



Central Sands Private Well Network

Appendix 1

January 2012

In accordance with the Americans with Disabilities Act, this information is available in alternative forms of communication upon request by calling 651/201-6000. TTY users can call the Minnesota Relay Service at 711 or 1-800-627-3529. The MDA is an equal opportunity employer and provider.

Table 1. Summary results for the question: What is the water source?

Q3. What is the Water Source for This Well?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	< 3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Country/Rural	1,176	101	70	1,347
Subdivision	22	3	2	27
Lake Home	177	0	0	1,77
Other	1	3	0	4
Total	1,376	107	72	1,555

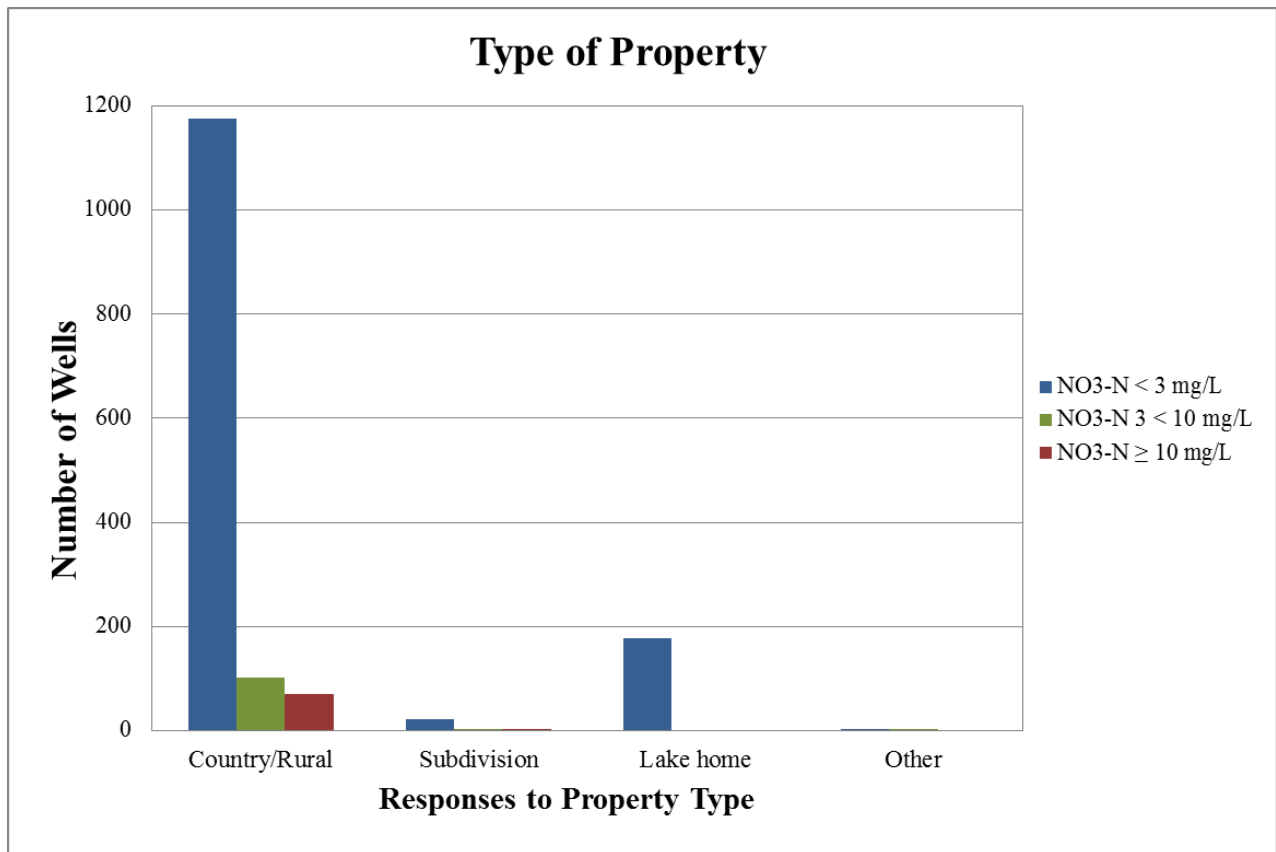


Figure 1. Summary results for the question: What is the water source?

Table 2. Summary results for the question: Do you have ten head of cattle or thirty head of hogs, or the equivalent of other livestock?

Q4. Do You Have 10 Head of Cattle or 30 Head of Hogs, or the Equivalent of Other Livestock?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	< 3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Yes	254	22	17	293
No	914	77	52	1,043
Blank	208	8	3	219
Total	1,376	107	72	1,555

