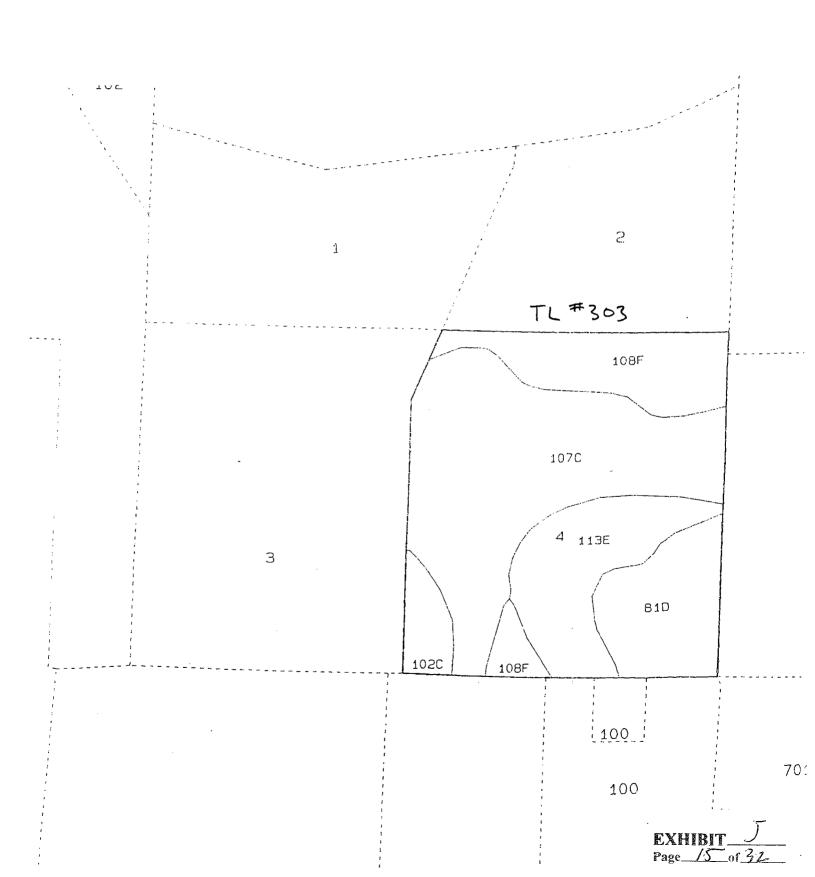
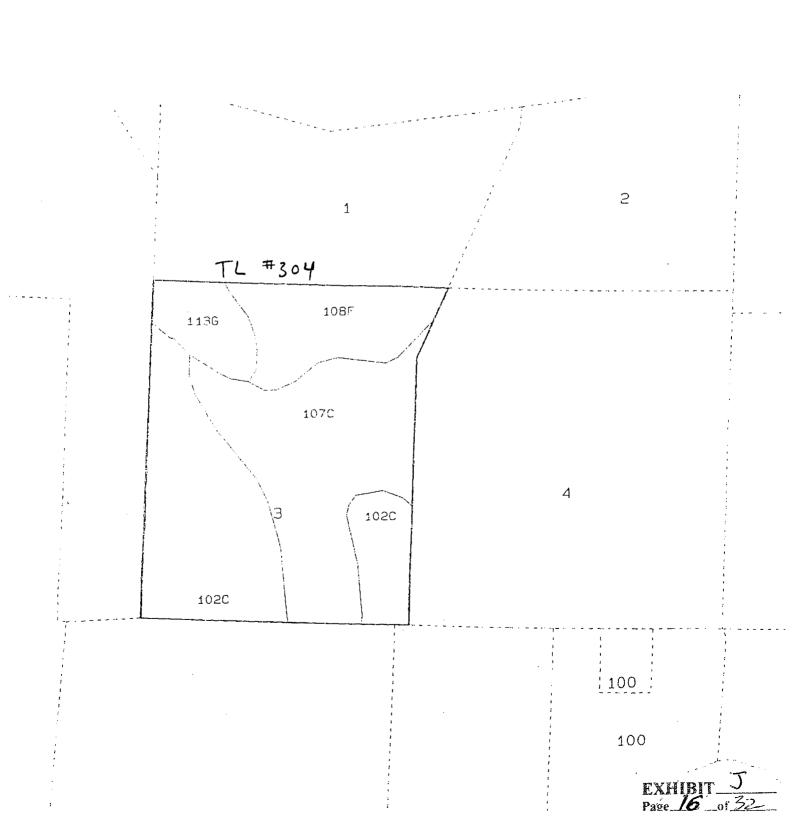


EXHIBIT J
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DOUGLAS FIR EMPIRICAL YIELD TABLE

SOURCE: For Douglas fir tables 2 through 10, D.N.R. Report No. 20 - May 1971, "Empirical Yield Tables for the Douglas fir Zone" by Charles Chambers, and Franklin Wilson. "Comprehensive Tree Volume Tarif Tables" by Dr. K. J. Turnbull, Gene Little, and Gerald Hoyer, June 1972. Stepwise multiple regression conversion made by Tom Wheatley, Publishers Paper Co., June 1978.

SITE 70									
Total Age	Normal Basal Area	Mean Diameter	, CAIR	CV4	SV6(32')	C/SCR Ratio			
20									
26	9	8.25			1 105	426			
30	38	8.57	517	517	1,185	.436			
40	91	9.36	1,874	1,847	4,196	.440			
41	96	9.44	2,004	1,963	4,554	.431			
50	128	10.11	3,126	3,008	8,115	. 371			
60	158	10.80	4,275	4,138	12,572	.329			
70	182	11.43	5,320	5,196	17,176	. 302			
80	202	11.98	6,261	6,141	21,544	.285			
90	220	12.43	7,099	6,941	25,350	. 274			
	235	12.78	7,833	7,574	28,374	. 267			
100	249	13.01	8,463	8,021	30,405	. 264			
110		13.10	8,989	8.266	31,279	.264			
120 130	261 273	13.10	9,412	8,297	30,900	.269			

TABLE 3 SITE 80

Total Age	Normal Basal Area	Mean Diameter	CAIR	CV4 ·	SV6(32')	C/SCR Ratio
20						
26	26	8.52	269	269	633	.425
	55	8.91	921	921	1,614	. 570
30	-	9.87	2,479	2,330	5,870	. 397
40	108	9.96	2,630	2,467	6,342	. 389
41	113	10.79	3,934	3,707	11,118	. 333
50	146	11.65	5,285	5,060	17,062	.297
60	175	12.45	6,532	6,330	23,187	273
70	199		7,675	7,473	29,038	.257
80	219	13.17	8,715	8,454	34,240	. 247
90	237	13.79	9,651	9,251	38,541	.240
100	252	14.31		•	41,709	.236
110 .	266	14.71	10,482	9,842	•	.235
120	279	14.97	11,211	10,216	43,565	
130	290	15.08	11,835	10,365	44,000	.236

TABLE 4

Total Age	Normal Basal Area	Mean Diameter	CVIS	CV4	sv6(32')	C/SCR Ratio
20 26 30 40 41 50 60 70 80 90 100 110 120 130	49 77 128 132 165 193 217 236 254 269 283 295	8.91 9.36 10.49 10.60 11.57 12.60 13.56 14.44 15.23 15.90 16.45 16.87	777 1,506 3,256 3,425 4,902 6,444 7,893 9,217 10,448 11,576 12,599 13,519 14,335	777 1,426 2,985 3,145 4,591 6,160 7,630 8,949 10,087 11,016 11,726 12,204 12,432	1,351 2,708 8,393 9,019 15,209 22,777 30,483 37,795 44,347 49,807 53,977 56,690 57,813	.575 .526 .356 .349 .302 .270 .250 .237 .227 .221 .217 .215

EXHIBIT J
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			BLE 5 E 100				
Total Age	Normal Rasul Area	mean Diameter	cvis	CV4	sv6(32')	C/SCR Ratio	
20 26 30 40	. 17 70 97 146 150	8.53 9.33 9.85 11.14 11.27	85 1,324 2,130 4,071 4,259	85 1,236 1,913 3,703 3,886 5,541	335 2,561 4,601 11,450 12,248 19,972	.254 .483 .416 .323 .317 .277	
50 60 70. 80 90 100 110 120 130	181 209 232 252 269 284 297 310 321	12.39 13.59 14.71 15.75 16.69 17.53 18.24 18.81 19.24	5,909 7,643 9,273 10,799 12,222 13,541 14,756 15,867 16,875	7,325 8,982 10,468 11,750 12,805 13,624 14,190 14,502	29,247 38,528 47,294 55,131 61,760 66,922 70,448 72,234	.250 .233 .221 .213 .207 .204 .201 .201	
			BLE 6 E 110			,	SITE 107 23,005 Bd.f
Total Age	Normal Basal Area	Mear. Diameter	CVTS	CV4	sv6(32')	C/SCR Ratio	_
20 26 30 40 42	30 83 2.09 258 162	8.74 9.63 10.23 11.69 11.83	327 1,688 2,574 4,717 4,926 6,757	327 1,494 2,253 4,275 4,482 6,345	666 3,299 5,812 14,125 15,074 24,305	.491 .453 .388 .303 .297	
50 70 80 90 100	194 222 245 264 281 296 310	13.11 14.47 15.76 16.97 18.09 19.09 19.72	8,693 10,525 12,253 13,878 15,398 16,815 19,129	8,344 10,200 11,963 13,304 14,503 15,448 16,126	35,244 46,141 56,425 65,675 73,549 79,636 84,358	.237 .221 .210 .203 .197 .193	
120 130	322 333	21.31	19,338	16,528	36,957 	.190	SITE 112 25,470 Bd.f
	•		PLE 7 E 120				SITE 112 25,470 Bd.f PER ACRE
Total Age	Normal . Basal Area	Mear. Diameter	CVIS	CV4	SV6 (321)	C/SCR Ratio	_
20 26 30 40 41 50	51 101 126 173 177 208	9.11 10.10 10.77 12.39 12.55 13.98	819 2,294 3,257 5,592 5,820 7,823	770 1,961 2,821 5,093 5,324 7,389	1,355 4,810 7,992 18,116 19,255 30,132	.568 .408 .353 .281 .277 .245	
50 70 80 90 100 110 120	235 258 277 294 309 522 334 345	15.50 16.96 18.33 19.60 20.76 21.80 22.70 23.45	9,951 11,974 13,894 15,710 17,423 19,031 20,536 21,937	9,588 11,611 13,424 14,992 16,297 17,334 18,091 18,561	42,783 55,265 66,954 77,437 86,410 93,643 98,946 102,187	.210 .200 .194 .189 .185 .183	

NUMBERS SHOWN OBTAINED BY INTERPOLATION

Lane Count Soil Ratings for Forestry and Agriculture

Map	Lane County	Douglas Fir Site	Cu. Ft./ Acre/	Agricultural Capability	High Value
Symbol	Soil Map Unit	Index	Year	Class	Farmlan
72F	Klickitat stony loam, 30 - 50% south slopes	112	158	6	
72G	Klickitat stony loam, 50 - 75% south slopes	112	158	7	
73	Linslaw loam	none		3	$X_{\overline{1}}$
74B	Lint silt loam, 0 - 7% slopes	117	169	. 3	
74C	Lint silt loam, 7 - 12% slopes	117	169	. 3	
74D	Lint silt loam, 12 - 20% slopes	117	169	3	
74E	Lint silt loam, 20 - 40% slopes	117	169	4	
75	Malabon silty clay loam	none		-	X
76	Malabon-Urban land complex	none		1	X
77B	Marcola cobbly silty clay loam, 2 - 7% slopes	none		4	
78	McAlpin silty clay loam	none	des and I	2	X
79	McBee silty clay loam	none		3	X^2
80F	McCully clay loam, 30 - 35% slopes	118	171	6	
80G	McCully clay loam, 50 - 70% slopes	118	171	7	
(81D)	McDuff clay loam, 3 - 25% slopes	112	158	6	
81F	McDuff clay loam, 25 - 50% slopes	112	158	6	
SIG	McDuff clay loam, 50 - 70% slopes	112	158	7	
82C	Meda loam, 2 - 12% slopes	 none		3	X
83B	Minniece silty clay loam, 0 - 8% slopes	none		6	
84D	Mulkey loam, 5 - 25% slopes	none		6	
85	Natroy silty clay loam	none		4	X
86	Natroy silty clay	none		4	X
87	Natroy-Urban land complex	none		4	X
88	Nehalem silt loam	none		2	X
89C	Nekia silty clay loam, 2 - 12% slopes	113	160	3	X
89D	Nekia silty clay loam, 12 - 20% slopes	113	160	3	X
89E	Nekia silty clay loam, 20 - 30% slopes	113	160	4	
89F	Nekia silty clay loam, 30 - 50% slopes	113	160	-6	
90	Nekoma silt loam	none		3	
91D	Neskowin silt loam, 12 - 20% slopes	none	•	6	
	Neskowin silt loam, 20 - 40% slopes	none		6	
	Neskowin-Salander silt loams, 40 - 60% slopes	none		6	
	Nestucca silt loam	none		3	
	Netarts fine sand, 3 - 12% slopes	none		6	
	Netarts fine sand, 12 - 30% slopes	none		6	
	Newberg fine sandy loam			2	X
	Newberg loam	none none		2	X

August 20, 1997



Lane County Lil Ratings for Forestry a. Agriculture

Map	Lane County Soil Map Unit	Douglas Fir Site Index	Cu. Ft./ Acre/ Year	Agricultural Capability Class	High Value Farmland
Symbol 97	Newberg-Urban land complex	none		2	Х
98	Noti loam	none		4	X
99H	Ochrepts & Umbrepts, very steep	none			
100	Oxley gravelly silt loam	none		3	
101	Oxley-Urban land complex	none		3	
102C	Panther silty clay loam, 2 - 12% slopes	none	•	6	
103C	Panther-Urban land complex, 2 - 12% slopes	none		6	
104E	Peavine silty clay loam, 3 - 30% slopes	125	184	6	
104G	Peavine silty clay loam, 30 - 60% slopes	125	184	6	
105A	Pengra silt loam, 1 - 4% slopes	none		3	X_1
106A	Pengra-Urban land complex, 1 - 4% slopes	none		3	
107C	Philomath silty clay, 3 - 12% slopes	none		6	
108C	Philomath cobbly silty clay, 3 - 12% slopes	none		6	
108F	Philomath cobbly silty clay, 12 - 45% slopes	none		6	
109F	Philomath-Urban land complex, 12 - 45% slopes	none		6	
110	Pits	none		8	
111D	Preacher loam, 0 - 25% slopes	128	190	6 ·	
111F	Preacher loam, 25 - 50% slopes	128	190	6	
112G	Preacher-Bohannon-Slickrock complex, 50 - 75% slopes	***	188	7	
113C	Ritner cobbly silty clay loam, 2 - 12% slopes	107	149	4	
113E	Ritner cobbly silty clay loam, 12 - 30% slopes	107	149	6	
113G	Ritner cobbly silty clay loam, 30 - 60% slopes	(107)	149	7	
114	Riverwash	none		8	
115H	Rock outcrop-Kilchis complex, 30 - 90% slopes	***	27	8	
116G	Rock outcrop-Witzel complex, 10 - 70% slopes	***	none	8	
117E	Salander silt loam, 12 - 30% slopes	125	184	6	٠.
118	Salem gravelly silt loam	none		2	X
119	Salem-Urban land complex	none		2	X
120B	Salkum silt loam, 2 - 6% slopes	116	167	2	X
121B	Salkum silty clay loam, 2 - 8% slopes	116	167	2	X
121C	Salkum silty clay loam, 8 - 16% slopes	116	167	3	X
122	Saturn clay loam	123	180	3	
123 -	Sifton gravelly loam	124	182	3	X
124D	Slickrock gravelly loam, 3 - 25% slopes	137	209	6	
124F	Slickrock gravelly loam, 25 - 50% slopes	137	209	6	
1.25C	Steiwer loam, 3 - 12% slopes	none		3	
125D	Steiwer loam, 12 - 20% slopes	none		4*	

LANE COUNTY FOREST SOIL RATINGS

		[1]	[2]
Мар	a 13 %	Site	Cubic Foot
Symbol	Soil Name	Index	/Acre/Year
077В	Marcola cob sicl, 2-7%	97	130
078	McAlpin sicl	125	184
079	McBee sicl	119	173
080F	McCully cl, 30-35%	125	184
080G	McCully cl, 50-70%	125	184
081D	McDuff cl, 3-25%	115	163
081F	McDuff cl, 25-50%	115	163
081G	McDuff cl, 50-70%	120	175
082C	Meda 1, 2-12%	128	190
083B	Minniece sicl, 0-8%	112	158
084D	Mulkey 1, 5-25%	90*	116
085	Natroy sicl	none	60**
086	Natroy sic	none	60**
087	Natroy-Urban land complex	***	40**
088	Nehalem sil	124	182
089C	Nekia sicl, 2-12%	115	163
089D	Nekia sicl, 12-20%	115	163
089E	Nekia sicl, 20-30%	115	163
089F	Nekia sicl, 30-50%	112	158
090	Nekoma sil	. 140	214
091D	Neskowin sil, 12-20%	109*	152
091E	Neskowin sil, 20-40%	109*	152
092G	Neskowin-Salander sil, 40-60%	***	205**
093	Nestucca sil	99	134
094C	Netarts fs, 3-12%	95	125
094E	Netarts fs, 12-30%	95	125
095	Newberg fsl	110	154 ^{\(\frac{1}{2}\)}
096	Newberg 1	110	154
097	Newberg-Urban land complex	***	100**
098	Noti 1:	none	30**
099Н	Ochrepts & Umbrepts, v. steep	* ***	130**
100	Oxley gr sil	none	80**
101	Oxley-Urban land complex	***	60** X
102C	Panther sicl. 2-12%	none	45**
103C	Panther-Urban land complex, 2-12%	***	40**
104E	Peavine sicl, 3-30%	124	182
104G	Peavine sicl, 30-60%	124	182
105A	Pengra sil, 1-4%	none	45**
106A	Pengra-Urban land complex, 1-4%	***	30**
107C	Philomath sic, 3-12%		45**) A
10/C	Philomath sic, 3-12%	none	45**

All ratings are taken from the "Single Phase Interpretation Sheets" (green sheets) published by the Soil Conservation Service (SCS) for the Lane County Area, Oregon except those marked **

All ratings are for Douglar Fir unmanaged, fully stocked stands.

^{*} ratings for additional tree species are listed on SCS green sheets

^{**} These estimated soils ratings are taken from an Office of State Forester Memorandum, February 8, 1990, General File 7-1-1

^{***} multiple site indices; refer to the cu.ft./acre/yr column for a composite rating for this complex

^{[1] 50} year base

^[2] volume produced at age of culmination

LANE COUNTY FOREST SOIL RATINGS

		[1]	[2]
Map		Site	Cubic Foot
Symbol	Soil Name	Index	/Acre/Year
108C	Philomath cob sic, 3-12%	none	45** X
[108F]	Philomath cob sic, 12-45%	none 🕝	45**
109F	Philomath-Urban land complex, 12-45%	***	20**
110	Pits	none	none
111D	Preacher 1, 0-25%	128*	190
111F	Preacher 1, 25-50%	128*	190
112G	Preacher-Bohannon-Slickrock, 50-75%	***	185**
113C	Ritner cob sicl, 2-12%	102*	140
113E	Ritner cob sicl, 12-30%	102*	140
113G	Ritner cob sicl, 30-60%	102*	(140)
114	Riverwash	none	none
115H	Rock outcrop-Kilchis complex, 30-90%	***	34**
116G	Rock outcrop-Witzel complex, 10-70%	***	21**
117E	Salander sil, 12-30%	<u>125*</u>	<u>184</u>
118	Salem gr sil	114	162
119	Salem-Urban land complex	***	T00**
120B	Salkum sil, 2-6%	119	173
121B	Salkum sil, 2-6%	126	186
121C	Salkum sicl, 8-16%	126	186
122	Saturn cl	104	143
123	Sifton gr l	. 110	154
124D	Slickrock gr 1, 3-25%	137*	209
124F	Slickrock gr 1, 25-50%	137*	209
125C	Steiwer 1, 3-12%	none	30**
125D	Steiwer 1, 12-20%	none	30**
125F	Steiwer 1, 20-50%	none	30**
126F	Tahkenitch 1, 20-45%	120	175
126G	Tahkenitch 1, 45-75%	112	158
127C	Urban land-Hazelair-Dixonville, 3-12%	***	45**
128B	Veneta 1, 0-7%	108	150
129B	Veneta variant sil, 0-7%	128	190
130	Waldo sicl	none	45**
131C	Waldport fs, 0-12%	90	116
131E	Waldport fs, 12-30%	90	116
131G	Waldport fs, 30-70%	90	116
132E	Waldport fs, thin surf., 0-30%	none	29**
133C	Waldport-Urban land complex, 0-12%	***	20**
134	Wapato sicl	none	none
135C	Willakenzie cl, 2-12%	110	154
135D	Willakenzie cl, 12-20%	110	154

All ratings are taken from the "Single Phase Interpretation Sheets" (green sheets) published by the Soil Conservation Service (SCS) for the Lane County Area, Oregon except those marked **

All ratings are for Douglar Fir unmanaged, fully stocked stands.

^{*} ratings for additional tree species are listed on SCS green sheets

^{**} These estimated soils ratings are taken from an Office of State Forester Memorandum, February 8, 1990, General File 7-1-1

^{***} multiple site indices; refer to the cu.ft./acre/yr column for a composite rating for this complex

^{[1] 50} year base

^[2] volume produced at age of culmination

Douglas-Fir

LOG PRICES - 3rd Quarter 1983

WEST OREGON, SANTIAM, LANE, FOREST GROVE, TILLAHOOK AND ASTORIA UNITS

# LP		:	\$505	
#2P			425	
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Determining site index

Professionals with sophisticated tools and techniques usually determine site indexes. You can make your own estimates if you wish.

Some tools to help you are a clinometer, increment borer, and tape. You'll find a description of each in EC 1129, Tools for Measuring Your Forest (available for \$1.50 from Extension and Station Communications, Oregon State University, 422 Kerr Administration, Corvallis, OR 97331-2119).

Determine site index by measuring the age and height of trees that dominate their neighbors. Here's now:

Select at least three of the taller trees for each area you wish to sample.

Estimate the age of each sample tree. Annual rings—the layers of wood a tree produces in a year's growth—provide a good record of age.

You can obtain a core sample (see Figure 1) with an increment borer, a hollow drill that is used most conveniently at breast height (b.h.=4.5 feet above the ground). Your ring count estimates the b.h. age.

For most site index systems, you need to know the total age of the tree. In such cases, you must add 5 to 10 years to allow for the time it took the tree to grow to 4.5 feet.

It may be necessary, or more convenient, to count the rings on the surface of a stump. This will provide an answer that is closer to the total age of the tree.

For stumps less than a foot tall, the ring count may be only 2 years less than the total age of the tree. The same stumps would have fewer rings showing if they were out 3 feet tall because it may take 5 years for the tree to grow that tall.

You can estimate the age of young trees by counting the layers of branches (whorls).

This works well on species that form one distinct layer of branches each year such as pines, true firs, and Douglas-fir. It does not work on cedars, hemlocks, and alder because they lack this particular branching habit.

It is easy to count the whorls for about the first 30 years, but trees

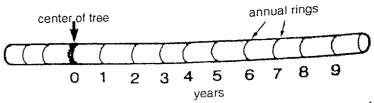


Figure 1.—Counting the rings: a band of light wood is formed in the spring of each year and is followed by a darker band of denser summer wood.

growing closely together in dense stands often lose their lower branches because of natural pruning. In such cases, you can look for limb scars or knot indicators.

Broken tops can cause you to underestimate age, and false whoris (Figure 2) can cause you to overestimate age.

Estimate height of the sample trees. Measure to the nearest foot if it is possible with your tools. Windthrown trees can provide good height estimates if they were dominant, healthy trees before they fell.

After you estimate age and height of your trees, you can determine site index. To do this, refer to the appendices (or similar tables) and find the age of the tree in the left column. Look to the right on the same line to find tree height. Fellow this column down to find the site index and various groupings of site indexes.

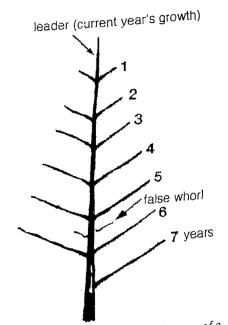


Figure 2.—Determining the age of a tree by counting the whorls.

Appendix A.—Site index and site class for Douglas-fir, 100-year basis.

