'13" (THE LONG CHORD BEARS N37°34'07"W 39.25 FEET) TO THE MOST SOUTHERLY CORNER OF SUMMIT ROAD (50.00 FEET WIDE); THENCE ALONG SAID SUMMIT ROAD N44°54'47'E 50.00 FEET TO THE MOST SOUTHERLY CORNER OF TRACT "A", "BEL-RIDGE"; THENCE ALONG THE SOUTHERLY LINE OF SAID TRACT "A", N29°03'32'E 123.55 FEET TO THE INITIAL POINT. CONTAINING 288,477 SQUARE FEET (6.62 ACRES) MORE OR LESS.

DECLARATION

KNOW ALL PEOPLE BY THESE PRESENT THAT KEITH L. IRONSIDE, JR. AND KEITH L. IRONSIDE, JR., TRUSTEE OF THE GLADYS BEDDOE CREDIT SHELTER TRUST, OWNERS OF THE LAND REPRESENTED ON THE ANNEXED MAP, AND MORE PARTICULARLY DESCRIBED IN THE ACCOMPANYING SURVEYOR'S CERTIFICATE, DO HEREBY DECLARE THE ANNEXED MAP TO BE A CORRECT MAP OF THE PARTITION PLAT OF SAID PROPERTY AND THAT HE HAS CAUSED THIS PARTITION PLAT TO BE PREPARED AND THE PROPERTY PARTITIONED INTO PARCELS WITH EASEMENTS, GRANTED AS SHOWN, IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 92 OF OREGON REVISED STATUTES. THE PLATTED PROPERTY HEREON IS SUBJECT TO RESTRICTIONS AS NOTED HEREON. THE DECLARANT MAKES NO CLAIM TO LAND BEYOND THE BOUNDARY AS PLATTED AND DESCRIBED IN THE SURVEYOR'S CERTIFICATE.

KEITH L. IRONSIDE, JR.

KEITH L. IRONSIDE, JR., TRUSTEE

GLADYS BEDDOE CREDIT SHELTER TRUST

NARRAT

-) CLIENT:
- 2) THE PURI IN DEED DOCUM NO. 88-09825, PLANNING FILE
- 3) BASIS OF FOUND 1/2" DIVINAPLE HEIGHT: FOR THIS MAP.
- 4) THE SUB-S.N. 15351. THI SURVEYOR, BEL CLIENT OR NAR

RECORD R PROPERTY, GIVING S.N

SEVERAL I DISTINCT I MAP INDIC CAPPED W PARCELS

- 5) A RANDO SUBJECT TRAC THE BOUNDARY
 - A) THE E 2005 DOCU
 - A SIC FROM
 - B) THE (THE I CONF
 - C) THE I DOCL CALL THE I
- 6) THE FIFT BOUNDARY OF

A PORTION 97-09089 THE END FACE OF Clackamas County Official Records Sherry Hall, County Clerk

2013-027244

After Recording Return To:

Leanne M. Bowker, Esq. Harris & Bowker, LLP 10300 SW Greenburg Rd., Suite 530 Portland, OR 97223-5486

\$48.00

04/22/2013 2:07:15 PM

D-D Cnt=1 Stn=2 CONNIEBRO \$5.00 \$10.00 \$16.00 \$17.00

Send Tax Statements To:

Keith L. Ironside 2323 Buckman Road West Linn, OR 97068

STATUTORY BARGAIN AND SALE DEED

Keith L. Ironside, Jr., Trustee of the Gladys Beddoe Credit Shelter Trust, Grantor, conveys to Keith L. Ironside, Jr., Grantee, all of the Grantor's 50% undivided interest in the real property and improvements located in Clackamas County, Oregon commonly known as 2323 Buckman Road, West Linn, OR 97068 and legally described as follows:

Parcel 1, Partition Plat No. 2013-015, County of Clackamas and State of Oregon.

The true consideration for this conveyance is \$0.00. Grantor is making an authorized distribution of trust property.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

DATED this \\ \Bar{\cancel{E}} day	of <u>Ap</u>	il	,2013.
	·		Keith L. Ironside, Jr., Trustee, Grantor
STATE OF OREGON)	gg	
County of Washington)	SS.	
This instrument was acknowled Jr., Trustee of the Gladys Bedd	dged before loe Credit S	me on helter T	Trust. , 2013, by Keith L. Ironside,

OFFICIAL SEAL

MEGAN KATHERINE DODDS

NOTARY PUBLIC - OREGON
COMMISSION NO. A461399

MY COMMISSION EXPIRES AUGUST 29, 2015

Notary Public for Oregon
My Commission Expires:

Clackamas County Official Records Sherry Hall, County Clerk

2013-027245

\$48.00

04/22/2013 2:07:15 PM

Cnt=1 Stn=2 CONNIEBRO \$5.00 \$10.00 \$16.00 \$17.00

After Recording Return To:

Leanne M. Bowker, Esq. Harris & Bowker, LLP 10300 SW Greenburg Rd., Suite 530 Portland, OR 97223-5486

Send Tax Statements To:

Valerie I. Mever 2323 Buckman Road West Linn, OR 97068

STATUTORY BARGAIN AND SALE DEED

Keith L. Ironside, Jr., Grantor, conveys to Valerie I. Meyer, Grantee, all of the Grantor's interest in the real property and improvements located in Clackamas County, Oregon commonly known as 2323 Buckman Road, West Linn, OR 97068 and legally described as follows:

Parcel 1, Partition Plat No. 2013-015, County of Clackamas and State of Oregon.

The true consideration for this conveyance is love and affection.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

DATED this _\S_ day	of Apr	1	KOTA	2013. Onside, Jr., Gra	MAL/1
STATE OF OREGON)				
County of Washington)	SS.			
This instrument was acknowled	ged before	me on	April 18	, 2013, by K	eith L. Ironside, Jr.

OFFICIAL SEAL MEGAN KATHERINE DODDS NOTARY PUBLIC - OREGON COMMISSION NO. A461399 MY COMMISSION EXPIRES AUGUST 29, 2015

My Commission Expires:

(1) SPSSE-PL

Dec 1, 1979

thereto belonging.

Thereto belonging.

Thereto belonging to the saller at any time to require performance by the buyer of any provision hereof shall in no way affect the same, nor shall any waiver by said seller of any breach of any provision hereof be held to be a waiver of any succeeded any such of any such provision, or as a waiver of the provision itself. In construing this contract, it is understood that the seller or the buyer may be more than one person; that if the context so requires, the singu-moun shall be taken to mean and include the plural, the masculine, the leminine and the neuter, and that generally all grammatical changes shall de, assumed and implied to make the provisions hereof apply equally to corporations and to individuals. IN WITNESS WHEREOF, said parties have executed this instrument in duplicate; if either of the undersigned is a corporation, if has caused its corporate name to be signed and its corporate seal affixed hereto by its officers duly authorized thereunto by order of its board of directors. Dale Belford Connie M. NOTE-The sentence between the symbols (), If not applicable, should be deleted. See ORS 93.030). STATE OF OREGON, County of. STATE OF OREGON, County of Multnoma Personally appearedwho, being duly sworn, each for himself and not one for the other, did say that the former is the Personally appeared the above named H. Dale president and that the latter is the delford Melvin & Kroker and that the seal affixed to the foregoing instrument is the corporation, of said corporation and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors; and each of them acknowledged said instrument to be its voluntary act and deed.

Before me: and tecknowledged the toles......voluntary act and deed. OFFICIAL Marily & Scrive (OFFICIAL OF ON Wotary Public for Oregon SEAL) Notary Public for Oregon My commision expires 3-19-75 My commission expires: (DESCRIPTION CONTINUED) It is further agreed that the seller will subrogate his interest in the subject property in favor of a mortgagee at such time as the buyers construct a family home on the property, provided seller shall have the option, with the knowledge and consent of the mortgagee, to reacquire the property by assuming the mortgage and acquiring the buyer's equity in the improved property (by negotiation if possible, otherwise by arbitration) in the event of the default of the buyer of the mortgage terms. Selver warrants that he is the owner of the Bel-Ridge Water System, approved as to design and quality to satisfy all known existing regulations, from which the buyer of this contract and that such water service will continue for so long as the well supplying the system, the well being a part of the system, continues to be adequate for such supply. The parties hereto understand that the seller has granted a five-foot wide water line easement through his contiguous property to that being sold, which assures uninterruptible water line access to the property herein described. The contiguous property is described in deed identified on Clackamas County records as number 73 39756; the restrictive easement is established by declaration filed March 14, 1974, Clackamas County recorded number 74 6127. n, County Clerk, Ex-Offin rees and Ex-Officio Cle f the State of Oregon, f nas, do hereby certify the of writing was received ft orids of said county at 1, George D. Poppen, Courscorder of Conveyances an the Circuit Court of the Se County of Clackamas, do e within instrument of writed recorded in the records of 1974 DEC 24 PM STATE OF OREGON, County of Clackamas,

(Z) SHGGE HL

P161,1 300