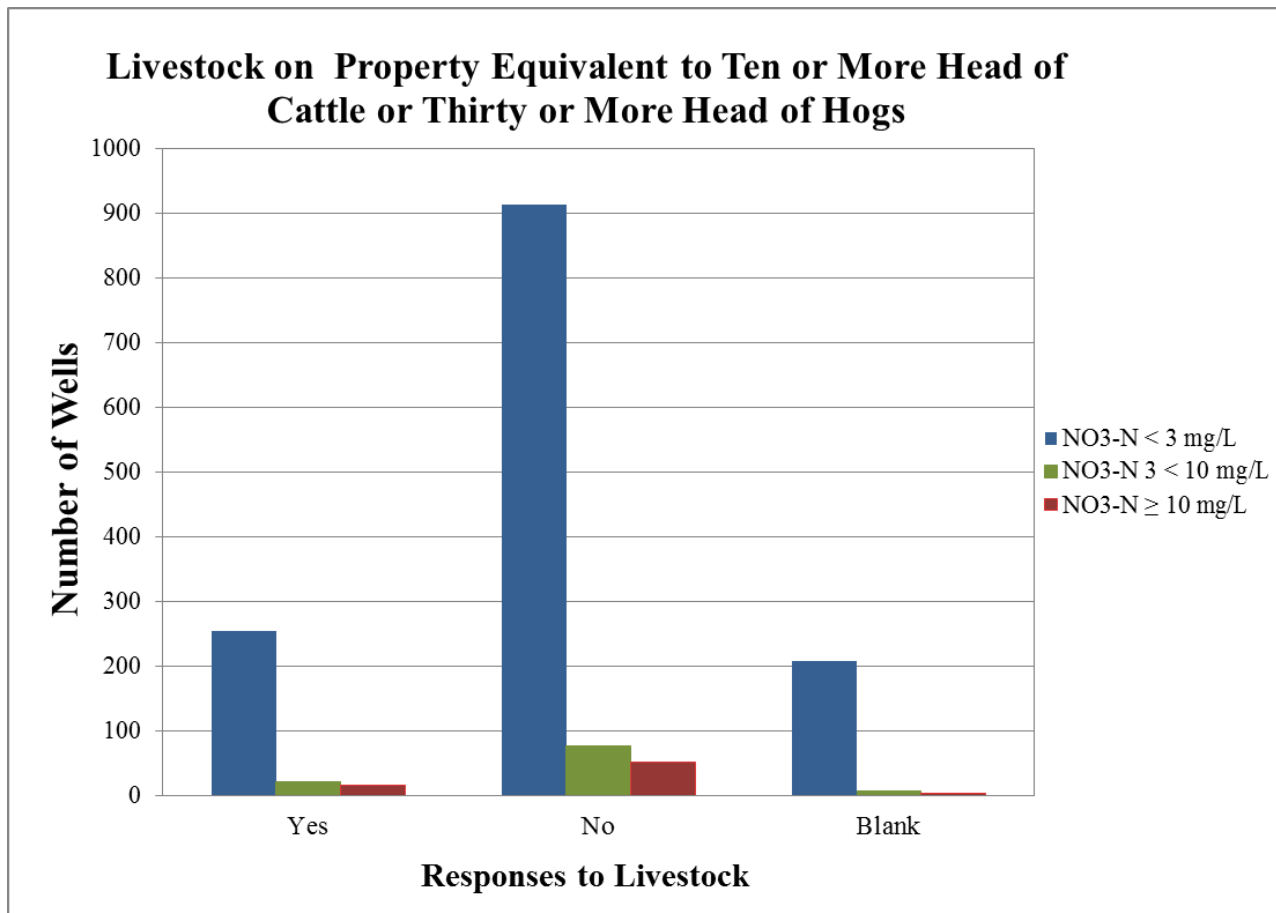


Figure 2. Summary results for the question: Do you have ten head of cattle or thirty head of hogs, or the equivalent of other livestock?

Table 3. Summary results for the question: Do you mix or store 500 pounds or more of fertilizer on this property?

Q5. Do You Mix or Store 500 lbs or More of Fertilizer on This Property?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	< 3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Yes	49	1	2	52
No	1,117	99	67	1,283
Blank	210	7	3	220
Total	1,376	107	72	1,555