Append	Appendix A.—Site index and site class for Douglas jury													
Total age (years)		Tree height (feet) 12 14 47 49 52 54												
20 30 40 50 60 70 80 90	21 37 48 56 63 68 73 77 80	24 41 54 63 70 77 82 86 90	26 46 60 70 78 85 91 96 100	29 50 66 77 86 94 100 105	31 55 72 84 93 102 109 115	34 60 78 91 101 110 118 125 130	37 64 84 98 109 119 127 134 140	39 69 90 105 117 127 136 144 150	42 74 96 112 124 135 145 153 160	44 78 102 119 132 144 154 163 170	47 83 108 125 140 152 163 172 180	88 114 132 148 161 172 182 190	92 120 139 156 170 181 192 200	96 126 146 163 178 190 201 210
Site	80	90	100	110	120	130	140	150	160	170	180	190	200	210
Site class		V		IV		III			II			I		
ODR* tax site class	F	G	F	F	ĮF	E	FD	I I	∵C 	ĮF)	3		FA	

^{*}Oregon Department of Revenue.

Appendix B.—Site index and site class for Douglas-fir, western Oregon, 50-year basis.

	Western Oregoni, 30 years 2221										
b.h. age (years)		Total height (feet)									
10 20 30 40 50	16 30 42 53 60	18 35 49 61 70	20 40 56 69 80	22 44 63 78 90	24 49 70 86 100	27 54 76 95 110	29 59 83 103 120	32 63 90 112 130	34 68 97 120 140	37 73 103 129 150	
Site index	60	70	80	90	100	110	120	130	140	1 <i>5</i> 0	
Site class	,	٧'	I.	* *	III II I						
ODR* site class	FG FF			F	E F	ֶׁ כֵּד :	FC .	FB		FA	

^{*}Oregon Department of Revenue.

Appendix D.—Site inaex and site class for Sitka spruce and western hemlock, 100-year basis.

				===	====		_		
Total age (years)			To	otal he	eight (િલ્લ	t)		
20 30 40 50 60 70 80 90	13 25 31 38 44 49 53 56	17 30 41 51 58 64 70 75 80	21 37 51 63 73 81 88 94 100	25 45 62 76 87 97 105 113 120	30 52 72 88 102 114 123 132 140	6	7 0 0 1 0	38 67 92 114 131 146 158 169 180	43 75 103 126 146 162 176 188 200
Site index	60	80	100	120	140	16	0	180	200
Site class		V		IV.	III			II	I

Appendix C. - Site index and site class for penderosa pine, 100-year basis.

	Total age (years)			X	\$	T	'otal	heigh	i (leet	· -	A A	5		
K	20 30 40 50 60 70 80 90	6 1 6 1 6 0 4 F 9	9 15 28 28 34 39 47 50	12 20 28 35 42 4 52 57 60	16 25 4 5 0 5 6 6 7 0 6	20 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0845890000000000000000000000000000000000	34 55 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	35 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	40 57 70 80 90 98 106 113 120	45 64 77 89 99 108 116 123	50 70 85 97 107 116 124 132 140	93 105 115 125 133 142 150	60 84 100 113 124 143 152 160
	Site index	4 0	<i>5</i> 0	60 j	70 <u> </u>	80 _:	9J-;	100	(110)	120	130	140	150	160
:	Site class		VI.		ν	Ī		III j	II			I		

Appendix E.—Site index and site class for alder, 50-year basis.

Total age (vears)			Tota] heig	ht (fe		15
10 20 30 40 50	23 37 47 54 60	27 44 55 55 55 50 70	31 50 63 72 80	35 56 71 81 90	39 63 79 91 100	42 69 87 100 110	46 75 95 109 120
Site index	60	70	sc	90	100	110	120
Site class	1	-	ĭ	I	11		I

EXAMPLE: 60 YRS, TOTAL AGE
81' TOTAL HEIGHT

= SITE INDEX AND CLASS

SITE INDEX

IS 110 FOR THIS TREE

The Woodland Workbook is a collection of publications prepared by the Oregon State University Extension Service specifically for owners and managers of private, nonindustrial woodlands. The Workbook is organized into separate sections, containing information of long-range and day-to-day value for anyone interested in wise management, conservation, and use of woodland properties. It's available in a 3-ring binder with tabbed dividers for each section.

For information about how to order, and for a current list of titles and prices, inquire at the office of the OSU Extension Service that serves your county.

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我是不知道的 人名马利 我们

Table 1- Total volume inside bark of ponderosa pine 1.5 cm (0.6 in) and larger in d.b.h. (39)

Site index at base age 100 years							
18 m or 60 ft	27 m or 90 ft	37 m or 120 ft	46 m or 150 ft				
	m	³/ha					
28	94	168	262				
122	238	396	588				
192	340	570	861				
238	413	696	1060				
273	472	794	1204				
308	518	868	_				
336	556	928	-				
	ft³/	acre					
400	1,350	2,400	3,750				
1,750	3,400	5,650	8,400				
2,750	4,850	8,150	12,300				
3,400	5,900	9,950	15,150				
3.900	6,750	11,350	17,200				
4,400	7,400	12,400					
4,800	7,950	13,250	-				
	28 122 192 238 273 308 336 400 1,750 2,750 3,400 3,900 4,400	60 ft 90 ft 128 94 122 238 192 340 238 413 273 472 308 518 336 556 1,750 3,400 2,750 4,850 3,400 5,900 3,900 6,750 4,400 7,400	60 ft 120 ft m³/ha 28 94 168 122 238 396 192 340 570 238 413 696 273 472 794 308 518 868 336 556 928 ft³/acre 400 1,350 2,400 1,750 3,400 5,650 2,750 4,850 8,150 3,400 5,900 9,950 3,900 6,750 11,350 4,400 7,400 12,400				

As a rough approximation, the Silvics handbook has the following yield table. To calculate the cubic ft/ac/year, determine the mean approximation of the silvics handbook has the following yield table. To calculate the cubic ft/ac/year, determine the mean approximation of the silving si determine the mean annual increment (MAI, = total stand volume divided by age) for a given site index. For example, for SI=120, the MAI of social field stand volume divided by age) are vear. For a 50 example, for SI=120, the MAI of social field stand volume divided by age. example, for SI=120, the MAI at age 40 is 5,650 cubic ft / 40 years = 141 cubic ft per acre per year. For a 50 year base site index, would have to first across to 100 to year base site index, would have to first convert to 100-base value.

SITE INDEX 120 150 60 f+3/ACRE YR. 8,400 3,400 5,650 1.750 40 12,300 8,150 4.850 2,750 60 15,15C 9,950 5,900 3,400 80 17,20C 11,350 6,750 3.900 100 12,400 7.400 4,400 120 13,250 7,950 4.800 140 ¹Height of dominant and codominant trees of average d.b.h. EXAMPLE: 104 SITE INDEX: 50 YEAR ROTATION

: Fletcher, Rick

Sent: Tuesday, January 27, 2004 9:40 AM

To: Jim Just Cc: Bennett, Max

Jim:

Subject: RE: ponderosa pine soils ratings

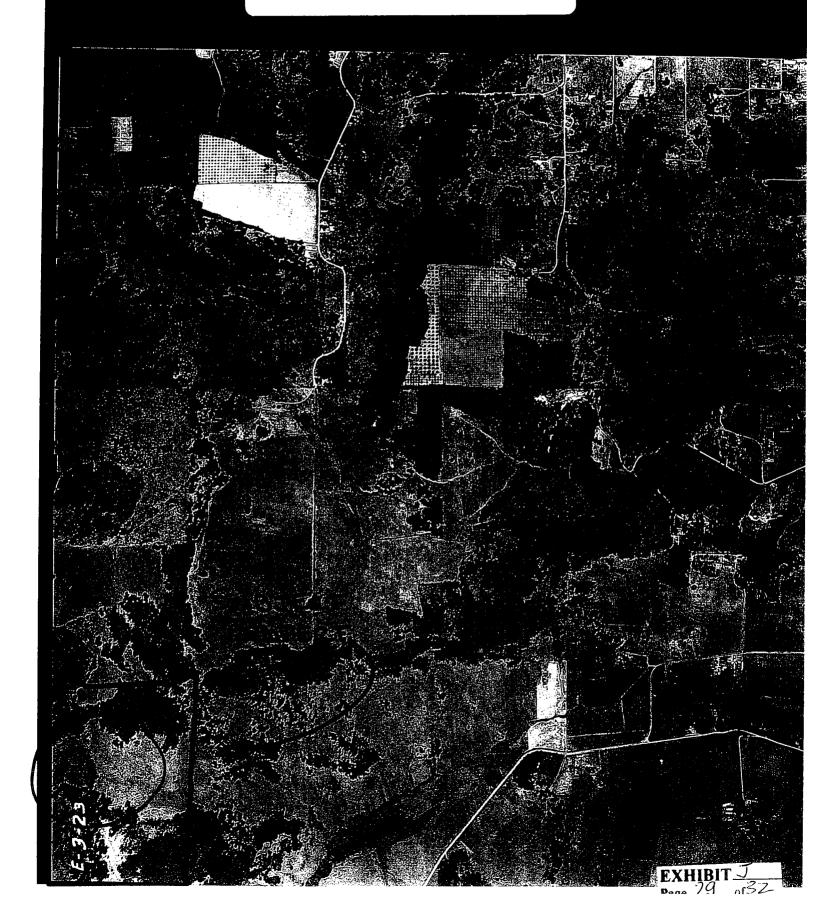
INTERPOLATION PUTS TOTAL ft3/ACRE HERE = 5420 CU.ft.

5420 Cu.ft. - 50 YEAR ROTATION =

108.4 cf/AC/YR

EXHIBIT J Page 28 of 32

OGLE 1936 PARCEL



OGLE PARCEL IN 1947



OGLE PARCEL IN 1952 (AVGUST PHOTO)

PARCEL

3190

ENTIRE PARCEL
SHOWN WITHIN
RED BOUNDARY
LINES. SOIL TYPES
SHOWN WITHIN AREA
BEING LOOKED AT
FOR MARGINAL
1.ANDS DESIGNATION.



THE POWEDLINE
BOUNDARIES ARE
CLEARLY DEFINED.

ONLY AREAS

HAVE BEEN DEDVCTED

EXHIBIT J
Page 32 of 32

March 1997

Supplement to Marginal Lands Information Sheet

BOARD OF COUNTY COMMISSIONERS DIRECTION REGARDING THE INTERPRETATION AND ADMINISTRATION OF MARGINAL LANDS **APPLICATIONS**

On February 26, 1997, the Lanc County Board of Commissioners reviewed the state Marginal Lands law and developed responses to seven issues in the law needing clarification for purposes of administration by Lane County. Those issues are identified below, followed by the direction provided by the Board. Any application for the Marginal Land designation within the Lane County Rural Comprehensive Plan's jurisdiction must be in compliance with the Board's directions. Refer to the Marginal Lands Information Sheet, or to Oregon Revised Statutes 197.247 (1991 laws), for an explanation of the law itself.

ISSUE 1: What is the Marginel Lands concept?

Board's Direction:

The Board recognized that marginal land is intended to be a sub-set of resource land, i.e., there are "prime" resource lands and "marginal" resource lands. The marginal lands are to be available for occupancy and use as smaller tracts than are required in the better resource lands. The criteria in the law define which lands may be designated as marginal. Evidence for this position is found in the legislative history and the fact that marginal lands are recognized in both Statewide Goal 3 - Agricultural Lands and Goal 4 - Forest Lands.

ISSUE 2: Definition of "Management".

When considering forest land, the entire growth cycle must be considered for evidence of management. This is because even the best managed forest operations may have nothing occurring on the land during the five-year window (1978 - 1982) stated in the marginal lands statute (ORS 197.247(1)(a)(1991 Edition). For farm operations, however, it is hard to conceive of an operating farm on which nothing occurred for five years.

Board's Direction:

No evidence of human activity on the land is required for forest land to be "managed". The conscious decision not to convert the land to another use is enough evidence of management to meet the statutory intent, provided there is a significant amount of merchantable or potentially merchantable trees on the property. Likewise, evidence of timber harvest since 1978 would suffice to show management even if there were no trees currently on the property. For farm land, no evidence of farm use during the 5-year statutory window would indicate that land was not managed for farm use.

ISSUE 3. Managed "as part of" a (farm or forest) operation during (1978-1982).

Does this phrase in ORS 197.247(1)(a)(1991) mean, for example, that if a large timber company owned and managed a 2000 acre tract during the five-year window, and then sold someone a 40 acre portion of non-forest land in 1985, that 40 acres would not be eligible for Marginel Lands designation?

Board's Direction :

The Board found that the law creates a general presumption that all contiguous land owned during 1978-82 was part of the owner's "operation". That presumption could be rebutted, however, by substantial evidence

that the parcel in question was not, in fact, a "contributing part" of the operation. The applicant would bear the burden of producing such evidence.

ISSUE 4: What price data should be used to calculate gross annual income for forest lands?

Board's Direction:

The legislative intent of the "management and income test" of the Marginal Lands Law was to identify those lands which were not, at the time the Marginal Lands law was enacted (1983), making a "significant contribution" to commercial forestry. Therefore, it is appropriate and statistically valid to use the following methodology:

- Based on the best information available regarding soils, topography, etc., determine the optimal level
 of timber production for the wact assuming reasonable management.
- 2. Assume that the stand was, in 1983, fully mature and ready for harvest.
- 3. Using the volumes calculated in step (1), and 1983 prices, calculate the average gross annual income over the growth cycle.

ISSUE 5: What "growth cycle" should be used to calculate gross annual income?

Board's Direction :

The consensus of the Board was that a 50-year growth cycle should be adopted as the usual standard, with the option that another standard could be used if substantiated by compelling scientific evidence presented by the applicant. The Board's choice was based on evidence that the USDA Natural Resource Conservation Service has adopted the 50-year cycle for rating soil productivity, plus the administrative ease of having a standardized figure.

ISSUE 6: Weight of evidence.

One of the main holdings of the <u>Ericsson</u> case, which arose in Lane County, is that on-site evaluation by a qualified expert is weightier evidence than published data. Given this ruling, what is the appropriate role of the parcelization table in Lane Code 16.211(10)(b) and the legislative findings for Goal 4 of the Rural Comprehensive Plan as an income standard?

Board's Direction :

As a matter of administrative ease, and in the absence of other substantial evidence, the parcelization test could still be used. It is one method of identifying the acreage required of a given forest capability classification to achieve the \$10,000 income standard.

ISSUE 7: Ambiguities in the percelization tests of ORS 197.247(1)(b)(A) & (E).

Is the parcelization test measuring the percent of an area (acreage) or the percent of the number of parcels a "parcel count"? If the test in ORS 197.247(1)(b)(A) is an area test, does the percentage requirement apply to the acreage or to the number of parcels that lie wholly or partly within the 1/4 mile of the subject tract?

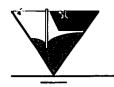
Board's Direction:

Regard the tests in ORS 197.247(1)(b)(A) & (B) as "area" tests with the difference being that (A) specifies an area including the subject parcel and land within 1/4 mile and uses a 50% small lot test, whereas (B) increases the area to a minimum of 240 acres but raises the small lot test to 60%.

(Note: This is the position adopted by Lane County in the <u>Jackson</u> case. In that case, Lane County ruled that the area was limited to the 1/4-mile line, whereas DLCD argued that the area line should expand to include the entirety of any parcel partly located within the 1/4 mile boundary. DLCD threatened to appeal the <u>Jackson</u> case on that basis, but did not do so.)

EXHIBIT K
Page 2 of 2

EXHIBIT "L"



EGR & Associates, Inc.

2535B Prairie Road Eugene, Oregon 97402 (541) 688-8322 Fax (541) 688-8087

Aquifer Test For Tax Lot # 304, Sections 10 and 11, Township 16 South, Range 2 West of the Willamette Meridian

May 2002

Prepared For:

Brad Ogle

3103 Timberline Drive

Eugene, OR.

Principal Authors:

EGR and Associates, Inc. Phillip Stallings, R.P.G.

Robert Murray, Geologic Associate



Aquifer Test for PA 3826-92, Tax Lot 304 Sections 10 and 11, Township 16 South, Range 2 West of the Willamette Meridian,

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PUMP TES	T	3
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POTENTIA	L FOR AQUIFER DEPLETION	6
LIMITATIO	ONS	6
	IONS	7
FIGURE 1	SITE LOCATION MAP	
FIGURE 2	TAX LOT MAP	

APPENDIX A: LANE COUNTY CODE 13.050

SOIL MAP

APPENDIX B: OREGON WATER WELL DRILLER'S LOGS APPENDIX C: PUMPING AND OBSERVATION WELL LOGS

APPENDIX D: TRANSDUCER DATA APPENDIX E: INTERPRETATIVE PLOTS

FIGURE 3

Aquifer Test for PA 3826-92, Tax Lot 304 Sections 10 and 11, Township 16 South, Range 2 West of the Willamette Meridian,

INTRODUCTION

EGR & Associates (EGR) was retained by Brad Ogle to investigate whether the proposed partition of Tax Lot 304 would adversely impact the neighboring wells or properties, or deplete the aquifer (Lane County Code 13.050 for groundwater quantity limited areas, Appendix A).

The subject property consists of Parcels one and two of Tax Lot 304 totaling 55.34 and 58.4 acres in size (113.7 acres). Parcels 1 and 2 of Tax Lot 304 is proposed to be partitioned into nine lots (Figures 1 and 2). The property is zoned (F-2) Impacted Forest Lands.

To satisfy the requirements of the Lane conditions for approval (under Lane Code 13.050), an aquifer pumping and recovery test was performed on Tax Lot 304 between May 6 and 7, 2002. The purpose of the test and interpretation is to estimate aquifer potential and assess whether the aquifer is sufficiently productive to support additional demands caused by the development of seven new residential homes to the site (two homes are currently located on the property). In addition to the aquifer test, drill logs from neighboring wells were used to characterize local groundwater production.

HYDROLOGY, GEOLOGY, AND HYDROGEOLOGY

The property is located between approximately 680 to 1020 feet elevation in the Spencer Creek Watershed. Surface water from the site drains to the south to an unnamed tributary to Spencer Creek (Figure 1).

The Soil Survey of Lane County indicates five soil types are presented on the site¹. The locations of the different soil types relative to approximate property boundaries is included in Figure 3.

These soils include the McDuff clay loam (81D), Panther silty clay loam (102C), Philomath silty clay (107C), Philomath cobbly silty clay (108 F), and Ritner cobbly, silty clay loam (113E).

The McDuff clay loam (81D) is a moderately deep, well drained soil commonly found in swales and benches on broad ridges and slump benches. The surface layer is typically very dark brown clay loam about 6 inches thick. The upper 8 inches of the subsoil is very dark grayish brown clay loam, and the lower 23 inches is dark brown and brown clay and silty clay. Weathered bedrock is at a depth of 20 to 40 inches below the surface. The available water capacity is 0.19-0.21inches/inch.

¹Patching, W.R. (1987) Soil Survey of the Lane County Area, U.S.D.A. Soil Conservation Service Publication, map sheet 89.

The Panther silty clay loam (102C) is a deep, poorly drained soil commonly found in swales and benches on foothills. The surface layer is typically very dark brown silty clay loam about 10 inches thick. The subsoil is very dark brown and dark grayish brown clay about 19 inches thick. The substratum is dark grayish brown mottled clay about 13 inches thick. Weathered bedrock ranges between 40 to 60 inches below the surface. The available water capacity is 0.19-0.21 inches/inch.

The Philomath silty clay (107C) is a shallow, well drained soil commonly found in colluvium and residium derived from igneous rock. The surface layer is typically very dark brown silty clay approximately 6 inches thick. The subsoil is very dark brown clay about 8 inches thick. Depth to bedrock ranges from 12 to 20 inches. The available water capacity is 0.18-0.21 inches/inch.

The Philomath cobbly silty clay (108F) is a shallow, well drained soil commonly found in colluvium and residium derived from igneous rock. The surface layer is typically very dark brown cobbly silty clay approximately 6 inches thick. The subsoil is very dark brown cobbly silty clay about 8 inches thick. Depth to weathered bedrock ranges from 12 to 20 inches below the surface. The available water capacity is 0.14-0.17 inches/inch.

The Ritner cobbly, silty clay loam (113E) is a moderately deep, well drained soil commonly found on foothills. The surface layer is typically dark reddish brown cobbly sitly clay loam about 7 inches thick. The subsoil is dark reddish brown and yellowish red very cobbly silty clay loam about 25 inches thick. Weathered bedrock, consisting of fractured basalt, ranges between 20 to 40 inches. The available water capacity is 0.12-0.19 inches/inch.

Beneath these top soils are marine deposited sediments of the Eugene Formation. The Eugene Formation consists of fine grained arkosic micaceous sandstone, with intercalated shale and occasional lenses of fine volcanic ash from the Oligocene (approximately 34-38 million years old)². Lithologic descriptions found in drillers' well logs in the area corroborate the presence of mixed sedimentary deposits consisting of sand and clay overlying sandstone, and claystone.

The well log for the pumping well (P-1) describes the underlying geology of the site as a 1/2 foot layer of topsoil overlying sandstone to a depth of at least 220 feet below the surface. The observation well (O-1), also located on the site, describes the underlying geology as a 3 foot layer of topsoil overlying sandstone and claystone to a depth of 380 feet below the surface. O-1 is located approximately 600 feet northwest of P-1. Drillers' logs from 85 wells of record in sections 10, 11, 14, and 15, Township 18 South, Range 4 West of the Willamette Meridian are presented with summary statistics in Appendix B. The well logs pertaining to the pumping well and observation well (Appendix C) indicate that the local water bearing zone encountered by the well on site is confined. A confined aquifer is defined as a water bearing zone isolated from the atmosphere by impermeable confining geologic formations, and which is generally subject to pressures higher than

atmospheric (water rises in the well above the point where it is initially encountered during drilling).³

Well completion depths in Sections 10, 11, 14, and 15 average 206 feet, with a minimum and maximum of 50 and 600 feet, respectively. Yields reported in well logs within Sections 10, 11, 14, and 15, Township 18 South, Range 4 West from recorded wells range from 0.8 gallon per minute (gpm) to 180 gpm. The average production is 20 gpm.

PUMP TEST

The pump test and data interpretation was used to estimate the hydraulic conductivity (K), transmissivity (T), and storage coefficient (S) of the confined aquifer underlying the property. Although there is inconsistent information on the well log for O-1, this well log seems to indicate a confined aquifer. The well log for P-1 indicates the aquifer underneath the subject property is confined.

The total depth of the pumping and observation wells was determined using a 300 foot tape. The pumping well (P-1) is approximately 220 feet deep and has a six-inch casing. The observation well (O-1) was too deep to measure with the tape, according to the well log the well is 380 feet deep.

Initial depth to water in P-1 was 80.96 feet from the top of casing (TOC). Initial depth to water in O-1 was 7.29 feet from TOC. Water levels in the pumping well and observation well were recorded on one-minute intervals using a pressure transducer and data logger. Transducer recordings were confirmed manually using an electronic water probe (Appendix D). Prior to the test, 200 feet of 1 inch diameter schedule 40 PVC pipe was inserted down the well to create a conduit for the transducer.

In addition to the constant pumping of the well P-1 at 5.5 gpm, sporadic domestic use of the well occurred. The observation well was not in use.

The submersible pump at P-1 was turned on at 9:36 AM on May 6, 2002 at an initial rate of 20 gpm. It was determined that pumping the well at this rate would overly stress the aquifer and the pumping was halted at 9:44 AM. A 7-gallon per minute flow restrictor was used to maintain a flow of 7 gpm during the test. The actual flow, as timed into a 5 gallon bucket, was 5.5 gpm. The pump was turned on again at 10:53 AM at a continual flow rate of 5.5 gpm. This constant pumping rate was maintained throughout the test and confirmed periodically during the pump test by timing the flow into a 5-gallon bucket.

Pumping was discontinued at 11:20 AM the next day and the water level recovery was recorded for approximately 127 minutes. The maximum drawdown from the constant pumping and sporadic use of the well was 19 feet from TOC during the test. This was caused by the sporadic domestic use of the well however, and does not represent the maximum drawdown caused by the constant pumping of the well. The actual maximum drawdown due to the constant pumping in the pumping well was approximately 13.4 feet. The well recovered to within 4.16 feet of static water level (80.93 feet) during the 127 minutes following the pump shut off. The observation well, located approximately 500

³ Driscoll, F.G., (1986) Groundwater and Wells, U.S. Filter/Johnson Screens. St. Paul MN. pp.62.

feet to the east, fluctuated, however did not show any obvious effects from the constant pumping at P-1.

The 24-hour pumping period exceeds the minimum 5-hour test indicated by the Lane Code requirements. The pump test on P-1 was run for this extended amount of time to identify potential flow boundaries further out in the aguifer.

Appendix D contains a tabulation of the transducer data collected from the pumping and observation wells. These data were used to estimate aquifer properties (Appendix E).

Plots illustrating the drawdown in the two wells versus time are presented in Appendix E. There is no evidence from the drawdown curve that, either a no-flow boundary or recharge boundary (near infinite source of water, such as a surface water stream), was intersected by the drawdown cone* which developed around the well.

AQUIFER TEST ANALYSIS

Three primary characteristics of the aquifer are needed to assess aquifer potential, hydraulic conductivity, transmissivity, and storage coefficient. These properties were estimated by interpreting the pump test data with mathematical models.

Transmissivity (T) is the rate at which water is transmitted through a 1-foot-wide vertical section of the entire thickness of the aquifer under a unit hydraulic gradient. More intuitively, T is a measure of how easily water moves through a formation of a given thickness. The units of T used in this report are gallons per day per foot (gpd/ft).

Hydraulic Conductivity (K) is a measure of the rate at which water can be transmitted through a unit area under a unit hydraulic gradient. It is directly proportional to T(K = T / T)formation thickness). The units of K used in this report are gallons per day per square foot (gpd/ft^2) .

In confined aquifers the storage coefficient (S) represents the volume of water that an aquifer releases from storage per unit area per unit decline in hydraulic head (a dimensionless value) and typically ranges between 10⁻³ and 10⁻⁵ for confined aquifers. The drill logs for the area indicate that the aquifer beneath the property is confined. Data collected from the pump test was used to calculate S. Since the observation well used for the test appears to be affected by an additional source, the storage coefficient could not be calculated.

The most suitable and simple mathematical models for interpretation are the Theis⁴ nonequilibrium equation and the Cooper-Jacob modification of the Theis equation⁵. Like all

A cone of depression or drawdown cone is a depression in the groundwater table or potentiometric surface that has the shape of an inverted cone and develops around a well from which water is being withdrawn. It defines the area of influence of a well.

⁴ Theis C.V., 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage. Trans. Amer. Geophys. Union. 2 pp. 519-524. EGR & Associates, Inc.

mathematical models, application of the Theis and Jacob equations requires certain simplifying assumptions apply to the aquifer. These assumptions and the degree to which they are satisfied by the aquifer are noted below. The Jacob solution has all the same assumptions as the Theis plus the first assumption listed below, regarding the size of the exponential integral (μ). The exponential integral is inversely proportional to the transmissivity and duration of the test, and directly proportional to the storage coefficient and distance from pumping well.

Theis equation:
$$s = \frac{114.6 \text{ Q W}(\mu)}{T}$$

Where: s= drawdown in feet at any point in the vicinity of a well discharging at a constant rate.

Q= pumping rate.

T= coefficient of transmissivity of the aquifer in gpd/ft.

 $W(\mu)$ = is read "well function of u" and represents an exponential integral.

In the $W(\mu)$ function, u is equal to:

$$\mu = 1.87r^2S$$

Where r = distance, in ft, from the center of a pumped well to a point where the drawdown is measured.

S= coefficient of storage Dimensionless).

T= coefficient of transmissivity, in gpd/ft.

t= time since pumping started, in days.

Cooper-Jacob equation:
$$T = \frac{264Q}{\Delta s}$$

Where: T= coefficient of transmissivity of the aquifer in gpd/ft.

Q= pumping rate in gpd.

 $\Delta s=$ (read "delta s") slope of the time-drawdown graph expressed as the change in drawdown between any two times on the log scale whose ratio is 10 (one log cycle).

The exponential integral of μ is sufficiently small to simplify the Theis equation to the Jacob solution. In this example μ is approximately less than $2X10^{-7}$ for a day-long test, sufficiently small for a simple solution. Driscoll suggests μ be less than 0.05 for use of Jacob⁶.

⁵ Jacob C.E., 1946b.Drawdown test to determine effective radius of artesian well. Trans. Am. Society of Civil Engineer. Vol.112. pp 1047-1070.

⁶ Driscoll, F.G., (1986) Groundwater and Wells, U.S. Filter/Johnson Screens. St. Paul MN. pp.219-220

- Aquifer has infinite areal extent. No aquifer actually has an infinite areal extent. However, because the areal extent of the aquifer is likely much larger than the study area, it can usually be assumed infinite for the purposes of the model.
- Aquifer is homogeneous, isotropic, and of uniform thickness. While an aquifer composed of sedimentary rock can not generally be assumed to be perfectly isotropic and homogenous and uniformally thick over a large enough area, the aquifer begins to take on the characteristics due to scale changes relative to the inhomogeneity. Therefore, the response to pumping in real aquifers (which are rarely perfectly homogeneous, isotropic, or uniform in thickness) can be interpreted. The longer the test, the closer the test comes to this assumption thus the 24 hour test versus the 5 hour test.
- Aquifer potentiometric surface is initially horizontal. The well was most likely in use prior to the test, therefore locally induced gradients may have been present. Any induced gradients from neighboring wells are assumed to be sufficiently low and distant to not interfere.
- The aquifer receives no recharge from any source. Over a 24-hour pumping test this assumption is essentially met.
- The pumping well is fully penetrating. The pumping well is probably not fully penetrating. Therefore, aquifer potential (yield per feet drawdown) will be underestimated because some of the groundwater produced by the well must travel upward through a smaller cross-sectional area.
- Flow to pumping well is horizontal and laminar. We do not have enough information to determine if flow to the well is exclusively horizontal. On average, flow to the well is expected to be primarily horizontal and laminar.
- All water removed from the well comes from aquifer storage. This criteria is essentially met.
- Aquifer is confined. This criteria is essentially met.
- Flow is unsteady. Flow in the aguifer is unsteady.
- The pumping well is 100 % efficient. The well is not perfectly efficient, since there probably are head loses at the intake. Water level changes due to friction head loss at the intake will indicate a greater aquifer response to pumping than is actually occurring in the aquifer, yielding a more conservative estimate of transmissivity.
- Diameter of pumping well is small so that the storage in the well can be neglected. The volume of water in the well is negligible compared to the volume of water in storage in the surrounding aquifer and the amount of water pumped during the test.

Experience has shown that even though real aquifers are rarely as simply as the model requires, the Jacob method yields results of sufficient accuracy for most engineering purposes⁷.

Interpretation of the drawdown in the pumping and observation wells yields aquifer transmisivities ranging between 283 (Theis) and 484 (Cooper-Jacob) gpd/ft. Assuming an aquifer thickness of 140 feet (depth of water in the well), the hydraulic conductivity is approximately 2.02 to 3.46 gpd/ft², within the range commonly observed for sandstone⁸.

To test the validity of the calculated transmissivity (T), the transmisivities derived from the Cooper Jacob solution (484 gpd/ft) and the Theis recovery solution (283 gpd/ft) were inserted into the full Theis⁹ non-equilibrium equation. The Theis recovery solution, derived in *Aqtesolve*, uses a storativity ratio (storativity pumping/storativity recovery) of 1.155. Since S could not be calculated due to the indeterminate results at the observation well, a conservative estimate of 0.0001 was used for both solutions.

As shown in Appendix E, the estimated T from the Cooper Jacob equation (484 gpd/ft) provides a close match when inserted back into the Theis solution. The Cooper Jacob model predicts a drawdown of 19.3 feet (from TOC), while the actual drawdown observed at the well was 13.4 feet (from TOC). This can be attributed to an inefficient well resulting from head loss at the intake. Inserting the more conservative transmissivity of 283 gpd/ft (derived from Theis recovery data) into the Theis non-equilibrium equation predicted a drawdown of 31.5 feet (from TOC).

WATER USE

To determine whether adequate water is available for the proposed use, the maximum drawdown possible in the aquifer under peak summer use with no recharge (rain) was approximated using cumulative Theisian drawdown cone calculations (Appendix E). To estimate cumulative drawdown due to pumping from the proposed use and existing users, drawdown in overlapping cones was added together⁸. The Theis model provides a first approximation of aquifer drawdown and is commonly used for this application. The conservative estimate of transmissivity derived from the Theis equation (283gpd/ft) was used for aquifer prediction. A conservative (high) estimate of the water needed to supply a single-family dwelling averages 500 gpd (0.35 gpm) on an annual basis. (Eugene Water and Electric Board figures indicate approximately 300 gpd including irrigation for domestic use). Peak use, during the irrigation months of July and August, is expected to be three times average use. For maximum drawdown in the aquifer, the typical use is assumed to be 1 gpm (more than three times the EWEB average).

Maximum drawdown of the overlapping cones, was calculated by eight new theoretical wells spaced approximately 250 feet from the old well (Appendix E). The actual distance between wells is expected to be greater than 250 feet and the maximum drawdown is therefore a conservative estimate. The model estimates maximum drawdown where the drawdown cones intersect after six months of pumping. Using the Theis solution, the drawdown where all the cones intersect is approximately 33.3 feet after 6 months (maximum potential rainless season) without recharge. The estimated saturated thickness

⁸ Freeze R.A., Cherry J.A. (1979). Groundwater. Prentice Hall. Toronto ON. p.29

⁹ Theis C.V., (1935). The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage. Trans. Amer. Geophys. Union. 2 pp. 519-524.

⁸ Freeze R.A. Cherry J.A. 1979. I.bid. p.328

of the aquifer is 140 feet, thus the maximum expected drawdown is less than 24% (approximately 3% per well) of the saturated thickness observed in the well.

Thus, a combined total withdrawal at a rate of 9 gpm (nine wells spaced 250 feet apart) over an entire summer without recharge in the vicinity of the proposed development will result in acceptable drawdown to the aquifer.

POTENTIAL FOR AQUIFER DEPLETION

The potential for aquifer depletion was addressed in the peak water use calculations above. Based on these calculations, which omit natural precipitation recharge, induced recharge from pumping or recharge from irrigation or drainage fields, a six month cycle would result in less than 34 feet of combined drawdown from nine wells.

Recharge for the aquifer underlying the subject property occurs primarily from precipitation.

Annual aquifer recharge to the Willamette Aquifer in the Willamette Valley area is estimated to be 13 inches⁹ Although, the property, located in the Spencer Creek watershed, most likely receives less recharge than the Willamette Aquifer, it is reasonable to assume aquifer recharge at the site will be greater than paved urban areas (3.1 inches)¹⁰ Therefore, over 114 acres (Parcels 1 and 2), 3.1 inches amounts to 29.45 acre feet of water each year. Assuming average water consumption of a single-family dwelling is 500 gallons per day, approximately 0.56 acre feet per year are used by a family. The combined use by nine dwellings (5.04 acre feet of water per year) constitutes approximately 18% of the recharge volume provided by precipitation. Since the aquifer receives adequate recharge to offset the residential withdrawal, aquifer depletion is unlikely and its ability to store or transmit water is unchanged. Therefore, the predicted temporary drawdown of the aquifer, contributed to by peak use and lack of recharge, will be mitigated during fall, winter, and spring months, when precipitation recharge to the surrounding aquifer will resupply the seasonal drawdown. Water use associated with the proposed partition does not constitute aquifer depletion.

LIMITATIONS

The aquifer test analysis presented above is based on assumptions that are conservative. The estimates given herein are in accordance with generally accepted principles and practices. The analyses, conclusions, and recommendations in this report are based upon site conditions as they presently exist and assume that the limited data reviewed is generally representative of subsurface conditions.

If, during further evaluation, information is found which has not been previously reviewed, EGR must be advised at once so these conditions and our recommendations can

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⁹ Woodward D.G., M.W. Gannett, J.J. Vaccaro. 1998. Hydrogeologic Framework of the Willamette Lowland Aquifer System. Oregon and Washington. USGS Professional Paper 1424-B. Table 10.

¹⁰ Woodward D.G., M.W. Gannett, J.J. Vaccaro. 1998. I.bid. Table 11

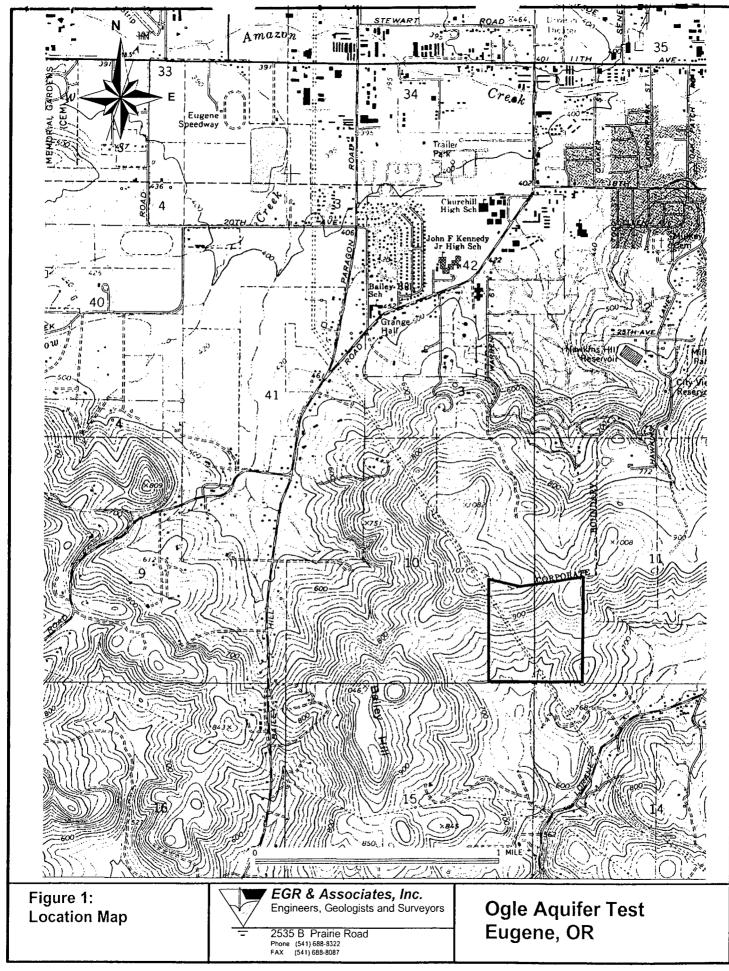
be reviewed and revised, if necessary. Should a substantial lapse of time occur between this investigation and its use as an evaluation of site conditions, or if conditions have changed due to nearby construction or natural causes the data contained in this report should be reviewed to determine its applicability.

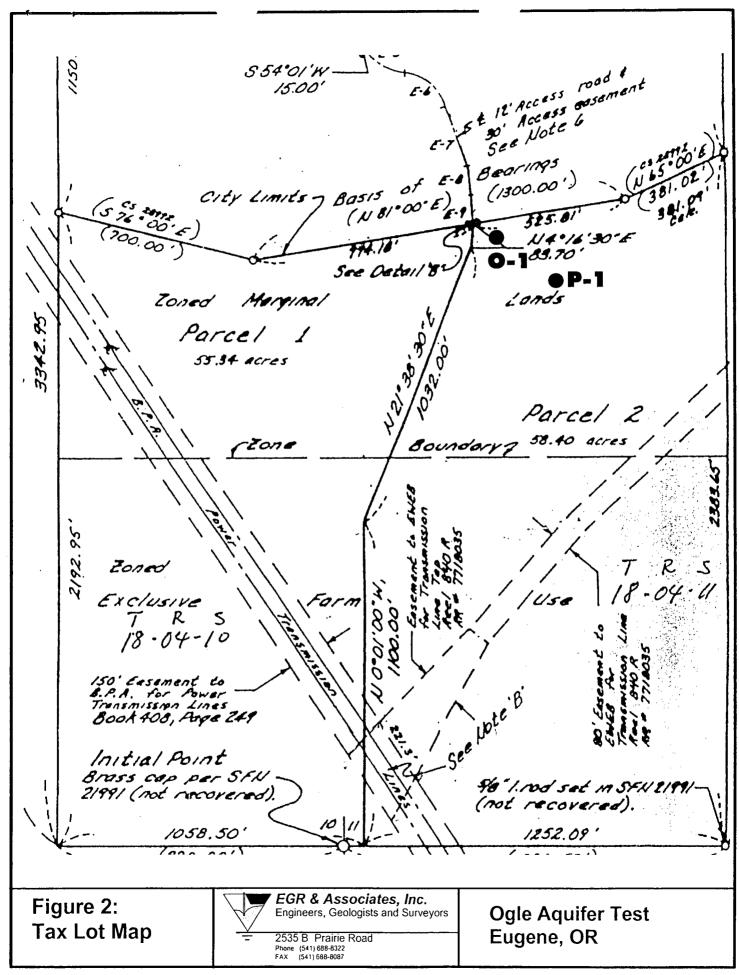
EGR does not warrant the use of this report to assess other sites which neighbor or abut the specific property referenced in this report.

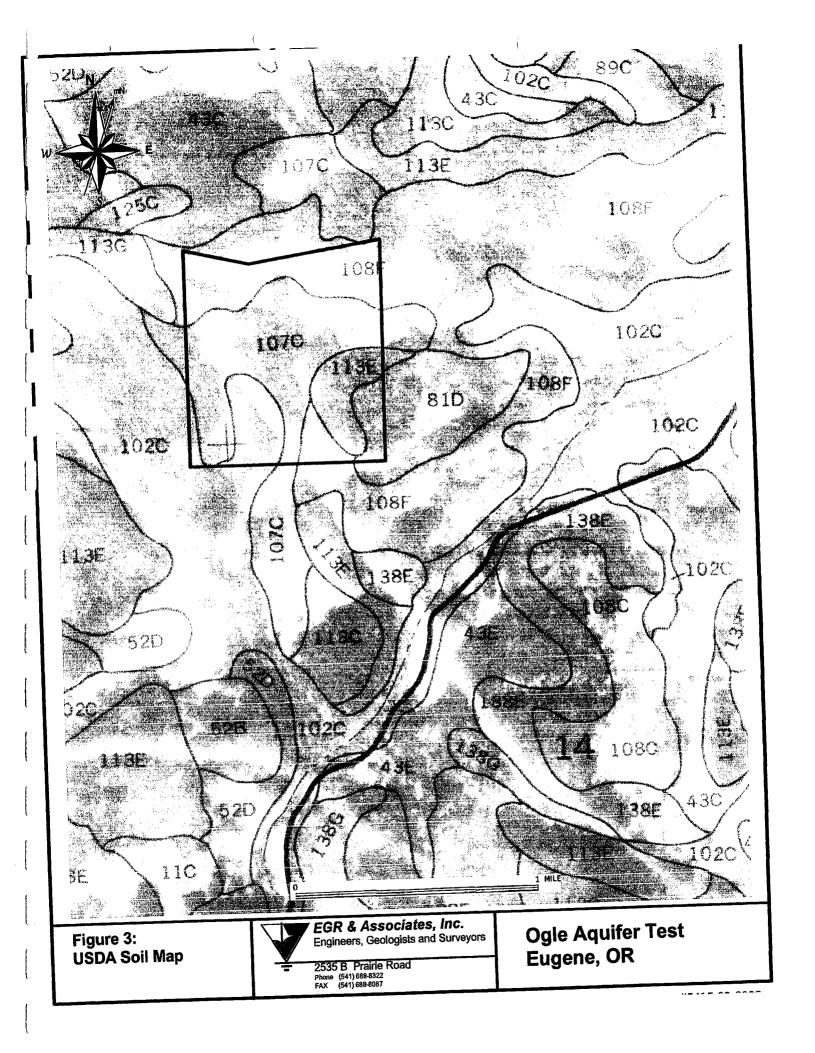
CONCLUSIONS

Per Lane County Code 13.050, we conclude that the underlying aquifer will yield an adequate residential water supply for the additional proposed dwellings without adversely affecting wells on adjacent properties or the underlying aquifer. Due to the additional demands of the aquifer caused by the sporadic domestic use of P-1 during the test, the results concluded in this report are conservative.

Based on the aquifer test results, mathematical modeling and review of published information, the aquifer beneath the subject property can accommodate nine domestic use wells at normal or peak usage. Not every well drilled in the area will have the same production.







APPENDIX A LANE COUNTY CODE 13.050

system and replacement area are designed to serve, then a variance must first be applied for and may be approved if in compliance with the variance section of this Chapter.

(13) Water Supply. Lots and parcels shall be served by an opposed public, community or individual water system. No construction or development work on proposed lots or parcels shall be started until information pertaining to water availability and quality is until information pertaining to water availability and quality is rubmitted to and approved by the Department. Water system shall be a accordance with and subject to applicable provisions of ORS, as well as all appropriate rules, regulations and policies promulgated under authority of these statutes, Lane Code and Manual. The stablishment of rural water systems shall be consistent with RCP and 2 policy #24 and RCP Goal 11 policies.

(a) Public or Companies Water System. The County may require that a new community or public water system be developed to serve lots or parcels when no existing public or community water system is available or suitable for use by the lots or parcels. and individual water systems are not feasible due to the density of the lots or parcels and/or the possibility of problems concerning the long-term availability of adequate quantities of suitable water. Aquifer and quality tests as discussed in LC 13.050(13)(c) below shall be required.

are to be served by individual water systems, sufficient evidence shall be submitted to show that each parcel or

evidence shall be submitted to show that each parcel or lot will have available at time of development an adequate supply of potable water which will meet minimum County standards for drinking water. Aquifer and quality tests

as discussed in LC 13.050(13)(c) below may be required.

(c) Aquifer and Quality Tests or Geological

Evaluation. Aquifer and quality tests or geological
evaluation may be required by lane County for any lot or
parcel. These requirements may include, but need not be
limited to, evaluation of existing well logs and
preparation of a geological report on the area, an
evaluation of the site by a professional geologist or
engineering geologist or full scale aquifer tests as

required. In determining the detail of analysis required, the following apply:

13-11

(1) Areas designated by Board order as having problems in the quantity or quality of available water as adopted, documented in Lane Manual and filed in the office of the Department shall meet the following requirements for all parcels less than 20 acres in size. The applicant must affirmatively demonstrate, in a manner acceptable to Lane County, that the proposed subdivision/partition is capable of sustaining the development anticipated with

sufficient potable water. This demonstration must include, but need not be limited to, equifer tests. More specifically, the aquifer test shall show coefficient of transmissivity, permeability, storage and the specific yield. The bacteriology/chemical tests shall show compliance with standards set by the Oregon State Health Division and Lane County. The test procedure shall utilize standard acceptable practices for aquifer tests using pumped and observation wells and records of static water level, date, clock, clapsed time (in min.), depth of water, drawdown and recovery. Analysis using the non-equilibrium method (or other methods where appropriate) must be performed by a licensed geologist or engineer. A copy of all field notes and test results shall be submitted with the report, together with summary statements which indicate whether the proposed use of the aguifer could adversely impact the neighboring walls or properties or deplete the aquifor and the general impact of the proposed use.

(d) For all areas not designated as problem areas by the procedures documented in LC 13.050(13)(a) above, a pump test report or a well log report shall be supplied, unless determined by Lana County to be not necessary. Pump test and well log reports shall be prepared according

to the following criteria:

(i) Pump Test. The test shall be a minimum five-hour pumping duration and record the following information: static water level, pumping level, drawdown, recovery, residual drawdown, well yield (pumping rate) and specific capacity. Measurements shall be made before pumping begins, during the pumping phase and during the recovery phase as necessary.

(11) Well log reports shall include tax map showing the subject property and surrounding area, all well logs of record from adjacent and surrounding properties and the location of the wells on the tax

lot map.

(14) Additional Cluster Subdivision Requirements.

(a) The land in a cluster subdivision not platted as a building lot shall be secured and maintained as private open space and recreation area by covenant or association prepared by the applicant and approved by Director or County Counsel. Said approved covenant shall be recorded with and referenced on the cluster subdivision plat.

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- (b) The largest lot in a cluster subdivision, if platted as a mobile home or dwelling lot, shall be restricted from further development, unless future zoning and/or changes in the comprehensive plan increase the density allowed for the overall cluster subdivision. Said restriction shall be in the form of a covenant prepared by the applicant and approved by the Director or County Counsel, and recorded with and referenced on the cluster subdivision plat.
- (c) The type and number of living units intended for each cluster subdivision lot shall be specified in the covenants, and each lot shall be restricted from an increase in the number of living units, unless the future zoning and/or changes in the comprehensive plan increase the density allowed for the overall subdivision and unless new cluster subdivision plans are submitted and approved. Said restriction shall be in the form of a covenant prepared by the applicant and approved by the Director or County Counsel, and recorded with and referenced on the cluster subdivision plat.

13.100 Application Requirements for Preliminary Partition Plans.

(1) An application for preliminary partition approval

shall be filed with the Department pursuant to LC 14.050.