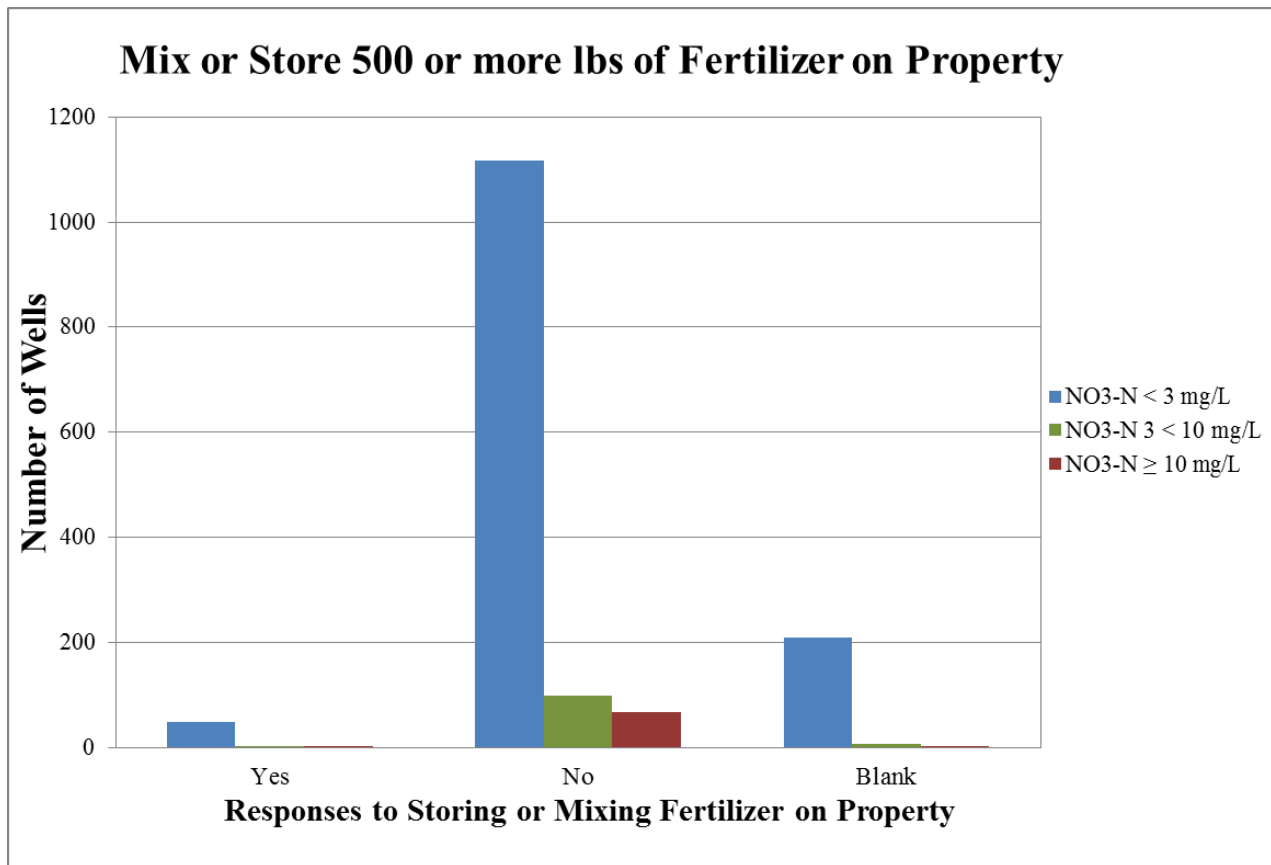


Figure 3. Summary results for the question: Do you mix or store 500 pounds or more of fertilizer on this property?

Table 4. Summary results for the question: Do you or your spouse farm this property?

Q6. Do You or Your Spouse Farm This Property?	Nitrate Concentration (NO3-N)			Total Number of Wells
	<3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Yes	465	43	39	547
No	699	56	30	785
Blank	212	8	3	223
Total	1,376	107	72	1,555

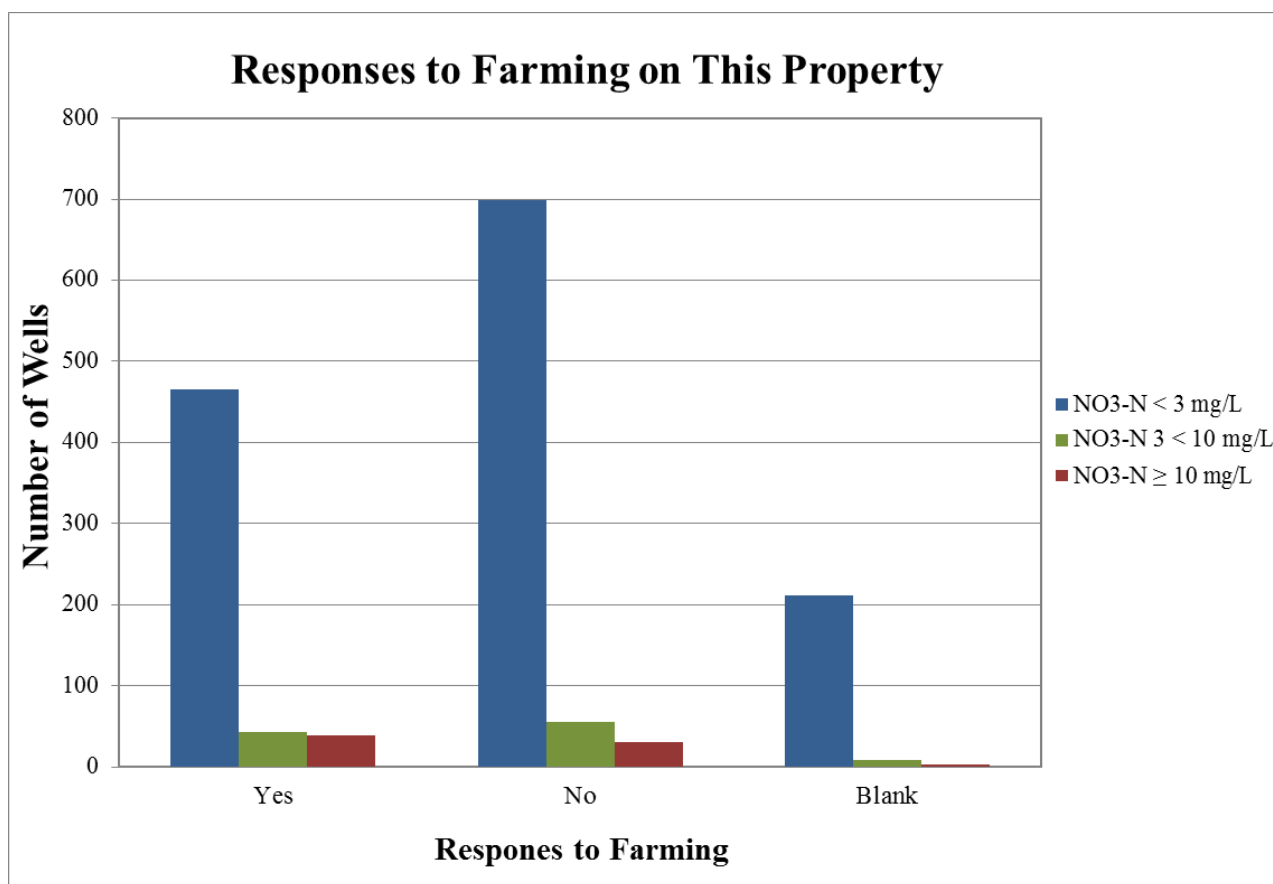


Figure 4. Summary results for the question: Do you or your spouse farm this property?

Table 5. Summary results for the question: Does this Well Have a County Well Index Number?

Q7. Does this Well Have a County Well Index Number?	Nitrate Concentration (NO3-N)			Total Number of Wells
	< 3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Yes	183	8	2	193
No	249	39	29	317
Blank	944	60	41	1,045
Total	1,376	107	72	1,555

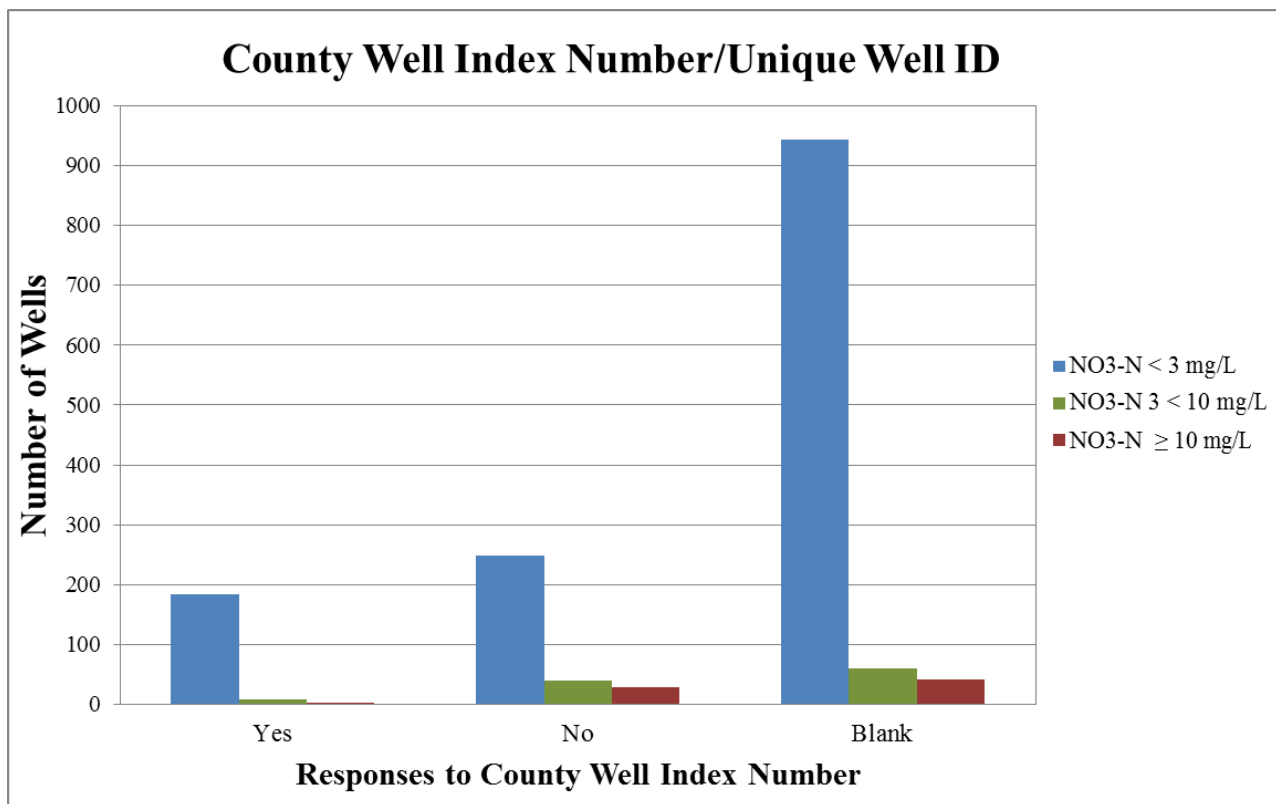


Figure 5. Summary results for the question: Does this Well Have a County Well Index Number

Table 6. Summary results for the question: What type of well construction was used?