(2) The application shall be accompanied by 5 copies of the preliminary partition plan one of which must be 2 1/2" x 11".

(3) Preliminary partition plans shall show all required information and shall be clearly and legibly drawn to a scale sufficient enough to enable the approving authority to have an adequate understanding of what is proposed. The following information is required on a preliminary partition plan:

(a) North point, scale and date of the preliminary

plan._{//}

(b) Appropriate identification clearly stating the

drawing is a preliminary partition plan.

J(c) Names and addresses of the landowners, applicant and the engineer, surveyor, land planner, landscape architect or any other person responsible for designing the preliminary plan.

J(d) The map number (township, range and section) and

tax lot number of the tract being divided.

(e) The boundary lines of the tract to be divided

and approximate acreage of the property.

(f) For partitions of land within an adopted urban growth boundary, contour lines sufficient to show the direction and general grade of land slope having the following intervals:

APPENDIX B OREGON WATER WELL DRILLERS LOGS

Well Log Report

Township: 18S, Range: 4W, Section: 10,11,14,15

	First Water	Completed Depth	Static Water	Yield
Well Log	(ft. bgs)	(ft. bgs)	(ft. bgs)	(gpm)
LANE 1385	30	90	1	150
LANE 1386	62	200	41	20
LANE 1387	80	240	55	25
LANE 1388	90	110	32	15
LANE 1389	80	180	10	14
LANE 1390	31	400	15	1
LANE 1391	125	200	12	15
LANE 16780	142	190	42	9
LANE 16990	172	215	40	40
LANE 16991	85	90	30	25
LANE 16992	70	100	30	10
LANE 16993	190	192	140	60
LANE 16994	125	132	140	- 00
LANE 16995	52	97	30	30
LANE 16997	52	132	75	0.8
LANE 16999		140	62	25
LANE 17000	78	105	46	20
LANE 17000	240	250	50	20
LANE 17001	83	294	56	15
LANE 17002	110	112	95	15
LANE 17003	44	95	15	9
LANE 17004	32	255	18	12
LANE 17005		100		
LANE 17006 LANE 17007	92		20	11
LANE 17007 LANE 17021	70	210 160	42	9
LANE 17021	70 129	275	20	20
LANE 17022 LANE 17023	350	385	51	7.5
	330	84	100	
LANE 17024	215	290	22	7.5
LANE 17025	130	360	30	15
LANE 17026			28	2
LANE 17027	40	105	25	1.5
LANE 17028 LANE 17029	60	400		7.5
	45	400	50	7.5
LANE 17030	30	205 127	5	2
LANE 17031	72		13	8
LANE 17032		120	7.5	8
LANE 17033		155	60	10
LANE 17034	70	230	80	9
LANE 17035	78	155	24	18
LANE 17036	185	425	90	1.5
LANE 17037	210	270	210	
LANE 17039	75	100	21	15
LANE 17040		150	30	1
LANE 17041		97	25	30
LANE 17042		230	4.5	1
LANE 17043	101	222	40	3
LANE 17044	104	150	48	7.5
LANE 17045	191	201	41	16
LANE 17046	60	88	18	35
LANE 17047	55	67	17	40
LANE 17048	90	340	15	2

[First Water	Completed Depth	Static Water	Yield
Well Log	(ft. bgs)	(ft. bgs)	(ft. bgs)	(gpm)
LANE 17049	, , , , , , , , , , , , , , , , , , ,	300	17	4
LANE 17050		50		
LANE 17051		105	24	1.7
LANE 17052		502	180	20
LANE 17053		120	65	8
LANE 17054	130	240	2	60
LANE 17055	148	228	48	10.5
LANE 17056	80	175	15	12
LANE 17057				
LANE 17058		,	·	
LANE 17059	125	137	28	5.8
LANE 17060		360	70	8
LANE 17061		131	54	1
LANE 17062		200	55	180
LANE 17063		310	150	60
LANE 17064		145	20	10
LANE 17065		65	23	60
LANE 17066	140	240	40	2
LANE 17067	65	80	35	17
LANE 17068		171	55	50
LANE 2829	138	145	59	20
LANE 2927	90	160	45	12
LANE 3330	28	50	9	10
LANE 4056	44	110	16	12.5
LANE 4472	73	120	15	100
LANE 4704	470	550	190	15
LANE 4818	81	330	24	4
LANE 50024	185	450	177	50
LANE 50594	58	380	58	2.5
LANE 50595	68	160	14	13
LANE 50600	113	220	75	21
LANE 51061	74	170	28	5
LANE 52540		200	6	2
LANE 52541	218	235	62	14.5
LANE 52916	65	145	60	10
LANE 52917	280	360	60	8
LANE 58511				
LANE 58653	i			
LANE 58950	566	600	165	12
LANE 59411	180	330	97	11
LANE 59895	87	110	20	8
LANE 89	75	173	18	50
				
Count	64	87	85	85
Min	28	50	1	0.8
Max	566	600	210	180
Mean	119	206	48	20
Median	84	175	35	12
Mode	80	200	15	15

WATER WELL REPORT STATE OF OREGON

(2) TYPE/OF WORK (check):

(3) TYPE OF WELL:

(6) PERFORATIONS: Type of perforator used

(7) SCREENS: Manufacturer's Name ..

(8) WELL TESTS:

Air test Bailer test

tesian flow

Type of Water?

Method of sealing strate off Was well gravel packed? [] Yes Z No

Gravel placed from

berature of water (9) CONSTRUCTION:

Was a drive shoe used? Yes WNo

Did any strata contain unusable water?

Yes No

Driveo

(b) CASING INSTALLED:

Deepening 🗆

(1) OWNER:

New Well &

RECEIVED

gal/min, with ft. drawdown after gal./min, with drill stem at 90 ft.

Slot Size Set from ...

gal/min. with

a pump test made? [] Yes 2 No If yes, by whom?

describe material and procedure in Item 12.

... ft. to ..

	- 1	2/11.10
RECEIVE	Orate Well No.	8sHw-10
SEP 18 1981	State Permit No.	
WATER RESOURCES	DEPT 4.385	
P / SALEM, OREGON	(10) LOCATION OF WELL:	
in thee	County LANC Driffer's well	number
15 5	4 Section 10 T. 185	R 44) W.M.
a State O.	Tax Lot # 100 Lot Blk	Subdivision
check):	Address at well location:	
Reconditioning		
and procedure in Item 12.	(11) WATER LEVEL: Completed w	ell.
(4) PROPOSED USE (check):	Depth at which water was first found 3 0 Static level 7 ft. below le	9 14.21
Domestie 21 Industrial [] Municipal []		and surface. Date 7-17-07
reigation Test Well. Other Thermal: Withdrawal Reinjection Thermal: Thermal:	(10) 11775 1 1 0 0	7 .
	Α λ	completed well 70 ft.
ED: Steel Z Plastic D	Formation: Describe color, texture, grain size and stru	cture of materials; and show
10 2 R. Gauge 150	thickness and nature of each stratum and equifer penel for each change of formation. Report each change in p	trated, with at least one entry
toft. Gauge	and indicate principal water-bearing strata.	
D: 242	- O MATERIAL	From To SWL
to 7.0 It Gauge	soct class	0 13
. Protorated? Yes No	men Rogn	15 23
hell	Blug Kres	22 27
in by in	B1.115-11 11 15	2 27
perforations from . 70 ft. to 30 ft.	Lide grey	60 30 +1
perforations from	Solt short WB	91 87
	Light gley	81 7041
reen installed? 🗆 Yes 💋 No .		
Model No.	· · · · · · · · · · · · · · · · · · ·	
Set from		
Set from ft. toft.		
Drawdown is amount water level is lowered below static level		
No If yes, by whom?		
min. with ft. drawdown after hra.		······································
al./min, with drill stem at 90 ft. hrs.		
gal/min, with ft. drawdown after hrs.		
Depth artesian flow encountered 9.0. ft.	a 12 57	
Special Andards: Yes 🗆 🗥 🗆	Work started 19 Complete Date well drilling machine moved off of well	d 7 -/3 19 6
was a second		7-15 NY/.
107	Drilling Machine Operator's Contification: This well was confirmeted under my direct so	mervision Materials used
seal in	and information reported above are true to my be	est knowledge and belief.
in.y	[Signed] (Drilling Machine Operator)	Date 7 5, 19. 8
ell seal	Drilling Machine Operator's License No	36
	Water Well Contractor's Certifications	
	This well was drilled under my jurisdiction	and this report is true to
Type HP Depth ft.	the best of my knowledge and belief.	Dalling.
No Pluga Size: location	Name ((()) () () () () () () ()	The state of the s
ter? Ves No depth of strate	Address Address	THIRD, ELLAN
Andrew or predict	[Signed] Caff telle	<u></u>
No Size of gravel:	Contractor's License No	1/3 5/
ft toft.		

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the

.....ft. to

. WATER RESOURCES DEPARTMENT. SALEM, OREGON 97310 within 30 days from the date of well completion.

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report
are to be filed with the

WATER RESOURCES DEPARTMENT. SALEM, OREGON 87310 within 30 days from the date of well completion. WATER WELL REPORT

CHESSE type or print)

AUSo not 1930 bove this line)

State Well No. 185/4w-10

	- EPT	
(1) OWNER: V: Ali	N(10) LOCATION OF WELL:	
Name Mr. Jerry Gilbert SALEM. OREGO	County Lane Driller's well number	
Address 3175 Bailey Hill Road, Eugene, Oregon	10 190 Jus	
		, M.
(2) TYPE OF WORK (check):	Bearing and distance from section or subdivision corner	—-
New Well 2 Deepening Reconditioning Abandon		رَةِ
If abandonment, describe material and procedure in Item 12.		
	(11) WATER LEVEL: Completed well.	
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found 62	žt.
Rotary Diriven Domestic Di Industrial Municipal	Static level 41 St. below land surface. Date 7/11/7	78
Dug Bored Irrigation Test Well Other	Artesian pressure lbs. per square inch. Date	-
CASING INSTALLED: Threaded G Welded YK		—
CASING INSTALLED: Threaded Welded XX Diam from +1 ft to 39 ft Gage 250	(12) WELL LOG: Diameter of well below casing 6	
"Diam from	Depth drilled 200 ft. Depth of completed well 200	£t.
"Diam from the to the Gage	Formation: Describe color, texture, grain size and structure of materi	als;
The days are the d	and show thickness and nature of each stratum and aquifer penetral with at least one entry for each change of formation, Report each change	ted.
PERFORATIONS: Perforated? Yes No.	position of Static Water Level and indicate principal water-bearing str	ata.
Type of perforator used	MATERIAL From To SWI	
Size of perforations in. by in.	Topsoil 0 3	
perforations fromft. toft.	Brown clay 3 19	<u> </u>
perforations from ft. to ft	Weathered sandstone 19 25	
perforations fromft_ toft.	Gray sandstone 25 200 41	· -
	57 250 13	
(7) SCREENS: Well screen installed? ☐ Yes 🖾 No		<u> </u>
Manufacturer's Name		
Type Model No		. .
Diam. Slot size Set from it to		
Diam Slot size Set from ft. to ft.		
(8) WELL TESTS: Drawdown is amount water level is		
lowered below static level		
Was a pump test made? Yes No If yes, by whom?		
Yield: 20 gal./min. with 159ft, drawdown after 2 hrs.		~
Air Rotary Developed " "		 .
Y		
Baller test gal/min, with ft. drawdown after hrs.		<u> </u>
Artesian flow g.p.m.		<u> </u>
	Work started 7/7 15/8 Completed 7/11 15/	, ,
Depth artesian flow encounteredft.		_
(9) CONSTRUCTION:	Date well drilling machine moved off of well 7/11 19	7 8
Well seal Material used Portland Cement	Drilling Machine Operator's Certification:	
Well sealed from land surface to	This well was constructed under my direct supervision	ac
Diameter of well bore to bottom of scalin.	Materials used and information reported above are true to a best knowledge and belief.	ny .
Diameter of well bore below seal	[Signed] Donald Throughoute 7/13 197	8'
Number of sacks of cement used in well sealsacks	(Drilling Machine Operator)	
How was cement grout placed? Mixed and poured	Drilling Machine Operators License No. 1043	
from the top.	Water Well Contractor's Certification:	-
Commission of the Commission o	hara at a same a come a come mana de la come	
The state of the s	This well was drilled under my jurisdiction and this report true to the best of my knowledge and belief.	18
Was a drive shoe used? [] Yes K No Plugs Size: location ft.	Name Pitcher Pump & Drilling Company	
Did any strata contain unusable water? [] Yes [XNo	(Person, firm or corporation) (Tupe or print)	·
Type of water? depth of strata	Address 150 River Ave. Eugene, Or 97404	
Method of sealing strata off		
Was well gravel packed? [] Yes K No Size of gravel:	[Signed] (Water Well Contractor)	
Oravel placed from ft. fo ft.	Contractor's License No. 494 Date 7/13	'8 [']
		= .
(COA ADDITIONAL BE	(BAIN IF NECESSARY) 5P-45656-	118

NOTICE TO WATER WELL CONTRACTOR	W/ Para			
of this report are to be O. WATER WE	ELL REPORTE CEIVED		4	. b
filed with the	OF OREGON APR 2 9 1974	ΙQ	C14	11.60
STATE OF	POREGON APR 2 9 1974 STATE ENGINEER SALEM CONTROL	ـدـد .	71.	W-11
within 30 days from the date of well completion.	ype or print)			_
	SAI EL ENGINEER	No		
(1) OWNER:	TO COLOR			
No. D. D. D.	(10) LOCATION OF WELL:			
The state of the s	Drillers Well 2	number	<u>776-</u>	-71
Address 3790 Onyx St. Eugene, Oregon	- % NW % Section]] T. 78	R.	J.W	W.M.
(2) TYPE OF WORK (check):	Bearing and distance from section or subdivis			
		<u></u>		
New Well Deepening Reconditioning Abandon U abandonment describe material and approximate to Year 10				
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed w	11		 .
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found			
Rotary Driven Driven Demonts to	_	80		<u>.tt.</u> _
Cable D Jetted Domestie D Industrial Municipal Dug Bored Irrigation Test Well Other	25. 0010W JANU			1-29-74
Dent well [] Other. []	Artesian pressure lbs. per sque	ste inch.	Date	
CASING INSTALLED: Threaded Welded D	(12) WELL LOC.			
Diam, from the to 32 th Gara 250	(12) WELL LOG: Diameter of well			6n
"Diam. fromft toft. Gage	Depth dritted 240 ft. Depth of comp	pleted we	en 2	240 n
"Diam fromft. toft. Gage	Formation: Describe color, texture, grain size	and stru		
0.86	with at least one entry for each change of forms	um and a	aquHer p	penatrated,
PERFORATIONS: Perforated? Yes IX No.	position of Static Water Level and indicate prin			
Type of perforator used		From	T	
Size of perforations in by in.		+	To	SWL
perforations fromft. toft.	" - TO	 -	+ "	+
perforations fromft toft	Dark Mue Shale	20	20	
perforations from	Blue Shale	50	65	 .
(H) A CHARLES	Dark Brown Shale	100	300	55 .
(7) SCREENS: Well screen installed? Yes R No	Blue & Red Mixed Shale	100	155_	 .
Manufacturer's Name	Red Shale	155	190	
TypeModel No.	Blue Shale	190	205	+ -,_ .
Diam. Slot size Set from ft. to ft.	Titre 21/818	205	240_	55
Diam, Slot size Set from ft. to ft.				 -
(8) WELL TESTS: Drawdown is amount water level is				
lowered below static level	1			+
Was a pump test made? [] Yes, [] No. If yes, by whom?	1			
Yield: gal/min, with ft drawdown after hrs.			<u></u>	
The state of the s	1			
The second secon	1			
Baller test 25 gal/min with 45 ft. drawdown after 1 hrs.	See The Company of the Section of th		·	
Artesian flow				
	Company of the relationship of the control of			<u></u>
n.	Work started 3-25 19 71 Complete),	7	19.7)
(9) CONSTRUCTION:	Date well drilling machine moved off of well		- -1	
Well seal-Material usedCement			<u>-T</u>	19 74
Well sealed from land surface to 0 to 32	Drilling Machine Operator's Cartification:			
Diameter of well have to better as . 70	This well was constructed under my Materials used and information reported a	direct	super	vision.
Diameter of	pene who where and bettef.	ADOVC .	To Mun	to my
Number of sacks of cement used in wall seet 8	[Signed] Cliffyerd Crones D	Oate	1,	, 1974
	(Orliffing Machine Operator)			3 Tombre
Brand name of bentonitesacks	Drilling Machine Operator's License No		J	
	Water Well Contractor's Certification:	1		 -
f water	This well was drilled under my invisite			3
107 /100 date	This well was drilled under my jurisdic true to the best of my knowledge and belie	tion and	d this re	eport is
Vas a drive shoe used? Yes E No Plugs Size: location ft.				
old any strata contain unusable water? Yes. No	(Person, firm or corporation)	SEBATE.	Bor pair	
ype of water? . depth of strata	Address P.O. BOX 46, SPHINGETTAL		EGON	071.77
lethod of sealing strata off		رد	NA NA	219.11
	[Signed]	۷		
	(Water Well Contract			
11.	Contractor's License No. 126 Date	_Apri	11.11,	., 19.74
(IIRP ADDITIONAL COMM			$\overline{}$	

NOV 9 1987

STATE OF OREGON WATER WELL REPORT (on required by ORS 537.765)

WATER RESOURCES DEPT. SALEM, OREGON



1844W-K-

						,						
(1) OWNE				Well Numi	ber:	•	(9) LOCATION O	F WELL by le	egal de	ecrip	ion:	
	elyn Hil	<u>.e</u>					County Lane	Latitude	later	Longitud	e	
	87 Harlo	w.Rd.	State		7:-	007/104	Township 188	Nor S. Range	.4W		_BorW,	WM.
	gene		OLELE	Or.	Zip	97401	Section 14	<u> </u>		¼	•	
(2) TYPE							Tax Lot 700 L	otBlock	k	Subd	iγ ι4Ιο υ	·
New Weli	Deepen		ndition	_ □ At	bandon		Tax Lot 100 L Street Address of Well (c	or nearest address) _	next	to 80	2448	
(3) DRILL		_					Lorane Hwy.	Eugene, C	r.	9740		
Rotary Air	Rotary	Mud 🔲	Cable				(10) STATIC WAY	TER LEVEL:	:			
Other							. 32 n. belos	v land surface.		Date	10	2-16-8
(4) PROP(-						Artesian pressure	lb. per squ	are luch.	Date		
Domestic		ity 🔲 Indua		☐ <i>Irrig</i> at	lon	•	(11) WATER BEA					
C. Thermal	☐ Injection					····					901	· • • •
BORE						440	Depth at which water was fire					
Special Construct	Uon approval Yea No		Depth o	of Complete	ed Well	110 e	From	То .	Estim	ated Flow	Rate	SWL
Explosives used		Туре		mount _		·	90	91 🦖		15		32!
HOLE		SF	AL			Lmount						
neter From		Material	From	To	sack	or pounds	 					<u> </u>
6" 77		ment	<u> </u>	_77_	130	eacks	(12) WELL LOG:	····	L			ئــــا
6" 77	110			ļ	┼		(AA) WELLLOG	Ground elevati	lon			
	+	.	 		+-			erial		From	Тο	SWL
Wannana and i		<u>п. п.</u>	ا ا		-		Topsoil			0	1	
How was seal place	red: Method	⊔. <u>∧</u> . ⊔ B	ryi C	LD L	⊥.B.	. <u></u>	Brown Clay	•]	1	19	
Backfill placed fro			Materi	 			Boulders]	19	20	
Gravel placed from			-				Brown Clay			20	31	
(6) CASIN			. 3128 01	Braver	-		Gray Brown Clay			31	40	
	er , From .	t: To Gauge	[Gtan] E	 Danta T	V_14	Thomas de d	Gray Brown Frac	ctured Clay	stone		72	لييا
Casing 6th		79 250	120		[2]	I areaded	Blue Soft Sanda	stone		72	110	32'
] =	<u> </u>	Ξ.	<u> </u>		<u> </u>	<u> </u>			
												\vdash
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Liner:					Ċ							
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location of a		91										
(7) PERFO				-		•						
Perforat		lethod			• • •							
□ Screens	T	уре		Material .			ļ					
To To	Slot		Tek	e/pipe	. .]
Tom To	N ozla	umber Dlame	PLET	lze (Casing	_						
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					Ö				∤-			
						<u></u>		<u> </u>				
					. 🗀		Date started 10-16-8	37 ~		10-1	<u>6_87</u>	
L_						ā l		Comp			<u></u>	
(8) WELL'	TESTS: N	Sinimum te	sting ti	me is 1			(unbonded) Water Well	Constructor Cor	tificatio	n:		
	☐ Baile		Air		Flow	ine I	I certify that the wor abandonment of this well	is in compliance	the con	structio	n, altera	tion, or
L. Piimn					Artes		standards. Materials used a	and information re	ported a	bove are	true to	my beat
Pump	. -	wn Dr	rill stem a		T	me	knowledge and belief.		•			a white
Yield gai/min	Drawdo					hr.	Q I M	. l		WC Nun	iber	1244
•	Drawdo		110				Simed PMAI IIII L	99LM	_		40 4E	
Yield gai/min			110				Signed Signed	A	Da	te	10-16	<u>=87</u>
Yield gat/min	77		110				(bonded) Water Well Con	istructor Certif	ication:			<u>=87</u>
Yield gai/min 15 Temperature of wa	77	De	pth Artesi	an Flow Po			(bonded) Water Well Con I accept responsibility	for the construct	ication:	ration. c	or aband	onment
Yield gat/min 15 Temperature of was	77	De	om		ound -		(bonded) Water Well Con I accept responsibility work performed on this we work performed during	for the construct Il during the const this time is in	leation: tion, alte truction o	ration, o	or abandoorted ab	ove. all
Yield gal/min 15 Temperature of was a water analys Did any strata cont	77	De De Dywhoultable for inten	opth Artesi om	☐ T∞	ound -		(bonded) Water Well Con I accept responsibility work performed on this we work performed during construction standards. The	for the construct Il during the const this time is in	ication: tion, alte truction o	ration, o	or abandoorted ab	ove. all
Yield gat/min 15 Temperature of was	77	De De Dywhoultable for inten	opth Artesi om	☐ T∞	ound -		(bonded) Water Well Con I accept responsibility work performed on this we work performed during	for the construct Il during the const this time is in	ication: tion, alte truction o complian of the bea	ration, of lates rep nce , wit st of my VC Nurr	or aband oorted ab h Orego knowled	oove, all on well dge and 5559

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report
are to be filed with the

WATER RESOURCES DEPARTMENT, SALEM. OREGON 81310 within 30 days from the date of well completion.



State Well No. 185

(1) OWNER:	(10) LOCATION OF WELL:	
Name Jerry Strand	County Lane Driller's well no	_{imber} 21.914/670
Address 86501 Loraine Hwy.	NW 14 Section 114 T 18	100
Fugene, Oregon	Bearing and distance from section or subdivision	R. W.M.
(2) TYPE OF WORK (check):	Search and distance from securit or subdivision	M corner
New Well ∰ Deepening □ Reconditioning □ Abandon □		
If abandonment, describe material and procedure in Item 12,	(11) WATER LEVEL: Completed w	
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found	80
Cable Jetted Domestic Municipal	Static level 10 ft. below land a	urface. Date 9/21/79
Dug Bored Irrigation Test Well Other	Artesian pressure lbs. per square	inch. Date
(5) CASING INSTALLED: Threaded D Welded D . 250	(12) WELL LOG: Diameter of well b	elow casing 611
5 " Diam. from 30 ft to 180 ft Gege .188	Depth drilled 180 ft. Depth of comple	
Diem. from ft. to ft. Gage	Formation: Describe color, texture, grain size a	nd structure of materials;
(6) PERFORATIONS: Perforated? W Yes No.	and show thickness and nature of each stratur with at least one entry for each change of format position of Static Water Level and indicate princ	
Type of perforator used Torch (Steel Liner Only)	MATERIAL	From To SWL
Size of perforations 4 in, by in.	Top Soil	0 2
23 perforations from 80 rt to 100 rt	Brown Clay	2 6 -
33 perforations from 140 ft to 160 ft.	Blue Clay	6 13
perforations from ft. to ft.	Soft Blue Shale	13 115 10
(7) SCREENS: Well screen installed? [] Yes #D No	Hard Grey Basalt	115 145 10
Manufacturer's Name	Soft Mue Shale	145 180 10
Type Model No.		
Diam Slot size Set from ft. to ft.		
Diam Slot size Set from ft. to ft.		 ·
WELL TESTS: Drawdown is amount water level is lowered below static level	-	
Was a pump test made? Tyes No If yes, by whom? Driller		
Yield: 111 gal/min with 160 tt drawdown after 1 hrs.	RECEIVED	
ler test 110 gal./min. with ft. drawdown after hrs.		
Artesian flow g.p.m.	WATER RESOURCES DEET	
Temperature of water 58 Depth artesian flow encounteredff.	Work started 9/21/ 19 79 Completed	0/2)./ 70
	Work started 9/21/ 19 79 Completed Date well drilling mechine moved off of well	
(9) CONSTRUCTION: Well seal-Material used Portland Coment Type III		9/25/ 19 79
Well sealed from land surface to 22	Drilling Machine Operator's Certification: This well was constructed under my	Ilmant anno
Diameter of well bore to bottom of sealin.	Materials used and information reforted a best knowledge and feller.	bove are true to my
Diameter of well bore below seal 3/4-6 in.	(Signed Corilling Machine Operator)	
Number of sacks of cement used in well seat 6 sacks Now was cement grout placed? Method "G"	Orilling Machine Operator's License No	717
coment grout piaceds sommercy	operators ticense No	
	Water Well Contractor's Certification:	استانون و * ایاد استخار حضوضون میلیدن
Vas a drive shoe used? ☐ Yes 🏖 No Plugs Size: location ft.	.This well was drilled under my jurisdictrue to the best of my knowledge and belie	ion and this report is
old any strata contain unusable water? Yes 16 No	Name Carter's Drilling & Pump S.	ervice
ype of water? depth of strata	Address P.O. Box 16 Springfield	Oregon/97477
fethod of seeling strata off	101-1	
Vas Wall gravel packed? Yes No Size of gravel:	[Signed] OML (Water Well Contract	
ravel placed fromft_ toft_		9/25/
(USE ADDITIONAL SEE		(3530-10)

NOTICE TO WATER WELL CONTRACTOR
The original and first copy
of this report are to be
filed with the

STATE ENGINER, SALEM, OREGON \$7810

7	W	ATER W	ell i	REPOR	Ēr	E I	V	r n		188/4W-14	ų
_		STATE (LU	L I	•	844	Well No.	100 100 1	

within 30 days from the date of well completion. (Do not write a	_	0	
(1) OWNER: Name LARRY DOUROUX	(10) LOGATION OREDINLL:	71.77	
Address 883/9 LOPANE WICHWAY		umber 7672	
EUGENE HICHWAY		R. 4W	W.M.
(2) TYPE OF WORK (check):	Bearing and distance from section or subdivision	ion corner	
<u>.</u>	<u> </u>		
New Well Deepening Reconditioning Abandon Life abandonment, describe material and procedure in Item 12.			
	(11) WATER LEVEL: Completed w	veⅡ.	•
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found 3/	L.	41,
Rotary M Driven Domestic Et Industrial C Musician C		surface. Date 9-	-4.75
Cable Jetted Jones Irrigation Test Well Other			72-1-
	Artesian pressure lbs. per square	e inch. Date	
CASING INSTALLED: Threaded Welded	(12) WELL LOG: Diameter of well b	- 4	
6 "Diam from +1 # to 273 # Gage ///	Diameter of well b		
ft. to ft. Gage	Depth drilled 400 ft. Depth of comple		
Diam. fromft, toft. Gage	Formation: Describe color, texture, grain size a and show thickness and nature of each strains	and structure of r	materials;
(b) PERFORATIONS: Perforated? Yes No.	and show thickness and nature of each stratum with at least one entry for each change of format position of Static Water Level and indicate princ	m and aquiler pe	enetrated,
Type of perforator used	MATERIAL	From To	SWL
Size of perforations in. by in.	BASALT		2MP
perforations fromft toft		125 244	
	TUEFACEOUS SS	135 344	 -
	TUFFAVEAUS SS	344 364	
perforations from ft. to ft.	TUFFACEDUS SS	364 400	
(7) SCREENS: Well screen installed? Yes K No		 '	
Manufacturer's Name		 '	 -
ype Model No			
Diam. Slot size Set from ft to ft		└── '	<u> </u>
Diam. Stot size Set from ft. to ft.		 '	L
16	1		
(8) WELL TESTS: Drawdown is amount water level is lowered below statio level		 '	L
	l ————————————————————————————————————		
Was a pump test made? Yes No If yes, by whom?	[└	<u> </u>
d: gal./min. with ft. drawdown after hrs.	1		
W			 _
" WELL OUT PUT MAY FEUCTUATE .	1		<u> </u>
Money test / gal./min. with A Aft. drawdown after & hrs.	l ————————————————————————————————————	<u></u>	·
Antonio de la companya della companya della companya de la companya de la companya della company	I	لللب	1
approximation and analysis analysis and analysis analysis and analysis analysis and analysis and analysis analysis and analysis analysis analysis analysis and analysis analysis and analysis analysis analysis analysis analysis and analysis a		للسلست	
imperature of water Depth artesian flow encountered ft.	Work started 9- 20 1976 Completes	ed 9 - 22	1976
(9) CONSTRUCTION:	Date well drilling machine moved off of well	0-12	1976
Well seal-Material used CEMENT GROUT	Drilling Machine Operator's Certification:	7	
Well sealed from land surface to 27	This well was constructed under my	direct sunan	lalan
16.		above are true	vision. • to my
Diameter of well bore to bottom of sealin.	Dest and wredge and benez.	0/.	
Diameter of well bore below seal m	[Signed] _ Live (froiste and	Date	, 19.76
Number of sacks of cament used in well seal sacks	(Orilling Machine Operator)	. /	• • • • • • • • • • • • • • • • • • • •
Number of sacks of bentonite used in well seal	Drilling Machine Operator's License No	617	<u></u>
Brand name of bentonite	Water Well Contractor's Certification:		
Number of pounds of bentonite per 100 gallons	_	2 7 1	
of water Ibs./100 gals.	This well was drilled under my jurisdic true to the best of my knowledge and belie	ction and this r	eport is
Was a drive shoe used? Yes No Plugs Size; location ft.	Name MARK CHRISTENS	er.	
Old any strata contain unusable water? Xes W No.	(Person, firm or corporation)	(Type or prin	
Type of water? depth of strata	Address 33/32 COLEMAN	Rel EVOE	
Method of sealing streta off	nu lal	ART. St. T.	
	[Signed]	neen	. <u> </u>
Was well gravel packed? Yes No Sho of gravel:	(Water Well Contrac	actor)	
Gravel placed from ft. to ft.	Contractor's License No. 9.7. Date 9	- 23	1976
			4

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT,
SALEM, OREGON 97310
within 30 days from the date
of well completion.

WATER WELL REPORT STATE OF OREGON (Please type or print)

(Do not write above this line)



State Well No. 185/4w-15	
State Permit No.	•

(1) OWNER:	(10) LOCATION OF WELL:				
Name Mr. Robert G. Smith	County lane Driller's well number 7950				
Address 86182 Lorane Hwy	34 34 Section 15 T. 185 R. 4W W.M.				
Eugene, OR 97405	Bearing and distance from section or subdivision corner				
(2) TYPE OF WORK (check):					
New Well (XX Desponing □ Reconditioning □ Abandon □					
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed well.				
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found 125 st.				
Rotary XM Driven Domestic XX Industrial Municipal Domestic	Static level 12 ft. below land surface. Date 6-15-79				
Coble Jetted Domestic Manuality Manuality Domestic Manuality Man	Artesian pressure lbs. per square inch. Date				
CASING INSTALLED: Threaded Welded XX	(12) WELL LOG: Diameter of well below casing 6"				
5 Id Diam from Plus 1 rt to 24 rt Gage 250	Depth drilled 200 ft. Depth of completed well 200 ft.				
Diam from the ft. to ft. Gage	Formation: Describe color, texture, grain size and structure of materials;				
"Diam. from ft. to ft. Gage	and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation, Report each change in				
PERFORATIONS: Perforated? Yes XX No.	position of Static Water Level and indicate principal water-hearing strata.				
Type of perforator used	MATERIAL From To SWL				
Size of perforations in. by in.	Clay - Brown 0 12				
perforations fromft. toft.	Boulders/small				
perforations fromft. toft.					
perforations fromft. toft.	B/G Med. Hard Sandstone 12 27				
(7) SCREENS: Well screen installed? Yes XX No	Basalt - Blue/hard 27 42				
Manufacturer's Name	Basalt - Blue/hard 27 42				
Type Model No.	B/G Med. Hard Sandstone 42 200				
Diam. Slot size Set from	- Pra rica: nara sanastone 42 200				
Diam Slot size Set from ft, to ft.	DEOF14/EB				
(8) WELL TESTS: Drawdown to amount water level to	REGEIVED				
(8) WELL TESTS: Drawdown is amount water level is lowered below static level	JUN 2 6 1979 ~				
Was a pump test made? Yes XM No If yes, by whom?					
Yield: gal/min. with ft. drawdown after hrs.	WATER RESOURCES DEPT				
Well output may fluctuate " "	SALEM, OREGON				
Atr -					
AXMer test 15 gel./min. with max ft. drawdown after 7 hrs.					
Artesian flow g.p.m.					
emperature of water Depth artesian flow encountered ft.	Work started 6-14-79 19 Completed 6-15-79 19				
(9) CONSTRUCTION:	Date well drilling machine moved off of well 6-15-79 19				
Well seal-Material used Cement grout	Drilling Machine Operator's Certification:				
Well sealed from land surface to 24 ft	This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief				
Diameter of well bore to bottom of seal	best knowledge and belief				
Diameter of well hore below seal	[Signed] Kor Machine Operator) Date 6-15-79 19				
How was cement grout placed?	Drilling Machine Operator's License No. 1234				
Machine mixed - pumped to dry seal area					
	Water Well Contractor's Certification:				
	This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.				
Was a drive shoe used? [] Yes Wwo Plugs Size: location tt.	Name Mark Christensen				
Did any strata contain unusable water? Tyes XX No	(Person_firm ar corporation) / (Type or print)				
Type of water? depth of strata	Address 33132 Coleman Root Eugene, OR 97401				
Method of sealing strata off	[Signed] Mark Hustingen				
Was well gravel packed? ☐ Yes YNo Size of gravel:	(Water Well Contractor)				
Gravel placed fromft. toft.	Contractor's License No. 97 Date 6-15-79 19				

(UBE ADDITIONAL SHEETS IF NECESSARY)

8P*45656-119

MEGEIVEN LAME 16780 B/4W/1 STATE OF OREGON JAN 26 1989 WATER WELL REPORT (as required by ORS 537.765) (START CARD) #_ WATER RETAILED OF WELL by legal description: (1) OWNER: Well Number Evelyn Hile Lane Latitude Longitude 2887 Harlow Rd. 18S Nor S, Range Township __ Bor W, WM. City Eugene State Zip 97401 14 Section (2) TYPE OF WORK: Tex Lot 700 Lot __ Block . Subdivision Street Address of Well (or nonrest address) ACross from 86448 Lorane Hwy. Eugene, Or. New Well Deepen Recondition Abandon (3) DRILL METHOD Rotary Air Rotary Mud Cable (10) STATIC WATER LEVEL: Other__ 421 ft. below land surface. (4) PROPOSED USE: Artesian pressure _____ _ lb. per square inch. Date Domestic Community Industrial Irrigation (11) WATER BEARING ZONES: ☐ Thermal ☐ Injection ☐ Other Depth at which water was first found ____ (5) BORE HOLE CONSTRUCTION: Special Construction approval Yes No Yes No 🗆 🛛 From To Estimated Flow Rate SWI. 1421 144. 44 grown Explosives used 🔲 🔯 421 Туре _ 171' 1751 44 gom 421 BOLE SEAL Diameter From To 10" 0 19 8½ 19 78 6" 78 190 Material Fro Cement 19 (12) WELL LOG: Cement 78 19 sacks 19 Ground elevation Material From To SWL Topeoil 0 2 Gray Brown Fractured Basalt 12 Other Gray Basalt 12 19 Backfill placed from_ _ Æ ft to _ Material Grav Brown Fractured Basalt 19 69 Gravel placed from _____ .ft. to £. Size of gravel Gray Green Blue Brown Cong. 69 120 (6) CASING/LINER: Gray Brown Cong. 120 126 Diameter From Gauge Steel Gray Green Blue Brown Cong. 126 178 421 П Grav Blue Cong. 178 190 П 41,11 0 190 PVC X П 781 Final location of shoe(s) . (7) PERFORATIONS/SCREENS: Perforations Method ___SAW_ ☐ Screens Туре _ Material Tele/pipe Diameter 1/8# Cesing Liner 170 2" 190 200 ΧÌ 2" 1/8" 130 150 200 1/8" 90 2" 110 200 Ø 1-16-89 Completed (unbonded) Water Well Constructor Certification: (8) WELL TESTS: Minimum testing time is 1 hour I cartify that the work I performed on the construction, elteration, or abandonment of this well is in compliance with Oregon well construction Flowing Artesian ☐ Pump ☐ Bailer X Air standards. Materials used and information reported above are true to my best Yield gal/min Drawdown Drill stem at knowledge and belief. Signed Bob Mushy WWC Number ____17 1344 9 1481 1901

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT

☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other .

Did any strata contain water not suitable for intended use?

Too little

Yes By who

Depth Artesian Flow Found

could fluctate

Was a water analysis done?

Temperature of water .

Depth of strata: ___

SECOND COPY - CONSTRUCTOR

Signed Casey I

(bonded) Water Well Constructor Certification:

THIRD COPY - CUSTOMER

Date 1-18-89

WWC Number .

I accept responsibility to the construction, alteration, or abandonment work performed on this well during the construction dates reported above, all work performed during this time is in compliance with Oregon well

construction standards. This report is true to the best of my knowledge and

559

STATE OF OREGON WATER WELL REPORT (as required by ORS 537.765)

LANE	DECEINE D 185/4W-106	٠.
16990	AUG \$ 1985 U - 1831 410-106	<u>ئ</u> و.
y	NTWAINK, RESCURCES DEPT.	

	(for ourself use only)
(1) OWNER:	(10) LOCATION OF WELL by legal description: Lane NW 10
Name Mel Purvis	County 185 4 of Section of
Address 1754 W. 11th #1	Township Range Range West
City Eugene State Or.	Tex Lot 501 Lot Block Bubdivision
(2) TYPE OF WORK (check):	MAILING ADDRESS OF WELL (or courset address) 80,339 Bailey hill
New Well □ Deepening ♥ Reconditioning □ Abandon □	
If abandonment, describe material and procedure in Item 12.	Eugene, Or.
	(11) WATER LEVEL of COMPLETED WELL:
(3) TYPE OF WELL: (4) PROPOSED USE (check): Rotary Abr	Depth at which water was first found ft.
Thermal:	Static level 40 ft. below land surface. Date 7/2/85
Rotary Mud Dug Irrigation Withdrawal Reinfection Other:	Artesian pressure lbs. per square inch. Date
Bored Piezometric Grounding Test	6"
	(12) WELL LOG: Diameter of well below casing
(5) CASING INSTALLED: Steel Plastic D	Depth drilled 115 ft. Depth of completed well 215 ft.
Diam from ft. to ft. Gauge	Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer paratrated, with at least one entry for each change of
	formation. Report each change in position of Static Water Lavel and indicate principal
	water-bearing strate.
LINER INSTALLED: Steel Plastic Threaded Welded	MATERIAL From To SWL
41	Brown Shale 100 128
43 Diam from 120 ft to 215 ft. Gauge 188	Blue Shale 128 215 40
(6) PERFORATIONS: Perforated? ☑ Yes ☐ No	• •
Size of perforations 1/4 tn. by 4 in.	
60 perforations from 160 n to 200 n	
perforations fromft. toft.	
perforations from ft. to ft.	
an annua	
(7) SCREENS: Well screen installed? Yes & No	
Manufacturer's Name	
TypeModel Na	
Diam Slot Size Set from R. to R.	
Dism Slot Size Set from ft. to ft.	
(8) WELL TESTS: Drawdown is amount water level is lowered below static level	
CONTROLLED WITE	
Was a pump test mede? Yes XNo If yes, by whom?	.
gal_/min. with ft_drawdown after brs.	
• • • • • • • • • • • • • • • • • • • •	
Air test 40 gal./min. with drill stem at 190 ft. 1½ hrs.	<u> </u>
Bailer test gal/min. with ft. drawdown after hre.	
Artesian flow g.p.m.	
perature of water 52° Dopth artesian flow encounteredft.	
(9) CONSTRUCTION: Special standards: Yes No Ki	Date work started 7/1/85 /completed 7/2/85
Undistrubed	Date well drilling machine moved off of well 7/2/ 1985
Well seal - Material used	(unbonded) Water Well Constructor Certification (if applicable):
·	This well was constructed under my direct supervision. Materials used and
- In-land	information reported above are true to my best knowledge and belief.
Diameter of well bore below seal	[Signed] Lewman Classellato 7/2/ , 19 85
Amount of seeling meterial	
How was cement grout placed?	(bonded) Water Well Constructor Certification:
	Bond #5032206 Issued by: Safeco
	On behalf of Carter's Drilling & Pump Service
Was pump installed? Type HP Depth ft.	(type or print name of Water Well Constructor)
Was a drive aboe used? ☐ Yes ☑ No Pluga, Size: location ft. Did any strata contain unusable water? ☐ Yes ☒ No	Marie and an addition and a superior
	This well was drilled under my jurisdiction and this report is fue to the best of my knowledge and belief:
Type of Water? depth of strata	Tours of Relien
Method of sealing strata off	(Signed) (Water Well Constructor)
Was well gravel packed? Yes XNo Size of gravel:	(Water Well Constructor) 7/2/85
Gravel placed fromft. toft.	
NOTICE TO WATER WELL CONSTRUCTOR	WATER RESOURCES DEPARTMENT, 8P*48868-890

The original and first copy of this report are to be filed with the

SALEM, OREGON 97310
within 30 days from the date of well completion.

WATER WELL REPORT STATE OF OREGON

RECEIVED

JUN 1 1 1984 State Well No. 185 4W - 10 Job

WATER RESOURCES DEPT TO PRINT SAREM, OREGON

(1) OWNER:	(10) LOCATION OF WELL:		
Name STEVEN BENNETT	County LANE Driller's well number		
Address 1590 HIBH ST.	NV64 NV64 Section /O T. /85	R 4W W.M.	
City EULENE State ORE	Tax Lot # Lot Blk	Subdivision	
(2) TYPE OF WORK (check):	Address at well location: BAILEY HI.	KL RO	
New Well ☑ Deepening □ Reconditioning □ Abandon □	(11) WATED I DUET. Completed and		
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed we		
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found Static level The below is	nd surface. Date S/1/84	
Rotary Air US Driven [] Domestic SS Industrial [] Municipal []		square inch. Date	
Rotary Mud Dug Irrigation Test Well Other	(12) WELLLOG: Diameter of well below of	neine 6	
— ———————————————————————————————————	Depth drilled 50 ft. Depth of o	_	
(5) CASING INSTALLED: Steel B Plastic Dreaded B Plastic Dreaded C	Formation: Describe color, texture, grain size and stru- thickness and nature of each stratum and squifer penet for each change of formation. Report each change in p and indicate principal water-bearing strate.	cture of materials; and show rated, with at least one entry	
LINER INSTALLED:	MATERIAL	From To SWL	
-	BROWN CLAY		
"Diam fromft toft. Gauge	VELLOW CLAY	4 15	
(6) PERFORATIONS: Perforated? □ Yes 🖼 No	BLUE ROCK	15 60	
Type of perforator used	GRAY ROCK	60 86	
Size of perforations In. by to.	BLUE ROCH	15 90 30	
perforations from			
perforations from	-		
perforations from			
(7) SCREENS: Wall acreen installed? Yes E No	·		
Manufacturer's Namo			
Type			
Diam. Slot Size Set from R. to ft.			
Diam. Slot Size Set from ft. to			
(8) WELL TESTS: below static level			
a pump test made? Yes Pr No If yes, by whom?			
d: gal/min. with ft. drawdown after hrs.			
Air test 26 gal./min. with drill stem at 90 (t. / hrs.			
Bailer test gol/min, with ft. drawdown after hrs.			
esian flow g.p.m.			
Depth artesian flow encountered ft.	Work started 5/3/1984 Complete	d 6/119 F4	
(9) CONSTRUCTION: Special standards: Yes No	Date well drilling machine moved off of well	6/1 19 84	
Well seal—Material used	(unbonded) Water Well Constructor Certifi		
Well sealed from land surface to	This well was constructed under my direct s and information reported above are true to my b	upervision. Materials used	
Diameter of well bore to bottom of seal	[Signed]	Deta 10 -	
Dismeter of well here below seal	***************************************		
Number of sacks of cement used in well seel	Bonded Water Well Constructor Certificati	on:	
was committee group property and an arrange for the first of the first	Bond 57403682 Issued by: IRAN Sur	S A MERICAN	
	This well was drilled under my jurisdiction	and this report is true to	
Was pump installed?	the best of my knowledge and belief. Name FRANK WILSON DR. (Person furner corporation)	111106-	
Was a drive shoe used? Yes	(Perior, furn or corporation) Address 1325 13 501N 6-F	(Type or print)	
Did any strate contain unusable water? Yes P No		ELD, ORE	
Type of Water? depth of strata	[Signed] Hand Wilson		
Method of sealing strate of	Water Well Construc	6/1 x4	
Was well gravel packed?	Date	, 19 84	
OLD THE PROPERTY OF THE PROPER	l'		

NOTICE TO WATER WELL CONSTRUCTOR The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT, BALEM, ORDOON 97310 within 30 days from the date of well completion.