Q8. Type of Well Construction	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	< 3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Drilled	1,191	66	41	1,298
Sandpoint	97	26	16	139
Hand Dug	11	8	11	30
Flowing	4	0	0	4
Don't Know	72	6	4	82
Other	1	1	0	2
Totals	1,376	107	72	1,555

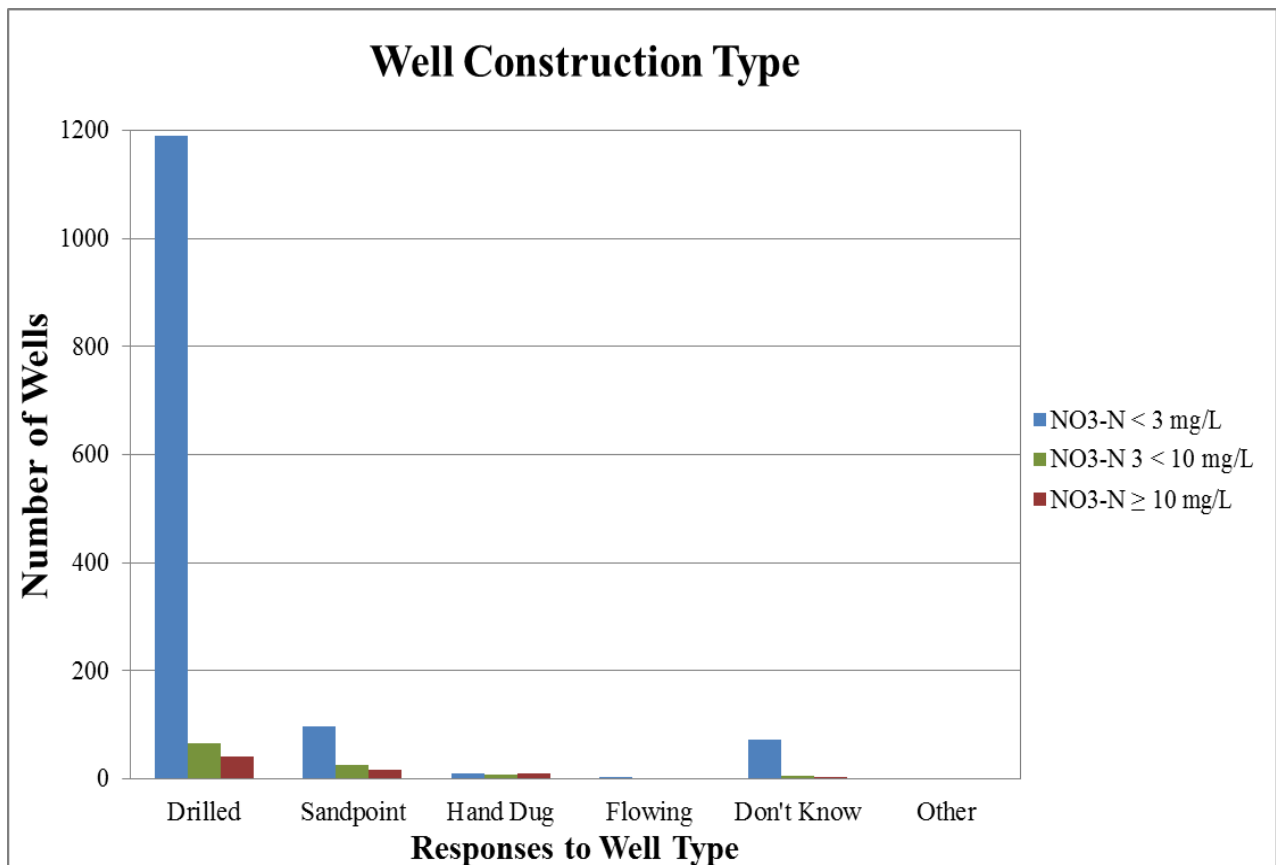


Figure 6. Summary results for the question: Type of well construction used?

Table 7. Summary results for the question: How old is the well?

Q9. How Old is the Well?	Nitrate Concentration (NO3-N)			Total Number of Wells
	< 3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
0-10	337	20	11	368
11 to 20	375	20	11	406
21 to 50	502	44	26	572
>50	96	18	19	133
Don't Know	66	5	5	76
Totals	1,376	107	72	1,555