SP*45292-690

WATER WELL REPORT # - Material mardouse Cement STATE OF OREGON # STATE OF OREGON

PLEASE TYPE or PRINT IN INK

(1) OWNER:	(10) LOCATION OF WELL:		
Name Mel Purvis Purvis Real Estate	County Lane Driller's well number 1108-650 CP		
Address 1754 W. 11th Suite 11		4W w.m.	
City Eugene State Oregon		Subdivision	
(2) TYPE OF WORK (check):	Address at well location: Bailley HIII Road	 -	
New Well ♣ Deepening □ Reconditioning □ Abandon □	CAN WATER LEVEL Completed and		
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed well.		
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found	70 ft.	
Rotary Air Driven	Static level 30 ft. below land surf		
Rotary Mod Dug Irrigation Test Well Other	Artesian prossure Ibs. per square	inch. Date	
☐ Bored ☐ Thermal: Withdrawal ☐ Reinfection ☐	(12) WELL LOG: Diameter of well below casing		
(5) CASING INSTALLED: Steel & Plastic	Depth drilled 100 ft. Depth of complet		
Threaded	Formation: Describe color, texture, grain size and structure of thickness and nature of each stratum and aquifer penetrated,	f materials; and show with at least one entry	
6 Diam from +1 ft to 50 ft Gauge = 250	for each change of formation Report each change in position	of Static Water Level	
Diam. from ft. to ft., Gauge	and indicate principal water-bearing strata.		
LINER INSTALLED:	MATERIAL From		
"Diam from	Top Soil 0		
(6) PERFORATIONS: Perforated?	Blue Clay 3		
Type of perforator used	Yellow Clay 6		
Size of perforations in. by in.	24 0112 020	 	
perforations from	Blue Shale 42		
perforations from	Brown Shale 90	100 30	
perforations from			
(7) SCREENS: Well screen installed? Yes No		 	
Manufacturer's Name		 	
Type Model No.		1	
Diam. Slot Size Set from	DEORME		
Diam Set from ft. to ft.	NELEIVEL		
(8) WELL TESTS: Drawdown is amount water level is lowered below static level	MAY 9 1983		
		 	
a a pump test made? Yes No If yes, by whom?	WATER RESOURCES DEPT.		
Tield: gal/min with ft.drawdown after hrs.	SALEM, OREGON	 	
Air test 10 gal.mln. with drill storn at 75 ft. 1 hrs.		 	
Bailer test gal/min. with it drawdown after hrs.		 	
rtesian flow g.p.m.	·	 	
Temperature of water 52° Depth artesian flow encountered ft.	Work started 5/2/ 19 83 Completed	5/3/ 1983	
(9) CONSTRUCTION: Special standards: Yes No 12	Date well drilling machine moved off of well	5/4/ 1983	
Well seal Material used Bentoni te	(unbonded) Water Well Constructor Certification		
Well sealed from land surface to			
Diameter of well bore to bottom of seal10	This well was constructed under my direct superv and information reported above are true to my best for		
Diameter of well bore below seal	[Signed] Date	19	
Number of sacks of cament used in well seal	Bonded Water Well Constructor Certification:		
How was cement grout placed? Method "C"	Bond U3-66353 Issued by: United Pact	fic	
- Company of the Comp	(number) Burnty Com	cany Name	
secretives and any or any or assessment production and some section of the contract of the con	the best of my knowledge and belief. Name CARTER'S DRILLING & PUMP SERV.	ans report is true to	
Was pump installed?	Name CARTER'S DRILLIANG & PUMP SERV.	LUB	
Was a drive about used? Yes No Pluge Size: location	Name P. O. Box 46 Springfield, Ore	zon, 974777	
Did any strata contain unusable water? ☐ Yes ∑ No Type of Water? depth of strata			
Method of sealing strata off	[Signed] Wester West Constructor,	ander-	
Was well gravel packed? ☐ Yes M No Size of gravel:	Date5/4/	19.83	
Gravel placed from			

NOTICE TO WATER WELL CONSTRUCTOR The original and first copy of this report are to be filled with tho WATER RESOURCES DEPARTMENT, SALEM, ORECON 97310 within 30 days from the date of well completion. SP-45292-690

NOTICE TO WATER WELL CONTECTED EIVETER WELL REPORT are to be filed with the

water resources Department. MARO 3 1979STATE OF OREGON
SALEM, OREGON \$1510
within 30 days from the dwater resources. Dept.
of well completion. WATER RESOURCES. DEPT.
SALEM, OREGON

	, ~ ,	1
State Well No.	185/	4w-10
	LANE	16993

Manne Mr. Roy Duncan #2 Address 1681 West 7th Street Eugene. OR 97402
EUGENE. OR 37402 (2) TYPE OF WORK (check): New Well XX Despening Reconditioning Abandon It abandonnent. describe material and procedure in item in 18 18 18 19 19 19 19 19
Eugene OR 97402 (2) TYPE OF WORK (check): New Well XX Despending Reconditioning Abandon Habandonment, describe material and procedure in item 18. (3) TYPE OF WELL: (3) TYPE OF WELL: (4) PROPOSED USE (check): Domestic XX Industrial Municipal Chile State of Price o
New Well XX Despening Reconditioning Abandon It abandonnent describe material and procedure in item 12. (3) TYPE OF WELL: (4) PROPOSED USE (check): Chief Despiration Test Well Other Chief Despiration Test Well Other Other Chief Despiration Test Well Other Oth
Abandonment, describe material and procedure in item 18 33 TYPE OF WELL: (4) PROPOSED USE (check): Domestic XX Inclustrial Municipial Domestic XX Inclustrial Municipial Domestic XX Inclustrial Municipial Casing Installed: Described Described Described Casing Installed: Treat Well Other
(3) TYPE OF WELL: (4) PROPOSED USE (check): Domestic XX Industrial Municipal Static level 140 11. below land surface. Date 3-2-79
(3) TYPE OF WELL: (4) PROPOSED USE (check): Domestic XX Industrial Municipal Cable Jetted Depth at which water was first found 190 ft.
Rotable Deted Domestic XX Inclustrial Municipal Cable Dieted Dieted Trigation Test Well Other Day Dieted Dieted Trigation Test Well Other Dieted Diet
CASING INSTALLED: Threaded Weided QX 250 CASING INSTALLED: Threa
CASING INSTALLED: Threaded Welded IX 6 Id - Diam. from Plus 1 n. to 29 n. Gage 250. Thism. from th to ft. Gage Depth drilled 192 ft. Depth drilled 192 ft
PERFORATIONS: Perforated? Yes KKNo. Type of perforator used MATERIAL From To SWI. Size of perforations In. by In.
Size of perforations in. by in. perforations from ft. to ft. CT) SCREENS: Well screen installed? Yes KNNo Manufacturer's Name Type Model No. Diam. Slot size Set from ft. to ft. Diam. Slot size Set from ft. to ft. Was a pump test made? Yes KNNo if yes, by whodown static level is lowered below static level Was a pump test made? Yes KNNo if yes, by whodown static level Was a pump test made? Yes KNNo if yes, by whodown static level Well output may fluctuate filling machine moved off of well 3-2-79 is completed 3-2-79 is Drawlown: (9) CONSTRUCTION: Well scal-Material used Cellent grout. Drilling Machine Operator's Certification:
perforations from ft. to ft. t
perforations from n. to
Stone 1 24
SCREENS: Well screen installed? Yes & XNo Blue gray il sandstone 24 192
Manufacturer's Name Type
Manufacturer's Name Type
Diam. Slot size Set from ft. to ft. Diam. Slot size Set from ft. to ft. (8) WELL TESTS: Drawdown is amount water level is lowered below static level Was a pump test made? Yes KWN if yes, by whom? Yield: gal/min with ft. drawdown after hrs. Well output may fluctuate . ATr
DiamSlot sizeSet fromft. toft. (8) WELL TESTS: Drawdown is amount water level is lowered below static level Was a pump test made? Yes KNo it yes, by whom? Yigid: gal/min with ft. drawdown after hrs. Well output may fluctuate
(8) WELL TESTS: Drawdown is amount water level is lowered below static level Was a pump test made? Yes KNNo if yes, by whom? Yield: gal./min. with ft. drawdown after hrs. Well output may fluctuate Atterian flow g.p.m. Work started 2-28-79 19 Completed 3-2-79 19 (9) CONSTRUCTION: Well scal-Material used Cement grout Drilling Machine Operator's Cartifloation:
Was a pump test made? [Yes KNo It yes, by whom? Yield: gal/min. with ft. drawdown after hrs. Well output may fluctuate AT: AT: Work started 2-28-79 19 Completed 3-2-79 19 CONSTRUCTION: Well scal-Material used Cement grout Drilling Machine Operator's Cartifloation:
Yield: gel./min. with ft. drawdown after hrs. Well output may fluctuate At At tests 60 gel./min. withmax ft. drawdown after 1 hrs. Artesian flow g.p.m. Work started 2-28-79 19 Completed 3-2-79 19 (9) CONSTRUCTION: Well scal-Material used Cement grout Drilling Machine Operator's Cartification:
Well output may fluctuate AT: AT: Willy test 60 gal./min. withmax st. drawdown after 1 hrs. Artesian flow F.p.m. Work started 2-28-79 19 Completed 3-2-79 19 (9) CONSTRUCTION: Well scal-Material used Cement grout Drilling Machine Operator's Cartifloation:
ATT " " " " " " " " " " " " " " " " " "
##W test 60 gal./min. withmax st. drawdown after 1 hrs. Artesian flow perature of water Depth artesian flow encountered st. (9) CONSTRUCTION: Well scal-Material used Cement grout Drilling Machine Operator's Cartification:
Artesian flow Sp.m. Work started 2-28-79 19 Completed 3-2-79 19 (9) CONSTRUCTION: Well seal-Material used Coment grout Drilling Machine Operator's Cartiflication:
(9) CONSTRUCTION: Well scal-Material used Coment grout Depth artesian flow encountered
(9) CONSTRUCTION: Date well drilling machine moved off of well 3- 2-79 Drilling Machine Operator's Cartification:
Well scal-Material used Cement grout Drilling Machine Operator's Cartification:
White wall were constructed above was divert assessed to
Well sealed from land surface to 29 This well was constructed index my direct supervision. At this well was constructed index my direct supervision. At this well was constructed index my direct supervision.
Dismeter of well bore to bottom of seal 10 in. Materials used and information reported above are true to my best knowledgy and belief
Diameter of well bore below seal
7.77
Machine mixed - pumped to dry seal area
Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is
true to the best of my knowledge and belief.
Did any strata contain unusable water? Yes XIX No
Type of water? depth of strate Address 33132 Coleman Road, Eugene, OR 97401
Method of sealing strata off
Method of sealing strata off Was well gravel packed? ☐ Yes XX No Size of gravel: [Signed]

The original and first copy of this partic CEIVEATER WELL REPORT are to be filed with the

WATER RESOURCES DEPARTMENTMAR 0 8 1979 STATE OF OREGON SALEM, OREGON 97310
Within 30 days from the WATER RESOURCES DEFT. type or print)
of well completion. WATER RESOURCES DEFT. SALEM. OREGON

State	Well No. 185/4w-10
State	Permit To LANE CONST

EP*45658-119

BALLIII. GILGOII			
(1) OWNER:	(10) LOCATION OF WELL:		
Name Mr. Roy Duncan #1	County Lane Driller's well nu	_{mber} 792	.2
Address 1681 West 7th Street	I	r. 4w	W.M.
Eugene, OR 97402	Bearing and distance from section or subdivision	on corner	
(2) TYPE OF WORK (check):			
New Well XX Deepening Reconditioning Abandon XX			
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed we	ell.	
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found 125	- 1⅓aom	ft.
Rotary XX Driven Domestic XX Industrial Municipal Domestic XX	Static level -0- ft. below land at		
Cable Jetted Jetted Jetted Jetted Jetted	Artesian pressure Ds. per aquare		
CASDIC DICHALLED.			
CASING INSTALLED: Threaded Weided	(12) WELL LOG: Diameter of well b	elow casing	<u>16"</u>
Diam from See LOg st. tost. Gage	Depth drilled 207 ft. Depth of comple	nted well	_O_ 11.
Diam. from ft. to ft. Gage	Formation: Describe color, texture, grain size a	and structure	of materials;
District Market and All Market and A	and show thickness and nature of each stratum with at least one entry for each change of format	uon. Report e	ach change in
PERFORATIONS: Perforated? Yes XXNo.	position of Static Water Level and indicate principal	cipal water-b	earing strata.
Type of perforator used	MATERIAL	From T	ro SWL
Size of perforations in. by in.	Gravel Driveway	0	<u>i</u>
perforations from ft. to ft.			
perforations from ft. to ft.	Light Brown Clay & Weathered		
perforations from ft, to ft.	Sandstone	1 28	8
(7) SCREENS: Well screen installed? Yes KNNo	Dive Const Control		
Manufacturer's Name	Blue Gray Sandstone	28 207	4
Type Model No.			
Diam Slot size Set from ft. to ft.			
Diam. Slot size Set from ft. to ft.			
(8) WELL TESTS: Drawdown is amount water level is lowered below static level	Well Bore filled with cement		
Was a pump test made? [] Yes YNo If yes, by whom?			
Yield: gal./min. with ft. drawdown after hrs.			
Well output may fluctuate • •			
Bailer test **********************************		 	
Artesian flow See Well Logm.	<u> </u>		
perature of water Depth artesian flow encounteredft.	Work started 2-27-79 19 Complete	a 2-28-7	79 19
		2-28-7	70
(9) CONSTRUCTION:	Date well drilling machine moved off of well		
Well seal-Material used See Well Log	Drilling Machine Operator's Certification:		
Well sealed from land surface to	Drilling Machine Operator's Certification: This well was constructed under my Materials used and interpolation reported best knowledge and belief.	above are	pervision. true to my
Diameter of well bore to bottom of sealin.	best knowledge and belief.		
Diameter of well bore below seal	[Signed] Machine Operator). I	Date2 <u>-28</u>	i-79 19
Number of sacks of cement used in well sealsacks How was cement grout placed?	Drilling Machine Operator's License No	99	
and tenter grout placed?			
	Water Well Contractor's Certification:		
Management of the second secon	This well was drilled under my jurisdic	ction and th	us report is
Was a drive shoe used? [] Yes XXNo Plugs Size: location ft.	true to the best of my knowledge and beli Name Mark Christensen		
Did any strata contain unusable water? Yes No	Address 33132 Coleman Road, Eug	(Type o	r print)
Type of water? depth of strata	Address 33132 Coleman Road, Eug	ene, OR	97401
Method of sealing strata off		ر.	
Was well gravel packed? [Yes XX No Size of gravel;	[Signed] (Water Well Contra	actor)	***************************************
Gravel placed fromft toft.	Contractor's License No. 97 Date 2	-28-79	, 19
	(EPTS IF NECESSARY)		EP*45658-119
(=== ADDITIONAD B)			= + *42626-119

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report
are to be filed with the

WATER WELL REPORT

WATER RESOURCES DEPARTMENT.

8ALEM. OREGON 97310
within 30 days from the date
of well completion.

PEC 1 1077



	<u> </u>
(1) OWNER:	. UEPT. (10) LOCATION OF WELL:
Name Don Dealy WATER RESCUE	County Lane Driller's well number
Address 3055 Bailey Hill Rd, Eugene, Orego	14 14 Section 10 T. 185 R. 4 W. W.
	Bearing and distance from section or subdivision corner
(2) TYPE OF WORK (check):	Design and distance from Section of Subdivision College
New Well 🗗 Deepening 🗍 Reconditioning 🗋 Abar	ndon 🗇 .
If abandonment, describe majorial and procedure in Item 12.	(11) WATER LEVEL: Completed well,
(3) TYPE OF WELL: (4) PROPOSED USE (ci	
Rotary Driven Driven Domestic M Industrial D Mu	Sopra de Maria Maria Maria Podrida
Cable 28 Jetted	
CASING INSTALLED: Threaded Welded	(12) WELL LOG: Diameter of well below casing 6.
Diam from +1 ft. to 47 ft. Gage :	Depth drilled 97 ft. Depth of completed well 97
ft. toft. Gage	Formation: Describe color, texture, grain size and structure of materia
PERFORATIONS: Perforated? Tyes IX	and show thickness and nature of each stratum and aquifer penetrate with at least one entry for each change of formation. Report each change
Type of perforator used	MATERIAL From To SWL
Size of perforations in. by in.	Topsoil 0 2
perforations fromft_ to	D
perforations from ft. to	Brown & blue sandstone 32 42
perforations from ft. to	Blue sandstone 42 62 30'
(7) SCREENS: Well screen installed! I Yes X	
Manufacturer's Name	Gray sandstone (very soft) 87 94
Type Model No	
Dism Slot size Set from ft. to	
Diam. Slot size Set from ft. to	n
(8) WELL TESTS: Drawdown is amount water level lowered below static level	el ta
Was a pump test made? ☐ Yes ☐ No If yes, by whom?	
Yield: gal./min. with ft. drawdown after	hrs.
· ·	
Bailer test 30 gal./min. with 60 ft. drawdown after	1 hrs.
Artesian flow g.p.m.	
Temperature of water Depth artesian flow encountered	# Work started 10/10 19/7 Completed 10/12 197
	Date well drilling machine moved off of well 16/12 197
(9) CONSTRUCTION:	
Well seal—Material used	Drilling Machine Operator's Certification: This well was constructed under my direct supervisio Materials used and information reported above are true to m best knowledge and belief. [Signed]
Diameter of well bors below scal	[Signed] Date 12/2 , 177
Number of sacks of cement used in well seal 32 How was cement grout placed? Slurry poured f	
the top.	Water Well Contractor's Certification:
	This well was drilled under my jurisdiction and this report true to the hest of my knowledge and bellef. The well was drilled under my jurisdiction and this report true to the hest of my knowledge and bellef. Name Titcher Tump & Drilling Company
Was a drive shoe used? Yes No Plugs Size: Jocation	
Did any strata contain unusable water? Tyes 6 No	(Person, firm or corporation) (Type or print)
Type of water? depth of strats	Address 150 River Ave., Eugene, Oregon 97404
Method of sealing strata off	[Signed] Car # tales
Was well gravel packed? [] Yes No Size of gravel:	(Water Well Contractor)
Gravel placed fromft. toft.	Contractor's License No. 494 Date 12/2

The original and first copy of this report are to ba.	LL REPOR ECEIVED	18/412-10	
STATE ENGINEER SALEM, OFFICE STATE STATE ENGINEER SALEM, OFFICE STATE WITHIN 30 days from the date FEB 17 1969 on not write a	OREGON MAR 10 1969 WARSO OF Print) BOVE this 115 TATE ENGINEER SALEM, OREGON	LAWE /6996	, · · ·
STATE ENGINEER	ONEGON		
(1) OWNER: SALEM. OREGON Name GERALO GILBERT	(11) LOCATION OF WELL: County AME Driller's well nu	mber	
ATT ACTAL FOREST	14 Section 10 T. 18	R. 4 W.W.	7
	Bearing and distance from section or subdivision		
(2) TYPE OF WORK (check):			
New Well of Deepening Reconditioning Abandon I If abandonment, describe material and procedure in Item 12.			
(3) TYPE OF WELL: (4) PROPOSED USE (check):			
	(12) WELL LOG: Diameter of well b	3 a 23	·
Rotery M Driven Domestic M Industrial Municipal Dug Bored Irrigation Test Well Other D	Depth drilled 250 ft. Depth of comple	sted Well 250 st.	: .
CASING INSTALLED: Threaded Welded X	Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level as drilling proceeds. Note drilling rates.		
" Dlam. fromft. toft. Gage	MATERIAL	From To SWL	2:
Diam. from ft. toft. Gage	TOP SOLL DY BRN	0 1	- :-
Perforations: Perforated 1 Yes (No.	W 5.5. TAN	13	• • • • • •
Size of perforations in. by in.	100 000	2 27	
perforations from ft. to ft.	N SS BAN	3 / 3	
perforations from ft. to ft.	BI 55	23 97	_
perforations from ft. to ft.			
	BL GRAV SS.	97 250	
perforations from ft. to ft.			-
(7) SCREENS: Well screen installed? Tes No			- - —
Type Model No.		 	
Diam. Slot size Set from ft. to ft.			
Diam Slot size Set from ft to ft			
(8) WATER LEVEL: Completed well.			
Static level 147 st. below land surface Date 4-5-68			
sian pressure lbs. per aquare inch Date]		
(9) WELL TESTS: Drawdown is amount water level is lowered below static level			
Was a pump test made? [] Yes [Y No II yes, by whom?			-ā-~
Yield: 50 gal./min. with SIR LAE Arawdown after / hrs.	Work started 4 _ / 1965 Complet	ed 4-5 196	Ø
1	Date well drilling machine moved off of well	4-3 168	2
	Drilling Machine Operator's Certification: This well was constructed under my di	trect supervision. Mate-	-
Baller test gal./min, with ft, drawdown after bra.	rials used and information reported above		
Artesian flow g.p.m. Date	knowledge and belief.	V: - 11	2
Temperature of water . Was a chemical analysis made? Yes No	No [Signed]		
(10) CONSTRUCTION:	Drilling Machine Operator's License No.	9 4 5/2	··
Well seal-Material used CEMENT GROUT		•	-
Depth of seal 2.1	Water Well Contractor's Certification:	Hation and this vonent f	
Diameter of well bore to bottom of sealin.	This well was drilled under my jurisd true to the best of my knowledge and beli	ef.	3
Were any loose strata comented off? D Yes 15 NP Depth	NAME MARK CHRISTEN	SEN	,
Was a drive shoe used? Yes No Did any strata contain unusable water? Yes No	(Person, firm or corporation)	(Type or print)	
Type of water? depth of strata	Address 3550 10 18	EUGENE	·
Method of sealing strate	In a Mark It Phase	ilean and	
	[Signed] (Water Well Contra	ctor)	
Was well gravel packer Yes W No Size of gravel:	Contractor's License No. 97 Date	1-5 19.6	8



DECEIVED SEP 25 1959

STATE ENGINEER WELL REPORT
SALEM, CREGON

•	WK No. 18/4W-10
State	WK No. 10/4/10/10
State	Permit NdLHANE 16997

(1) OWNER:	(11) WELL TESTS: Drawdown is amount lowered below static is	water level is
Namo Manlus Ylumber in & Heating	Was a pump test made? [] Yes [] No. If yes, by who	
Address That State Quel W. Beda On Ose.		
	Yield: gal/min, with it drawdon	en after hrs.
		····
(2) LOCATION OF WELL:		
County Jewe Owner's number, if any	Baller test 45 gal/min: with /06 ft. drawdov	on after / hrs.
14 14 Section 10 T. 18 S R. 4 W W.M.	Artesian flow g.p.m. Date	
Bearing and distance from section or subdivision corner	Temperature of water Was a chemical analysis m	ade? [Yes [No
Petroli and deserte roll sector of another roll of	441	
	(12) WELL LOG: Diameter of well	
	Depth drilled 3 ft. Depth of completed v	
	Formation: Describe by color, character, size of mater	al and structure, and
-	Formation: Describe by color, character, size of mater show thickness of aquifers and the kind and nature of stratum penetrated, with at least one entry for each	change of formation.
	MATERIAL	FROM TO
(9) WINDE OF WODY (shorts).	7. 5. 1. 1.	0 4
(3) TYPE OF WORK (check):	- Japan	37
New Well Despening Reconditioning Abandon	- Stulder tompe	2 73, -
If chandonment, describe material and procedure in Item 11.	- cara tack	73' /
PROPOSED USE (check): (5) TYPE OF WELL:	_ wed socle	1141132-
		
Cable SE Tettod		
Irrigation Test Well Other Dug Bored		<u> </u>
(6) CASING INSTALLED: Threaded Welded	· - ·	T
"Diam from O tt. to 45 8 tt. Gage / 88		
" Diam. from ft. to ft. Gage		
" Diam. from ft. to ft. Gage		
		
(7) PERFORATIONS: Perforated? Yes No		
Type of perforator used		
SIZE of perforations in. by in.	<u> </u>	
perforations from ft. to ft.		}
perforations from ft. to ft.		
perforations from ft. to ft.		
perforations from ft. to ft.		
perforations from ft. to ft.		
		<u> </u>
(8) SCREENS: Well screen installed Yes X No		
Manufacturer's Name		
Type		
Slot size Set from it. to ft.		
D. Slot size Set from ft, to ft.	Work started 1-9- 19 J.9 Completed 8	C. 266 1035 G
	work started A 7 19 U ./ Completed A	- AT IN
(9) CONSTRUCTION;	(13) PUMP:	•
Was well gravel packed? N Yes No Size of gravel: Atther	Manufacturer's Name	
Gravel placed from	Type:	
Was a surface seal provided? M Yes No To what depth? Zo it	Type:	н
Material used in seal Mudder dill Cuttings	Well Driller's Statement:	
Did any strata contain (musable water? Yes W No		
Type of water? Depth of strata	This well was drilled under my jurisdiction true to the best of my knowledge and belief.	and this report is
Method of sealing strate off	يبيا آسسا (م	- 11 · 0
NOTICE OF PERSONS ASSESSMENT OF THE PERSONS ASSESSMENT ASSESSMENT ASSESSMENT OF THE PERSONS ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT A	NAME (a sey Jones Well	Villing
(10) WATER LEVELS:	(Perjon, firm, or corporation)	type or print)
Static level 75 st. below land surface Date 6-25:59	Address ATO BAX 695 CAG	SWELL, Ore
Artesian pressure lbs. per square inch Date		
we has shorte mer nate	Driller's well number	
Log Accepted by	[Signed] De Chest of Hone	2
(81) 1441/ 9-15 59	(Well Driller)	
[Signed] MANA Date Depte License No. 03 Date 6-24 19 5		24 , 18 59
Maller		
(USE ADDITIONAL BE	LEETS IF NECESSARY)	<u>.</u> .4
·		•

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM, OREGON 97510 within 30 days from the date of well completion.		HW-	10
(1) OWNER: TEGON	(11) WELL TESTS: Drawdown is amount lowered below static	water level	is :
	Was a pump test made? Yes II No II yes, by who		
	Yield: gal./min. with ft. drawdo		hra.
Address Ct. 3 Colors 572	Yield: gal/min. with it diawas		
a cure ceregon	-		
(2) LOCATION OF WELL:	Bailer test 2,5 gal./min. with 0 ft. draws	down after	/ hrs.
County Driller's well number		<u></u>	
% % Section 10 T. 185 R. 41U. W.M.		medet C V	- DAY
Bearing and distance from section or subdivision corner			
	(12) WELL LOG: Diameter of well below	casing	
	Depth drilled 33 ft. Depth of completed w		2 n
			ture, and
	Formation: Describe by color, character, size of mater show thickness of aguifers and the kind and nature of stratum penetrated, with at least one entry for each	change of fo	madon.
(2) MUDE OF WORK (-11.).	MATERIAL	FROM	
(3) TYPE OF WORK (check):		+	· · · · · · · · · · · · · · · · · · ·
Well Deepening Reconditioning Abandon	light blue den 55	107	140
bandonment, describe material and procedure in Item 12.		4	<u> </u>
(4) PROPOSED USE (check): (5) TYPE OF WELL:			
Potent El Polyon El		-	
Domestic I Industrial Municipal Cable I Jetted		1	
Irrigation Test Well Other Dug Bored		T	
			*
	·		
6 Diam from tt to 1 Gago 250			<u></u>
Diam from FXLS to WC it. Gage		, 	
"Diam fromft toft Gage		1	=
(7) PERFORATIONS: Perforated? Yes No			
		1	= =
Type of perforator used Size of perforations in. by in.		1 1	
8ize of perforations in. by in. perforations fromft toft.	1	1	_
perforations from ft. to ft.		1 1	
perforations from ft. to ft.		1 1	
perforations from ft. to ft.		1	
perforations from ft. to ft.		7	===
		7	7=
(8) SCREENS: Well screen installed? Yes Date		1	*
Manufactuzer's Name		7 1	
Model No.			ૐ .
Dmin Slot size Set from ft. to ft.	Work started //-/5 19 & Completed	11-77	1966
Diam	Date well drilling machine moved off of well	11-17	19 /-/
			
(9) CONSTRUCTION:	(13) PUMP:		
Well seal-Material used in sealEXISTING	Manufacturer's Name DERKELEY		
Depth of sealft. Was a packer used?	Type: SUB	н.р. 3/4	<u></u>
Diameter of well bore to bottom of sealin.			
Were any loose strata cemented off? Yes 12 No Depth	Water Well Contractor's Certification:		
Was a drive shoe used? Yes 1200	This well was drilled under my jurisdiction	n and this	report is
Was well gravel packed? ☐ Yes PNo Size of gravel:	true to the hest of my knowledge and belief.		
Gravel placed from	CHRISTENSEN DRILLING & IRRIGATIO) <u>F</u>	
	NAME	Type or print	}
Did any strata contain unusable water? Nes Mo	Address		
Type of water? depth of strata	Address Engene, Oregon 97402		
Method of sealing strata off	Drilling Machine Operator's License No	756	
(10) WATER LEVELS:		1	
Static level 62 ft. below land surface Data 1//17/66	[Signed]	II)	
	Contractor's License No. 27 Date	- 1 A	19.66
Artesian pressure lbs. per square inch Date		·/	, 40
(USE ADDITIONAL S	HEETS IF NECESSARY)		

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the

WATER WELL REPORT

WATER RESOURCES DEPARTMENT.