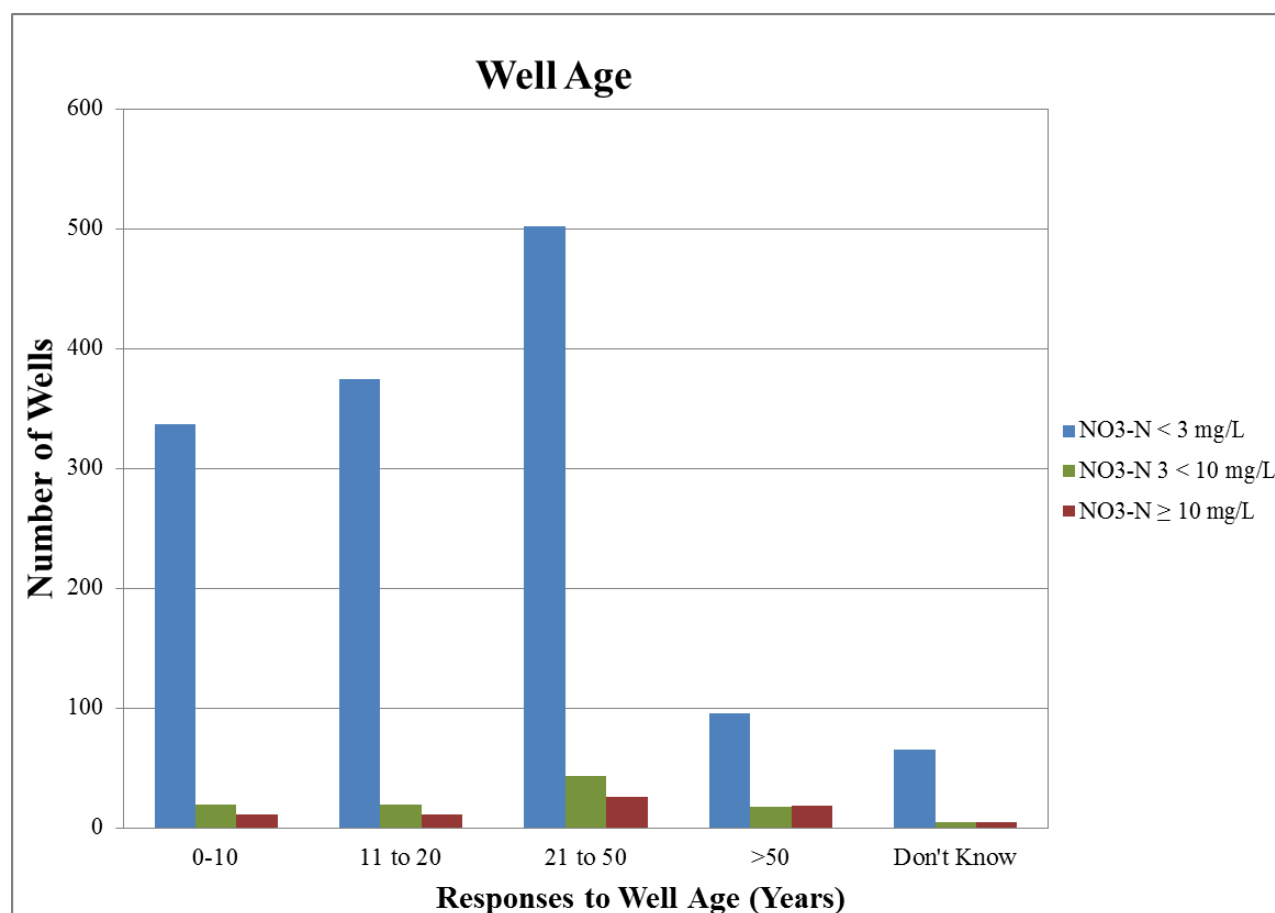


Figure 7. Summary results for the question: How old is the well?

Table 8. Summary results for the question: What is the depth of the well?

Q10. What is the Depth of the Well?	Nitrate Concentration (NO3-N)			Total Number of Wells
	< 3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
0 to 50	156	47	33	236
51 to 100	597	39	32	668
101 to 300	490	10	5	505
>300	21	0	0	21
Don't Know	112	11	2	125
Totals	1,376	107	72	1,555