SALEM, OREGON 87510
within 30 days from the date of well completion.

RECEIVED write above this line)

							
(1) OWNER: JUL - 5 1977	(10) LOCATION OF WELL:						
Name Mr. Joe AngelmoW/ATER RESOURCES DEPT.	County Lane Driller's well number						
Address 2820 Chuckanut SALEM, OREGON	14 14 Section 10 T. 185 R. 4W W.M.						
Fugene OR	Bearing and distance from section or subdivision corner						
(2) TYPE OF WORK (check):				·-			
New Well M Deepening Reconditioning Abandon							
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed w	ell.					
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found	7	8	ft.			
Rotary M Driven Domestic M Industrial Municipal Domestic M Industrial Municipal D	Static level 46 st. below land :	rurface. 1	Date 6/	<u> </u>			
Dug Bored Irrigation Test Well Other	Artesian pressure lbs. per squas	e inch.	Date				
CASING INSTALLED: Threaded I Welded KI			6.				
CASING INSTALLED: Threaded Welded E 6 Diam from 0 ft. to 10 ft. Gage 250	(12) WELL LOG: Diameter of well 1		_				
Diam. from ft. to ft. Gage	Depth drilled 105 ft. Depth of compl	eted well	10)5 <u>#</u>			
Diam. from tt. to tt. Gage	Formation: Describe color, texture, grain size and show thickness and nature of each stratu	and struc	ture of n	naterials;			
	with at least one entry for each change of forms	tion. Repo	ort each e	hange in			
PERFORATIONS: Perforated? Tyes E No.	position of Static Water Level and indicate prin	cipal wat	ter-bearin	g strata.			
Type of perforator used	MATERIAL	From	To	SWL			
Size of perforations in. by in.]				
perforations from ft. to ft.	Top Soil	Q	2				
perforations from ft. to ft.	Brown gray clay	2	24				
perforations from ft. to ft.	Brown cong	24	34				
(7) SCREENS: Well screen installed? Yes M No	Gray sandatone	34	69				
Manufacturer's Name	Blue green cong.	69	105				
Type Model No							
Diam Slot size Set from ft. to ft.		- "					
Diam, ft. to ft.							
(8) WELL TESTS: Drawdown is amount water level is lowered below static level							
				~			
Was a pump test made? Yes No If yes, by whom?	·	 					
Yield: gal/min. with ft. drawdown after hra.	· · · · · · · · · · · · · · · · · · ·	 					
		 					
Tested by Air (Est. could fluctuate "	1.15						
production 20 gal/min. with 59 ft. drawdown after 1 hrs.							
Artesian flow g.p.m.		L					
crature of water Depth artesian flow encountered ft.	Work started 6/8 1977 Complet	ed	6/	8 <u>19 7</u> 7			
(9) CONSTRUCTION:	Date well drilling machine moved off of well		6/	8 19 77			
Well seal-Material usedCament	Drilling Machine Operator's Certification	:					
Well sealed from land surface to	This well was constructed under my	direct	super	vision.			
Diameter of well bore to bottom of seal 10 in.	Materials used and information reported best knowledge and belief.	above	are true	to my			
Diameter of well bore below seal	[Signed] (Drilling Maching Operator)	Date	6/8	1977			
Number of sacks of cement used in well seal Backs	1						
How was cement grout placed? Poured	Drilling Machine Operator's License No.						
	Water Well Contractor's Certification:						
	This well was drilled under my jurisd	iction ar	nd this r	eport is			
Was a drive shoe used? ☐ Yes 🖺 No Flugs Size: location	true to the best of my knowledge and be	lie £		-			
Did any strata contain unusable water? Yes 🗓 No	Name Casey Jones Well Drillin (Person, firm or corporation)	g co.,	inc.	nt) .			
Type of water? depth of strata	Address 37115 Immigrant Road						
·	1 4		_				
Method of sealing strata off		Tactor)	<u></u>				
Was well gravel packed? ☐ Yes 🖾 No Size of gravel:	TEO -		6/8	, ₁₉ 77			
Gravel placed from ft. to ft.	Contractor's License No Date			_, 19! .			

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT, SALEM, OREGON 97310 within 30 days from the date of well completion.

WATER WELL REPORT CEIVED

STATE OF OREGON MAY 2 7 1977 State Well No. 185 420-106

(Please type or print)

(Do not write above this AUGIR RESOURCES SORPHERMIT No. ANE 1700)

	Citalian - Com-						
(1) OWNER:	(10) LOCATION OF WELL:						
Name Rosemead Realty Inc.	County Lane Driller's well n	umber 27	36-GP	· 			
Address 915 0ak Eugene, Oregon	NN 4 Section 10 T. 18 R. IW W.M.						
(2) TYPE OF WORK (check):	Bearing and distance from section or subdivision corner						
New Well 20 Deepening Reconditioning Abandon							
If abandonment, describe material and procedure in Item 12.	(41) trea mater a material						
(3) TYPE OF WELL: (4) PROPOSED USE (check):	(11) WATER LEVEL: Completed w						
Datam VI Dulum III	Depth at which water was first found 2110			# +			
Cable Jetted Domestic 35 Industrial Municipal	Static level 50 ft. below land	surface.	Date 5/1	9711			
Dug Bored Irrigation Test Well Other	Artesian pressure lbs. per squar	re inch.	Date				
CASING INSTALLED: Threaded Welded	(12) WELL LOG: Diameter of well		6	st			
Diam from +1 ft to 11 ft Gage 250	Depth drilled 250 ft. Depth of compl		OF.	0			
Diam from	Formation: Describe color, taxture, grain size	and etruc	turn of n	neteriale:			
Diam. from ft. to ft. Gage	and show thickness and nature of each stratu with at least one entry for each change of forms	m and a	ruifer pe	netrated			
PERFORATIONS: Perforated? * Yes No.	position of Static Water Level and indicate prin	icipal wat	er-bearin	rnango in ig strata.			
Type of perforator used Torch in steel line only	MATERIAL	From	To	SWL			
Size of perforations 4 in. by 3 in.	Top Soil	0	7	 · .			
57 perforations from 230ft. to 250ft							
perforations from ft. to ft.	Heavy Brown Clay	7	28				
perforations from ft. to ft.	Blue Clay	28	33	<u>:</u>			
(7) SCREENS: Well screen installed? Yes No			رر				
Manufacturer's Name	Soft Blue Shale	33	1.73				
Type Model No							
Diam Slot size Set from ft. to ft. Diam Slot size Set from ft. to ft.	Grey Sandstone	173	250	50			
(8) WELL TESTS: Drawdown is amount water level is lowered below static level		 		 .			
Was a pump test made? & Yes No If yes, by whom Driller							
gal/min. with 180 ft. drawdown after 2 hra.							
# # # # # # # # # # # # # # # # # # #		 					
Bailer test NO gal./min, with ft, drawdown after hrs.	7	 					
Arterian flow g.p.m.		 					
perature of water 54° Depth artesian flow encountered ft.	Work started 5/12/ 1977 Complete	<u>, 5/1</u>	77	1977			
(9) CONSTRUCTION:	Date well drilling machine moved off of well	5/1	.8/	19 77			
Well seal-Material used Portland Coment	Drilling Machine Operator's Certification:						
Well sealed from land surface to	This well was constructed under my	direct	super	vision.			
Districter of well bors to pottom of seal in.	Materials used and information reported best knowledge and belief						
Diameter of well bore below seal	[Signed] (Willing Machine Operator)	Date 5/1	<u>9/</u>	, _{19.} 77			
Number of sacks of cement used in well seal	Drilling Machine Operator's License No.	71	.7	•			
water per sack - poured in from the top.	Operator a Lincolne Ito.	~~~~	· · · · ·				
8 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Water Well Contractor's Certification:						
To the same of the	This well was drilled under my jurisdi true to the best of my knowledge and bel	ction and	d this re	port is			
Was a drive abou used? [] Yes [ANo Plugs Size: location ft.	NameCartar's Drilling & Pump S	errice					
Did any strata contain unusable water? Yes A No	(Parson, firm or corporation)	7	or prin	_			
Type of water? depth of strata	Address P.O. Box 16 Springfield	y Orye	\ 2747	7			
Method of scaling strata off	[Signed]	La)				
Was well gravel packed? [] Yes M No Size of grave]:	. (Water Well Contr		,	-			
Gravel placed from ft. to ft.	Contractor's License No.126 Date	<u> 5/19/</u>	·	, 19 <u>.77</u>			

(USE ADDITIONAL SHEETS IF NECESSARY)

8P*45656-119

NOTICE TO WATER WELL CONTRACTOR The original and first copy of this report are to be filed with the

STATE ENGINEER, SALEM, OREGON 97310 within 30 days from the date of well completion.

WATER WELL REPORTE ECEIVED

STATE OF OREGON

(Please type or print)

AUG-51978 Well ANE / 7000 (Do not write above this ineATER RESOURCES to Barrie No. 185/4w70 ba

CALEM, OFFGON (1) OWNER: (10) LOCATION OF WELL: Name JERRY GILBERT County Lane Driller's well number Address 627 Archie St.
EUGENE, OREGON 97402 N.E. KN.W. K Section 10 T. 18S R. Bearing and distance from section or subdivision corner (2) TYPE OF WORK (check): New Well Deepening Reconditioning [Abandon Fi If abandonment, describe material and procedure in Item 12. (11) WATER LEVEL: Completed well. (3) TYPE OF WELL: (4) PROPOSED USE (check): Depth at which water was first found <u>tt.</u> Rotary | Driven | Color | Oriven | Domestic M Industrial | Municipal | Static level 56 ft. below land surface. Date 7/16/76 Bored | Irrigation | Test Well | Other Artesian pressure Ibs. per square inch. Date (5) CASING INSTALLED: Threaded [] Welded [] (12) WELL LOG: Diameter of well below casing ____ft. Gage _____ft. Depth drilled 294 ft. Depth of completed well 294 _ ft. to _____ ft. Gage _ Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquiter penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata. " Dlam. from _____ft. to _____ft. Gage . (6) PERFORATIONS: Perforated? | Yes | No. Type of perforator used MATÉRIAI. From To RWT. Bize of perforations in. by Blue Sandstone 195 294 561 __ perforetions from __ ft. to ... ___ perforations from ... et to perforations from _____ _. ft. to _ (7) SCREENS: Well screen installed?

Yes

No Manufacturer's Name _ Model No. Diam. ____ Slot size ____ Set from ____ Diam. Slot size Set from _____ ft. to _ (8) WELL TESTS: Drawdown is amount water level is a pump test made?

Yes No If yes, by whom? gal/min. with ft. drawdown after hrs, er test 15 gal./min. with223 ft. drawdown after] hrs. rsien flow g.p.m. Temperature of water CoDepth artesian flow encountered _ ... st. Work started 7/14 176 Completed 7/16 1976 (9) CONSTRUCTION: DEEPENING - DOESN'T APPLY Date well drilling machine moved off of well 1276 Well seal-Material used __. Drilling Machine Operator's Certification: This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief. Well sealed from land surface to __ Diameter of well bore to bottom of seal ... [Signed] January Machine popular Diameter of well bore below seal Date 8-2-1926 Number of sacks of cement used in wall seal .. Drilling Machine Operator's License No. . Number of sacks of bentonite used in well seal .. Water Well Contractor's Certification: Number of pounds of bentonite per 100 gallons This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief. _ lbs./100 gals. Was a drive shoe used? [Yes] No Plugs ____ Size: location _ Name GUS STORES LOGGING & WELL DRILLING Did any strata contain unusable water? 🔲 Yes 🖹 No (Type or print)
Address 5555 West 1111 Ave., EUGENE, ORE. 97402 Type of water? depth of strata Method of sealing strata off [Signed] Was well gravel packed? [Yes [No Size of gravel; _ __ n. 10 ___ Contractor's License No. 578 Date _ & _

NOTICE TO WATER WELL CONTRACTOR
The original and first copy
of this report are to be
filed with the

WATER WELL REPORT

STATE ENGINEER, SALEM, OREGONATED CONTROL (Do not within 30 days from the date of well completion. JUN 2 0 1977 State Well No. 185/4w-1036

State Permit No. 185/4w-103

	JUN 1-0 13/1	,			
(1) OWNER:	WATER RESOURCES DEPT.	(10) LOCATION OF WELL:			•
Name Roll as	SELEN, OREGON	County Tane Driller's well		,	
Address Bailey	reile Re	NW % 5 % Section 10 T. 85	R 4	<u> </u>	W.M.
Eugene ~		Bearing and distance from section or subdivi	sion corne	r	
(2) TYPE OF WORK	₹ (check):				
New Well of Deepening	g 🗌 Reconditioning 🗍 Abandon 🗎				
	aterial and procedure in Item 13.	(11) WATER LEVEL: Completed	well.		
(3) TYPE OF WELL		Depth at which water was first found	110		ft.
• •	1,,,		7-7-3-C	Date 3	-25
Rotary, [] Driven [] Cable [] Jetted [] . Dug [] Bored []	Domestic X Industrial Municipal	Static level 95 ft. below land Artesian pressure lbs. per squ			-
CASING INSTAL		(12) WELL LOG: Diameter of wel			, 1, ·
Diam. from	ft. to ft. Gago	Depth drilled //2 ft. Depth of com			
	ft, toR. Gage	Formation: Describe color, texture, grain size and show thickness and nature of each stra	and structure of	cture of s coulier pe	naterials; metrated
Diam, from	The Desire of the Control of the Con	with at least one entry for each change of fort	nation.Rej	port each	crange m
PERFORATIONS	S: Perforated? 🗋 Yes 🙀 No.	position of Static Water Level and indicate pr	incipal we	tter-beart	ng strata
Type of perforator used	1	MATERIAL	From	To	8WL
	in. by in.	Diaz	0	2	
Size of perforations					
		Clay	2	15	
perforations	• • • • • • • • • • • • • • • • • • • •				
perforations	from ft. to ft.	Dandstone Quen	2 15	16	
(7) SCREENS:	Well screen installed? [] Yes [] No				
Manufacturer's Name	· · · · · · · · · · · · · · · · · · ·	Blue Sudstone	60	1/12	95
Туре	Model No				
Diam Slot size	Set from ft. to n.			<u> </u>	
Diam. Stot size	Set from ft. to ft.				ļ
(8) WELL TESTS:	Drawdown is amount water level is lowered below static level			 -	 -
` '					
	Yes No If yes, by whom?		-	1	1
Yield: gal./m	in. with ft. drawdown after hrs.				1
9		1 42 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4	7		
7	<u> </u>	A.763	\top	$\overline{}$	
Baller test /5 gel.	/min. with 3 ft. drawdown after / hrs.	1	\top		
Artesian flow	g.p.m.				
	Depth artesian flow encounteredft.	Work started 3-24 1973 Comp	leted 3~	- 25	19 7
pperature of water	robin greening from cucommission			-25	19 7
(9) CONSTRUCTION	A more	Date well drilling machine moved off of welling Machine Operator's Cartification		<u></u>	
Well seal-Material used .		This well was constructed under t	nv direc	t supe	rvistor
Well scaled from land surf	1.	Materials used and information report	ed above	are tru	e to m
Diameter of well bore to b	<i>-</i>	best knowledge and belief. [Signed] Thomas May	D-4-	3-28	105
Diameter of well bore bel	A	(Orilling Machine Operator)	_	_	_, 18.4-
Number of sacks of cement		Drilling Machine Operator's License N	o _	<u> </u>	
Number of sacks of benton					
Brand name of bentonite .		Water Well Contractor's Certification:			
Number of pounds of bent		This well was drilled under my fur	isdiction	and this	report.
of water	lbs./130 gala.	true to the best of my knowledge and	pener 💆	19	a
Was a drive shoe used?	Yes No Plus Size: location ft.	Name Person, firm or corporation	sell	Type or	rini
Did any strata contain uni	usable water? [] Yes M No	75/20 Land of conformal	. Pui	1	4
Type of water?	depth of strata	Address 72/38 Jondon	······································		and the same
Method of sealing strata o	et	[Signed] 20m May	<u> </u>		
	Yes No Size of gravel:	(Water Will C	ontractor)	_	- h
Gravel pleased from	ft toft.	Contractor's License No. 646. Date	3-2	<u> </u>	, 197

WATER WELL CONTRACTOR

original and first coppe ECE WATER WELL REPORTS CE 1 1E

this report are to be CC 2 4 1972 of this report are to be filed with the state engineer, salem, oregon would 10 1972 State of Oregon (Please type or print) OCT 2 4 1972 ate Well No. engineer, salem, oregon or this to 19/2 (Please type or pring TATE ENGINEER within 30 days from the date TATE ENGINEER of well completion. STATE ENGINEER to above this linealem. OREGON SALEM, OREGON (10) LOCATION OF WELL: (1) OWNER: Driller's well number Tane Name Douglas Capps % Section 1 1 T. 148 18 R. 4W Address Rt 3 Box 189E Bearing and distance from section or subdivision corner Digene Oregon (2) TYPE OF WORK (check): New Well & Despening Reconditioning [If abandonment, describe material and procedure in Item 12. (11) WATER LEVEL: Completed well. (3) TYPE OF WELL: (4) PROPOSED USE (check): Depth at which water was first found Rotary 🖾 Driven 🖸 ft. below land surface. Date 8/5/72 Domestic 🖫 Industrial 🗌 Municipal 📋 Static level 15 Jetted D Irrigation | Test Well | Other lbs. per square inch. Data Artesian pressure b) CASING INSTALLED: (12) WELL LOG: Diameter of well below casing Threaded | Welded ID 6 " Diam from 0 # to 20 # Gage # 250 Depth drilled 95 ft. Depth of completed well Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strate. _ tt, to _____ ft. Gage ___ Diam. from .) PERFORATIONS: Perforated? TYes . T No. - MATERIAL Type of perforator used 91 ្រ Black olay Size of perforations in. by 9 24 blue claystone perforations from ft. to . gray clayatone 29 _ perforations from ft. to 29 48 blue_olayatone _ perforations from ...__ 14 to blue sandatone blue claystone 48 63 (7) SCREENS: Well screen installed? [] Yes XI No 70 Manufacturer's Name bit light blue sandstme 76 95 blue claystone Set from _ Slot size _ Drawdown is amount water level is (8) WELL TESTS: Was a pump test made? Yes X No If yes, by whom? *tested with air: estimate could flucutate MINIEM test 9 gal./min. with 80 ft. drawdown after 1 hrs. Artesian flow Depth artesian flow encountered Completed 8/7/72 Work started 8/5/72 19 aperature of water Date well drilling machine moved off of well 8/7/72 (9) CONSTRUCTION: Drilling Machine Operator's Certification: Cement grout Well seal-Material used This well was constructed under my direct supervision. Materials used and information reported above are true to my Well sealed from land surface to _ ft [Signed] (Ortiling Section Operator) Diameter of well bore to bottom of seal __10 Number of sacks of cament used in well seal Number of sacks of bentonite used in well seal Brand name of bentonite ... Water Well Contractor's Certification: Number of pounds of bentonite per 100 gallons This well was drilled under my jurisdiction and this report is of water __ true to the best of my knowledge and belief. CASEY JONES WELL DRILLING CO INC Was a drive shoe used? ☐ Yes ☐ No Plugs ... Size: location Did any strata contain unusable water? [] Yes Y] No (Person, firm or corporation) (Type or grint)
Rt 8 Box 695 Pleasant Hill, Oregon Type of water? depth of strata Address . Method of sealing strata off Was well gravel packed? Yes No Size of gravel:

NOTICE TO WATER WELL CONTRACTOR

Gravel placed from ______ ft. to _

Contractor's License No. 559 Date August 8

NOTICE TO WATER WELL CONTRACTOR
The original and first copy
of this report are to be
filed with the

STATE ENGINEER, SALEM, OREGON 97310 within 30 days from the date of well completion.

WATER WELL REPORT CELVEN WELL ANE 17005 STATE OF OREGON JUN 1 1976 State Permit No. 185/4W-11 (Do not write above this line) WATER RESOURCES DEPT.

	(10) LOCANTON OF WELL:		
(1) OWNER:	(10) LOCALION, OF WELL:	. 264	
Name S. GILBERT CUDDEBACK	County LANE Driller's well num	nber	
Address 2100 Keith Way	S.E. KN.E. & Section 11 T. 185	<u>. 4 W.</u>	W.M.
Fugone, OR 97401	Bearing and distance from section or subdivision	corner	
(2) TYPE OF WORK (check):			بعدادا
New Well Despening Reconditioning Abandon			
If abandonment, describe material and procedure in Item 12.	(11) WATER LEVEL: Completed we	11,	
(3) TYPE OF WELL: (4) PROPOSED USE (check):	Depth at which water was first found 32		ft.
	Static level 18 ft. below land su	rince. Date 5/2	1/76
Rotary Driven Domesiic Industrial Municipal Cable Jetted Driven Test Well Other	Artesian pressure ibs. per square	inch. Date	
CASING INSTALLED: Threaded □ Welded &	(19) YÜRLI LOC.		611
6 Diam. from ± 2 n to 100 nt Gage 250	(12) WELL LOG: Diameter of well be	255	ft.
		acc wes	
Diam from ft toft Gage	Formation: Describe color, texture, grain size at and show thickness and nature of each stratum	and adulter Der	ieuraucu,
	with at least one entry for each change of format position of Static Water Level and indicate princ	on. Report each c	nange in
PERFORATIONS: Perforated			
Type of perforator used	MATERIAL	From To	SWL
Size of perforations in. by in.	Brown Clay	0 19	
perforations fromft. toft.	Blue Claystone	19 30	<u> 18</u> 1
perforations from ft. to ft.	Dark Blue-Grey Basalt	30 105	18'
perforations fromft. toft.	Red-Brown Claystone	105 140. 140 150	181
	Blue Claystone		18
(7) SCREENS: Well screen installed? ☐ Yes M No	Grey Claystone	150 155 155 167	181
Manufacturer's Name	Light Blue Claystone		181
Type Model No	Brown Claystone	167 190 190 255	18
Diam, Slot size fl. to ft.	Blue Sandstone	190 255	10.
Diam. Slot size Set from ft. to ft.			
(8) WELL TESTS: Drawdown is amount water level is			·
DACES DOOR STARS TO THE			
Was a pump test made? The M No H yes, by whom?			
Vield: gal/min. with ft. drawdown after hrs.			
	and the standard transfer		
	and the second of the second o		
Baffer test 12 gal./min. with 225 ft. drawdown after 1 hrs.			
Artesian flow g.p.m.		ليليا	56
perature of water 55° Depth artesian flow encountered ft.	Work started 5 - 10 1976 Complete		1976 1976
(9) CONSTRUCTION:	Date well drilling machine moved off of well	5 - 21	20/0
Well seal Material usedCEMENT_GROUT	Drilling Machine Operator's Certification:		
Well sealed from land surface to	This well was constructed under my Materials used and information reported	above are true	to my
Diameter of well bore to bottom of seal 10 in.	best knowledge and peller.		. 5
Diameter of well bore below seal6 in.	[Signed]	Date 5-26	719/6
Number of sacks of cement used in well seal 15 sacks	(Drilling Machine Oberecor)	C7 0	
Number of sacks of bentonite used in well seal sacks	Drilling Machine Operator's License No.		· · · · · · · · · · · · · · · · · · ·
Brand name of bentonite	Water Well Contractor's Certification:		-
Number of pounds of bentonite per 100 gallons	This well was drilled under my jurisd	iction and this	report ls
of water	true to the best of my knowledge and be	ief.	
Was a drive abou used? 🗆 Yes 😥 No Plugs Size: location ft.	Name GUS STORES LOGGING & WELL	DRILLING	
Did any atrata contain unusable water? Yes XXNo	. (Person, firm or corporation)	(73be er hr	
Type of water? depth of strata	Address 5555 West 111 Aves . Fue	ene OH • 974	U.C
Method of sealing strata off	Signed Mana (A)		
Was well gravel packed? [] Yes [] No Size of gravel:	(Water West Con		~
Gravel placed fromft. toft.	Contractor's License No578 Date	5-26-	

NOTICE TO WATER WELL CONTRACTOR

The original and first compare to be the compare to this report are to be the compare to this report are to be the compare to this report are to be the compare to the c

(1) OWNER:	(10) LOÇATION OF WELL:		 "
Name HERB CHAPMAN	1		
Address Eugene Ore	"	R. 4W	W.M.
	Bearing and distance from section or subdivisi	lon corner	
(2) TYPE OF WORK (check):		ou contra	
New Weil \ Deepening \ Reconditioning \ Abandon \			
If abandonment, describe material and procedure in Item 12.	(11) WATER TRUET, C		-
(3) TYPE OF WELL: (4) PROPOSED USE (check):	(11) WATER LEVEL: Completed w	ell.	
Rotary Driven D	Depth at which water was first found 92		<u></u>
Cable Jetted Domestic Industrial Municipal Dug Bored Irrigation Test Well Other		nirface. Date 8	(17/72
Other L	Artesian pressure Ibs. per squar	re Inch. Date	,
(a) CASING INSTALLED: Threaded Welded V	(12) WELL LOG: Diameter of well to	valow casing	/ 4
5 Diam from 10 tt to 100 ft Gago 10	Depth drilled 100 ft. Depth of compl		n.
"Diam. fromft. toft. Gage	Formation: Describe color, texture, grain size a	and structure of n	natorials;
PERFORATIONS: Perforated? Y Yes No.	and show thickness and nature of each stratus with at least one entry for each change of formal position of Static Water Level and indicate prin	m and aquifer per	netrated,
Type of perforator used FORCh	MATERIAL	From To	SWL
Size of perforations 6 in by 18 in.	BROWN SOIL	06	
perforations from 40 nt to 100 ft	Blue claystope	6 100	
perforations from ft. to ft.			
perforations from ft. to ft.			
(7) SCREENS: Well street brotelies I very			
(1) SCREENS: Well acreen installed? Yes No			
Type Model No.			
Diam. Slot size Set from ft, to ft	1		
Diam. Slot size Set from ft to ft			
(8) WELL TESTS: Drawdown is amount water level is lowered below static level			
Was a pump test made? Yes Wo If yes, by whom?			
THATA			
Yield: gel/min. with ft, drawdown after hrs.		\longrightarrow	
lester while est light could fluctuates		 	
Bailer test gal./min. with 76 ft. drawdown after hts.			
Artesian flow g.p.m.			
Temperature of water Depth artesian flow encounteredft.	Work started 8/17 19 74 Complete	4 8/17	1977-
(9) CONSTRUCTION:	Date well drilling machine moved off of well	9/17	19 72
Well seal-Material used Coneut	Drilling Machine Operator's Certification:		
Well scaled from land surface to	This well was constructed under	direct superv	rision
Diameter of well bore to bottom of seal in.	Materials used and information reported best knowledge and belief	above are true	to my
Diameter of well bore below seat	[Signed] Both Till I	dos	To
Number of sacks of cement used in well seal	(Drining Machine Operator)	Date 8/35,	19
Number of sacks of bentonite used in well sealsacks	Drilling Machine Operator's License No	158	
Brand name of bentonite			
Number of pounds of bentonite per 100 gallons	Water Well Contractor's Certification:		
of water lbs./100 gals.	This well was drilled under my jurisdic	tion and this re	port is
Was a drive shoe used? (1) Yes No Plugs Size: location ft.	true to the best of my knowledge and belle		•
Did any strata contain unusable water? Yes No	Name JOULSUS LRIIIUA	(Type or print)	·
Type of water? depth of strate	Address St. Rt. 2 Box 120	Lebavo	
Method of scaling strata off	Bot land		-
Was well gravel packed? [] Yes WNo Size of gravel;	[Signed] (Water Well Contra	etor)	· · ·
Gravel placed fromft. toft.		8/25	72
	Contractor's License No. WI_7 Date	<u>/ P(Q</u>	19

First Copy with the STATE ENGINEER.
STATE ENGINEER,

WATER WELL BEPORT

State	wall	No	18/4W	-11 /
			** * * ****	17007

First Copy with the STATE ENGINEER. STATE OI SALEM, OREGON STATE OI	F OREGON State Permit No.	E /7007
(1) OWNER: Name GORDAN MOORE,	(11) WELL TESTS: Drawdown is amount w lowered below static for Wes a pump test made? Yes ENO If yes, by when	rater lovel is
Address 2203 Forming Highway	Yield: gal./min. with ft. drawdow	n after hra.
carpen	" " "	
(2) LOCATION OF WELL:	Baller test 9 gal./min. with /00 ft. drawdown	after hrs.
County AANE Owner's number, if any—	Artesian flow g.p.m. Date	
NE 1 5 F 1 Section // T. /85 R. 4 W.M.	Temperature of water Was a chemical analysis ma	de? Yes No
Bearing and distance from section or subdivision corner		7
approx 300'N of Fast Yest	(12) WELL LOG: Diameter of well	inches.
Ereck 100' Wol N.S. creek	Depth drilled 2/0 ft. Depth of completed w	
	Formation: Describe by color, character, size of materia show thickness of aquifers and the kind and nature of t	he material in each
	stratum penetrated, with at least one entry for each cl	FROM TO
(a) milme on mount (I - I)	Class & Boulders	
(3) TYPE OF WORK (check): New Well of Deepening [] Reconditioning [] Abandon []		0 44
New Well [Deepening [Reconditioning [Abandon [If abandonment, describe material and procedure in Item 11.	Alla gray Tuffaccous 55.	79 83
PROPOSED USE (check): (5) TYPE OF WELL:	beself	83 101
Domestic M Industrial Municipal Rotary Driven Cable W Jetted		
Irrigation Test Well Other Cable W Jetted Dug Bored	Tulfaceous as	101 210
(6) CASING INSTALLED: Threaded Welded W		
(7) PERFORATIONS: Perforated?		
Type of perforator used		
SIZE of perforations in, by in ft to ft.	•	
perforations from ft. to ft.		
perforations from it to it.		
perforations from ft. to ft.		
perforations from ft. to ft.	· · · · · · · · · · · · · · · · · · ·	
(8) SCREENS: Well screen installed Tes: 12-No		
Manufacturer's Name Model No.		
Slot size Set from ft. to ft.		
Slot size Set from ft. to ft.	Work started /O 1957 Completed	11 1959
(A) CONCERNICATION.		
(9) CONSTRUCTION:	(13) PUMP:	r
Was well gravel packed? Yes Pro Size of gravel: Gravel pieced fromft. toft.	Manufacturer's Name	
Was a surface seal provided? ☐ Yes ☐ No To what depth? ft.	Type: Jet 1	LP.
Material used in seal—	Well Driller's Statement:	
Did any strata contain unusable water? [] Yes [No	This well was drilled under my jurisdiction a	nd this report is
Type of water? Depth of strata	true to the best of my knowledge and belief.	
Method of scaling strata off	NAME MARK CHRISTENSE	X
(10) WATER LEVELS:	(Person, firm, or corporation) (Ty Address 3550 W 18 H	pe or print)
Static level 42 ft below land surface Date /// 58		
Artesian pressure ibs. per square inch Date	Driller's well number	· ·
Log Accepted by:	[Signed] Mark (Well Deliler)	
[Signed] Date, 19,	License No. 97 Date Move	- 18 5 8

APR 24 1989

STATE OF OREGON

WATER WELL REPORT (as required by ORS 537.765)

WATER RESOURCES DEPT. SALEM, OREGON

LANE	. 10/1/1/1/
17031	18/4W/14ab
(START CARD)	9493

(1) OWNER: Well Number: Name TERRY LANGE A	(9) LOCATION OF WELL by legal description:	
WEST CHILDREN	County Latitude Longitude	
City JORINGFIELD State OR Zip 97477	Township 18 5 Nor S, Range 4 4 Eor W	, WML
(2) TYPE OF WORK:	Section 14 NW W NEW	
New Well Deepen Recondition Abandon	Tex Lot Block Subdivision_	111
(3) DRILL METHOD	Street Address of Well (or nearest address) 36514 LORAN EUGENE, UR	E May
	(10) STATIC WATER LEVEL:	
(4) PROPOSED USE:	20 ft. below land surface. Date 4/2	0/89
D Domestic Community Industrial Irrigation	Artesian pressure lb. par square inch. Data	
☐ Thermal ☐ Injection ☐ Other	(11) WATER BEARING ZONES:	_
(5) BORE HOLE CONSTRUCTION:	Depth at which water was first found 70	
Special Construction approval Yes No Depth of Completed Well 160 to	From To Estimated Flow Rate	8WL
Explosives used Type Amount	69 70 4	20
HOLE SEAL Amount	150 151 16	20
Diameter From To Material From To sacks or pounds		
10 0 40 CEMENT 0 40 13	(12) WELL LOG:	ليب
B 10 160	Liround elevation	
	Material From To	SWL.
How was seal placed: Method	Soil 0 3.	ļ
Other	BROWN CLAY 2' 16' 24'	
Backfill placed fromft_ toft. Material	BLUE CLAY 16. 24' 32'	
Gravel placed fromfi. toft. Size of gravel	BLUE ROCK 32' 160	20'
(6) CASING/LINER:		
Diameter From To Gauge Steel Plastic Welded Threaded Casing: 6 4/40 250 Di		
Casing 6 7 40 232 21		
		
Liner: 4/2 30 160 PRZG B D		
		1
Pinal location of shoe(s)		
(7) PERFORATIONS/SCREENS:		
Perforations Method JAW		
туре масела:	\$	├
Slot Tele/pipe From To size Number Diameter size Casing Liner		
140 155 18 75 41/2 0		
		
	Date started #/ 10/89 Completed #/2989	
(8) WELL TESTS: Minimum testing time is 1 hour	(unbonded) Water Well Constructor Certification:	
— " Klowing	I certify that the work I performed on the construction, alter abandonment of this well is in compliance with Oregon well con-	ation, or
	standards, waterials used and information reported above are true to	my best
	Allowiedks and better.	
	Signed Date	
Temperature of water Depth Artesian Flow Found	(bonded) Water Well Constructor Certification: I accept responsibility for the construction, alteration, or aband	lon
Was a water analysis done? Yes By whom	work penginged on this well during the construction dates reported a	house all
Did any strata contain water not suitable for intended use? Too little	construction standards. This report is true to the best of my knowle	nn mmll
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other		
Depth of atrata:	Signed Hanh Wilson Date 4/21	89

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		of oreg					CU	T 24 1568 " .	17022	0 x / Y	U.	790	
W	ATER W	ELL RE				W	AT COM	ECOURCES DEP	START CARDI	4465		<u> </u>	
(3)					ell Numb		U.F.E	(a(\f\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	OF WELL by le	agal das			
(1) Nan	OWNER Robe	ert Guni	ter	w	eu (vumt	ber			Latitude	gai des			
Add		1 Lora						Township_18	Nor 8 Range 4		_	_Bor 0	. WM.
Clty	Eugene			State Or	egon	Zip 971	105	Section14					,
(2)	TYPE O	F WORE	K:		_				Lot Block		Subd	livísion	
		☐ Deepen	☐ Reco	ndition	☐ A1	bandon		Street Address of \	Vell (or nearest address) _	вале			
<u>``</u> ,	DRILL		· ·					(10) CM A MICLE	17 A (T) 17 X Y) 17 Y				
	Rotury Air Other	Rotary	Mud ∐	Cable				l ' '	VATER LEVEL:	:	_	0.46	. 00
	PROPO	SED US	E:	•		*****	=====		below land surface. Ib. per squ			9-10	-00
			ity ☐ [ndu	atrial] Irrigat	tlon					Date		
	Chermal	☐ Injection	☐ Other					l ' '	BEARING ZONE	49:			
(5)	BORE	IOLE CO	NSTRUC			_		Depth at which water wa	,				
Spec	tal Construction	on approval Yea No	Yes No □ P1	Depth of	Complete	ed Well	270_n	From	To	Estimet	ed Flov	v Rate	SWL
	osives used			Az	mount _			128	129	2			51
_	HOLE		818	AL		Am	ount			 			
Dia 1	meter From		Material Ment	From	то 19		pounda						\vdash
_	8 19		ment	19	- 19 51	9		(12) WELL LO	G: Ground elevat	ia-			
		7-							Material		From	To	SWL
	6 91	270				1		Brown clay			0	9	3,72
	-	d Method		Dic [] a [⊒ B		Black basal			9	39	
	Other				<u> </u>			Blue sandst	one		39	70	
	rill placed from al piaced from		to ft. to ft.					n Red Shale	caving		70	72	\sqcup
	CASING			012001	marei _		 .	Blue shale	caving		72	<u>78</u> 88	├─┤
(0)	Diameter	•	To Gauge	Steal Pi	astic V	Welded T	hreaded	Red shale Blue sandst	caving one med hd		<u>78</u> 88	200	
Cast	աց 6	+1	92 .250			X		Red shale	- III	- 1	200	210	
				7				Black basal	t w/ quarts		210	245	
		 		1				Red shale	caving		245	254	
Line	r 4	0 2	70 160#	1	Ö	1 20	ii ii	Blue shale	naving		254	275	
] 🗇 🗼		ō							
Fina	location of sh	00(s)											
(7)	PERFO		S/SCREE									ļ	
	Perforation		ethod ‡Tr	ound he	olea_				 ·				
	☐ Screens		ype	———)		-		 					$\vdash \vdash \vdash$
Fr	oma To	Blot size N	umber Dlam	Telo eter si	/plp o zo	Casing	Liner						
-8	250	 -	500				X		• 1				
		 						 				ļ	
		1				H	H						┼
								Date started 9/1	5/88	pleted 9	/20/	88	
_		<u> </u>				. П							
(8)	WELL T	ESTS: M	linimum te	esting ti	ne is 1				Well Constructor Co e work I performed o			on, alter	ration, or
1	Pump	☐ Beile	, 🔀	Air		☐ Flowing ☐ Artesian	; 3	abandonment of this	well is in compliant used and information	e with Or	egon v	we∐ con	struction
Yı	eld gal/mln	Drawdo	wa D	rill stom at		Time		knowledge and belief.	used and information i	reported at	ove ar	re urue u	my best
	2		27	70		1 hr.						mber	
								Signed		Dat	<i></i>		
					$\perp \Gamma$				ll Constructor Certi			_	
	perature of wat			opth Artesis	ın Flow F	ound			ibility for the constru- is well during the con-				
	water analysi		∐Yes Bywl		Π	1241		work performed du	ring this time is in	compliar	ice w	ith Ore	gon well
			uitable for inte. Colored		∟i 'I`00	little		belief.	ls. This report is true			mber _	
	hofstrate:					-	·	Signed Coop of	2 Kann	Det	70 Nu	mber _ 2 2 2	-85
		m copy w	ATED DECOL	mana ppr	· Domes		OF GOS	D CODY CONCEDIO			~		

RECEIVED

STATE OF OREGON WATER WELL REPORT

	-1851	14W-1	£ .
is L	ANE	1700	25.3

(as required by ORS 537.765)	SEP 24 1987	•	<u></u>	WIL	1	100	3_
(1) OWNER: Well Number. Name Rudy Powell WATER RESOURCES		S DET LOCATION OF WELL by legal description:					
Address 26721 Pickens Rd.	Ounty 12010	Letitude	-1	Longitud	e	<u> </u>	
City Eugene State	Or. Zip 97402	LOWIGHT - 1	TOTO, runge			E or W,	WM.
(2) TYPE OF WORK:							
New Well Deepen Recondition	Tax Lot 4100 Lot Block Subdivision Street Address of Well (or nearest address) 86433 Lorane Hwy.						
(3) DRILL METHOD	Falgene Or						
II Rotary Air ☐ Rotary Mud ☐ Cable		· · · · · · · · · · · · · · · · · ·					
Other	<u> </u>	(10) STATIC WATER LEVEL: 100' n. below land surface. Date 8-28-87					
(4) PROPOSED USE:							
☑ Domestic ☐ Community ☐ Industrial							
Thermal Injection Other	(11) WATER BEARING ZONES:						
BORE HOLE CONSTRUCTION	:	Depth at which water was	first found3	501			
Special Construction approval Yes No Depth	From To Estimated Flow Rate			Rate	SWL		
	Amount	350	355!	L	73 80	m	100'
HOLE SEAL			.*c				
neter From To Material From	Amount sacks or pounds						<u> </u>
70" 0 58 Cement 0	58 15 sacks	(12) WELL 100		L			
6" 58 385	 	(12) WELL LOC	Ground elevati	on			
	· · · · · · · · · · · · · · · · · · ·		Material		From	То	SWL
How was seal placed: Method A B 22 C		Topsoil			0	1	
Other	- U L	Brown Clay			1	27	
Backfill placed fromft_ toft_ Mater	-ial	Brown Gray G		g	27	50	
Grevel placed fromft toftSize o		Gray Green Co			50	78	
(6) CASING/LINER:		Basalt	YA		78 133	133	\vdash
Diameter From To Gauge Steel	Plastic Welded Threaded	Light Green	Sandstone so	Pt.	138	138 223	
Cusing 6" +1 59 -250 🖾		Gray Green Se			223	255	-
		Gray Blue Gre			255	330	
		Brown Clayate	one		330	244	
Liner: 43" 0 385 PVC		Gray Green Sa	ndy Cong.		344	385	100
		l 					
al location of shoe(s)							
(7) PERFORATIONS/SCREENS:							
Perforations Method BBW							
Screens Type	Material		:				
	s/pipe						
	tize Casing Liner]	I		
		 					
		 			\longrightarrow		
					\rightarrow		$\overline{}$
	🗆 🖂	Date started 8-27	-87 Comp	leted	8-28	-87	
(a) YEAV A TRACTOR				-			
(8) WELL TESTS: Minimum testing time is 1 hour Plowing Artesian Qualification I certify that the work I performed on the construction, alteration, or attandance of this well is in compliance with Oregon well construction attandance Materials used in compliance with Oregon well construction						tion, or	
□ Pump □ Beiler □ X Air	abandonment of this	vell is in combliance	with O	ragon w	ell const	nuction	
Yield gal/min Drawdown Drill stem :	standards. Materials us knowledge and belief.	and minkwetton to	ported a	BIR SVOOL	true to	my best	
7 ½ gpm 285 385	1 hr.	2.xM.	A.	W	WC Nun		1344
		Signed FOT W	erry.	Da	te{	8-28-1	B7
		(bonded) Water Well	Constructor Certifi	cation:			
emperature of water Dopth Artes	I accept responsible	lity for the construct	tion alte	ration, o	abanda r	onment	
Was a water analysis done? Yes By whom	work performed on this well during the construction dates reported above, all work performed during this time is in compliance with Orsean well						
Did any strata contain water not sultable for intended use?	construction attandards.	This report is true t	o the be	at of my	knowled	ge and .	
Salty Muddy Odor Colored Other	belief.	\mathcal{A}		WC Num	_{ber} _5;	59	
Depth of strata:	Signed	- Junea	Da	te	3-28-8	57	
WHITE COPIES - WATER RESOURCES DEPARTMEN	TYELLOW CO	PY - CONSTRUCTOR	PINK COPY	-CUST	MER	980	09C 10/86
	·						

STATE OF OREGON WATER WELL REPORT (as required by ORS 537.765)

WATER REPORTATION INDENT

RECEIVED LANE 1844W-14

JAN 30 1985

THESE EXPROSPRING PORTY (for otheral use only)

SALEM.	OREGON
(1) OWNER:	(10) LOCATION OF WELL by legal description:
Name Bob FAGEISTAN	County LANE 4 4 of Section 9
Address P.O. Box / 10202_	Township Range WM.
City Excess State CRE	(Township is North or South) (Range is East or West) Tex Lot Lot Stock Subdivision
(2) TYPE OF WORK (check):	MAILING ADDRESS OF WELL (or nearest address) 86279 LOCALE
New Weil □ Deepening □ Reconditioning ★ Abandon □	HWY ELGENE
If abandonment, describe material and procedure in Item 12.	
(3) TYPE OF WELL: (4) PROPOSED USE (check):	(11) WATER LEVEL of COMPLETED WELL:
Botary And Driver Doccastle Municipal Doccastle	Depth at which water was first found
Rosary Must Dug Irrigation Thermal Reinjection	Static level 22 ft. below land surface. Date //28
Other	Artesian pressure ibs. per square inch. Date
Cole Bornd Piezometric Grounding Test	(12) WELL LOG: Diameter of well below casing 4 6
(5) CASING INSTALLED: Steel Plostic	Depth drilled R. Depth of completed well SX A.
EXISTING Threaded Welded	Formation: Describe color, texts fire, grain size and structure of materials; and show thickness and nature of each stratum and equifer penetrated, with at least one entry for each change of
Diam from ft. Gauge	formation. Report each change in position of Static Water Level and indicate principal
Diam from ft. Gauge	water bearing strata.
LINER INSTALLED: Steel Plastic Threaded Welded	MATERIAL From To SWL
"Diam from ft. to ft. Gauge	
(6) PERFORATIONS: Perforated?	· · · · · · · · · · · · · · · · · · ·
	WELL DRILED FOR
perforations from ft. to ft.	WoyNe Weber
	1-1/2/2/2/2/2
(7) SCREENS: Well screen installed? Yes Yes	- 6/AT/18 133
Manufacturer's Name	
Type Model No Slot Size Set from ft_ to ft_	MELL GADUTED WITH
Diam. Set Size Set from 1. to 1.	
Powder is a set wet find a larger	Coment from 155 to BY
(8) WELL TESTS: Drawdown is amount water level is lowered below static level	
Was a pump test made? Tes No If yes, by whom? Clarence here !	ung HumpED than teined
d: 7/2 gal/min. with O ft. drawdown after hra.	
	12 SACKS CEMENT
Air test gal./min. with drill stem at ft. hrs.	
Bailer test gal./min. with ft. drawdown after hrs.	
Artesian flow g.p.m.	
perature of water Depth artesian flow encounteredft.	Date work started 125/85 /completed 168/85
(9) CONSTRUCTION: Special standards: Yes No	Date well drilling machino moved off of well 19
Well seal—Material used	(unbonded) Water Well Constructor Certification (if applicable):
Well sealed from land surface tof	This well was constructed under my direct supervision. Materials used and
Diameter of well bore to bottom of seal at the fine	information reported above are true to my best knowledge and belief.
Diameter of well bore below sealin.	[Signed] Date 19
Amount of sealing material acks of pounds How was cement group piecests	
now was cement group placed	(bonded) Water Well Constructor Certification
	Bond JET 655 Astrued by: PAYERS (manper) Surety Company Name)
Was pump inotal/od?Type HP Depth ft.	On hehalf of Chelstonian Lange Delical Car
Was a drive shoe used? Yes No Plugs Size: location ft.	(type or print name of Water Will Constructor)
Did any strata contain unusable water? Yes No	This well was drilled under my jurisdiction and this report is true to the
Type of Water? depth of strata	best of my knowledge and belief:
Method of sealing strata off	(Signed) Hand Christian U-Pres
Was well gravel packed? ☐ Yes 🖟 🛪 Size of gravel:	(Water Well Constructor)
Gravel placed from	(Dated)

NOTICE TO WATER WELL CONSTRUCTOR The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT, SALEM, OREGON 97810 within 30 days from the date of well completion.