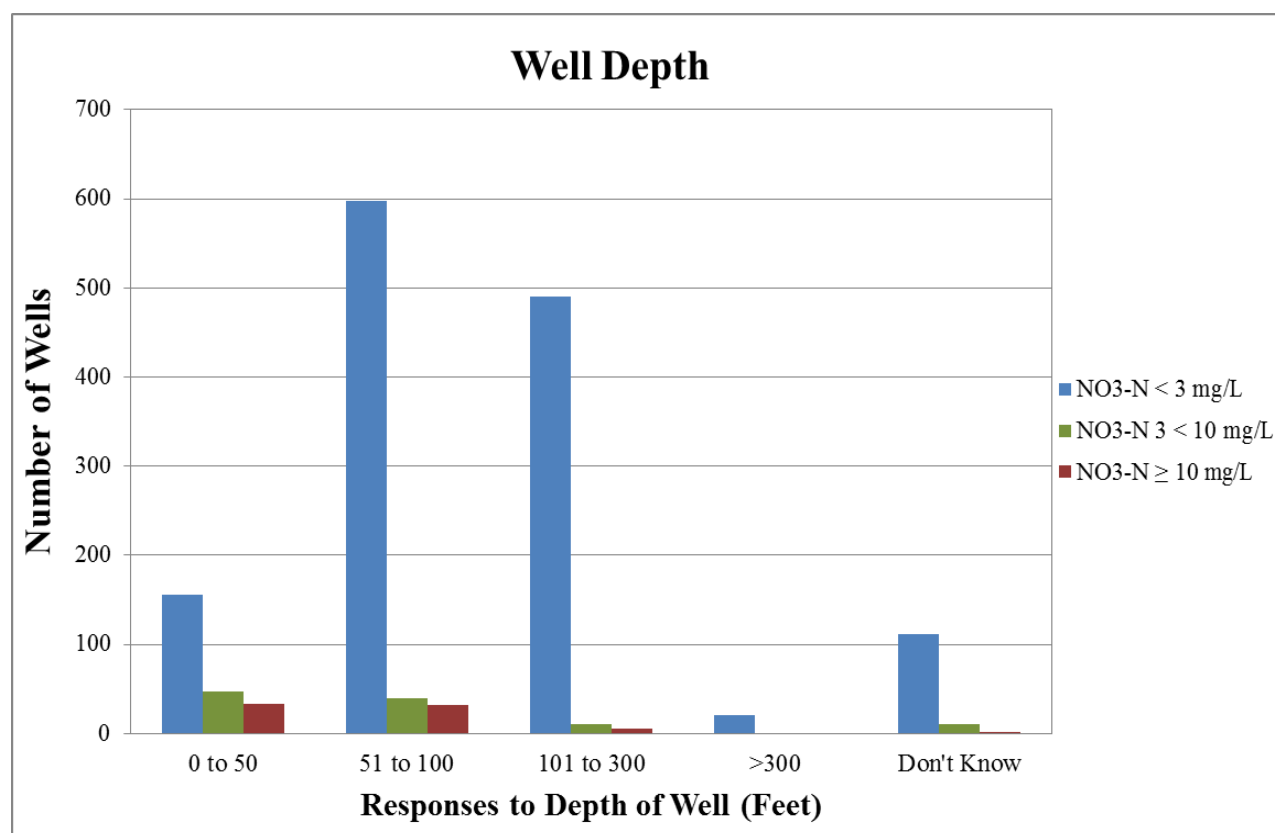


Figure 8. Summary results for the question: What is the depth of the well?

Table 9. Summary results for the question: What is the distance to a septic system?

Q11. What is the Distance to a Septic System?	Nitrate Concentration (NO3-N)			Total Number of Wells
	<3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
0 to 50	42	4	7	53
51 to 100	525	41	21	587
101 to 300	601	47	33	681
>300	166	11	9	186
Don't Know	7	0	0	7
No Septic	35	4	2	41
Total	1,376	107	72	1,555

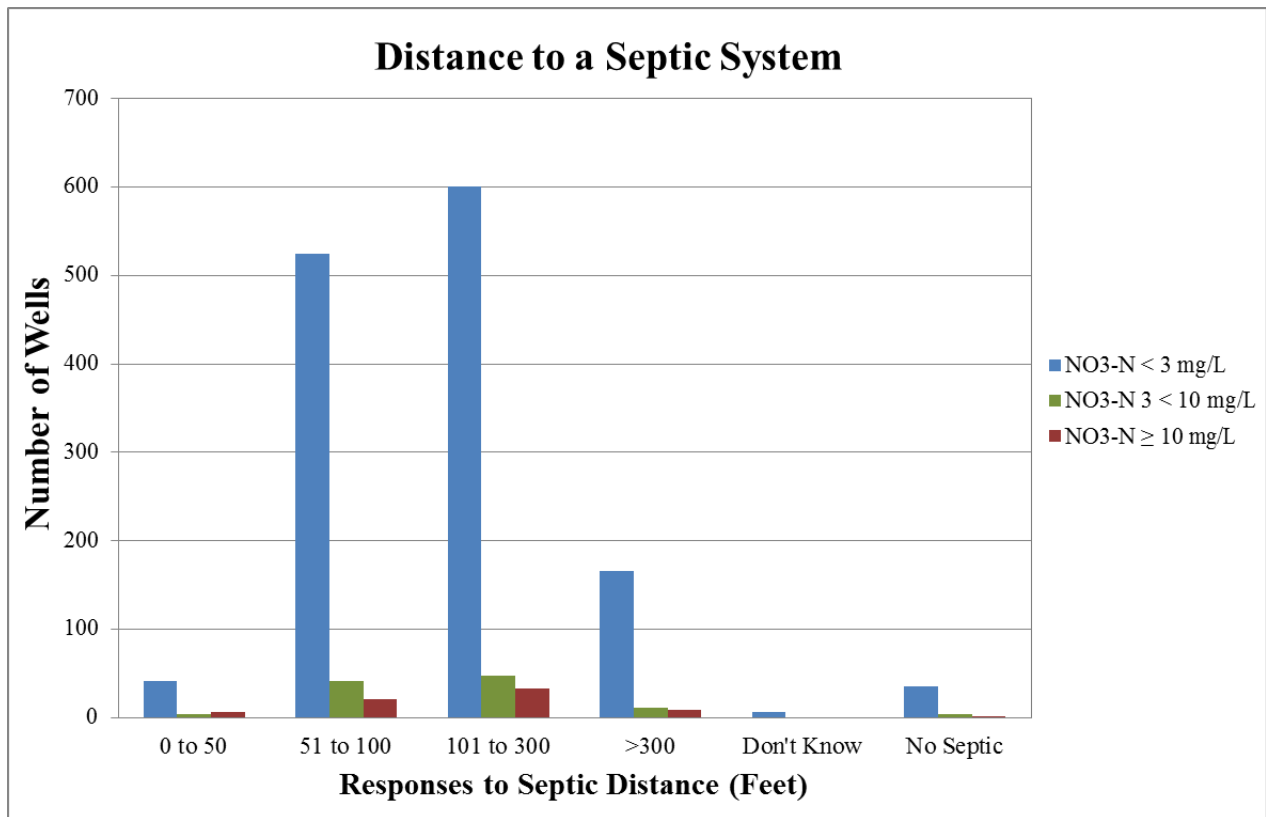


Figure 9. Summary results for the question: What is the distance to a septic system?

Table 10. Summary results for the question: What is the distance to an agricultural field?

Q12. What is the Distance to an Agricultural Field?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	<3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
0 to 50	58	7	5	70
51 to 100	132	13	5	150
101 to 300	362	36	33	431
>300	744	47	29	820
Don't Know	80	4	0	84
Total	1,376	107	72	1,555

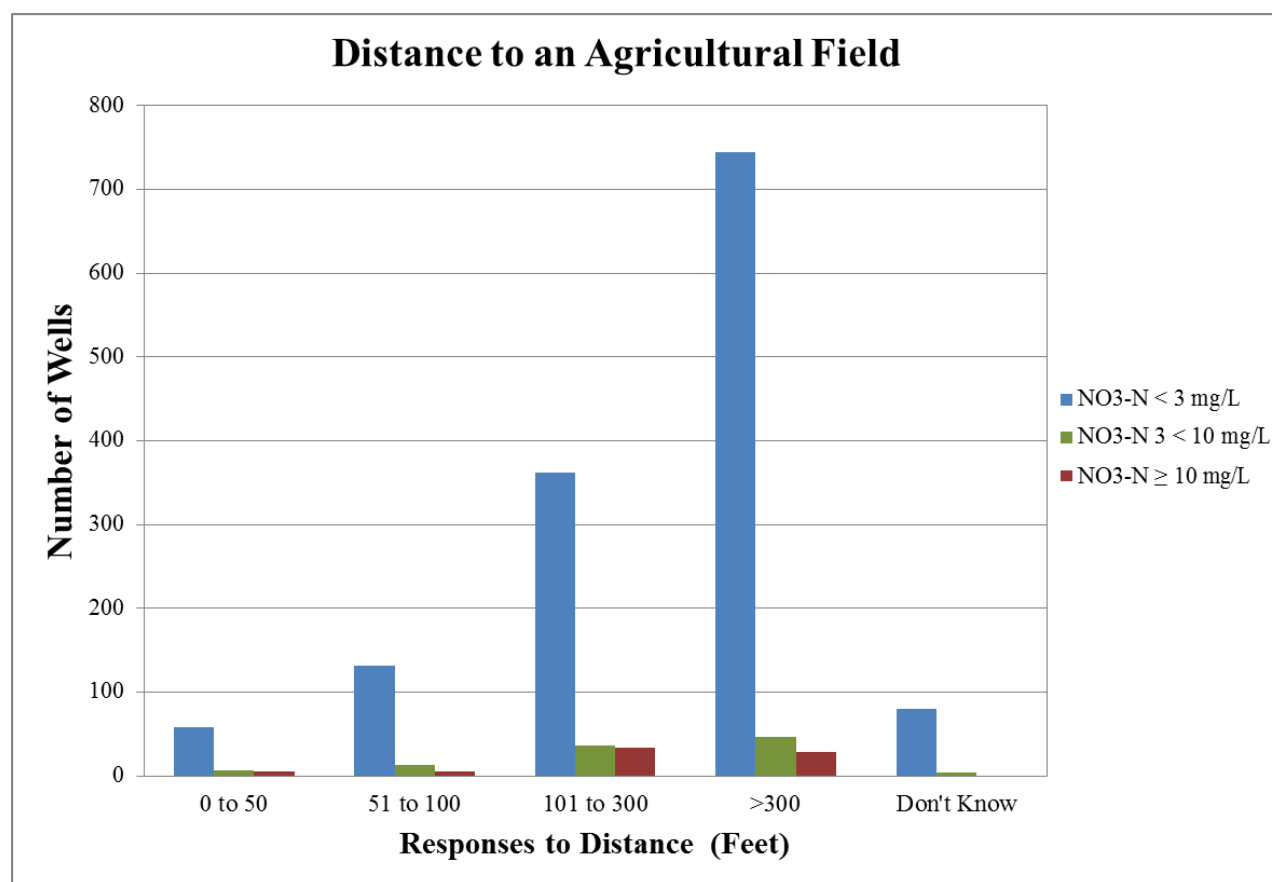


Figure 10. Summary results for the question: What is the distance to an agricultural field?

Table 11. Summary results for the question: What is the distance to an active or inactive feedlot?

Q13. What is the Distance To an Active or Inactive Feedlot?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	<3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
0 to 50	44	6	2	52
51 to 100	75	7	4	86
101 to 300	209	14	13	236
>300	783	58	41	882
Don't Know	197	17	4	218
No feedlot	61	5	8	74
Blank	7	0	0	7
Total	1,376	107	72	1,555

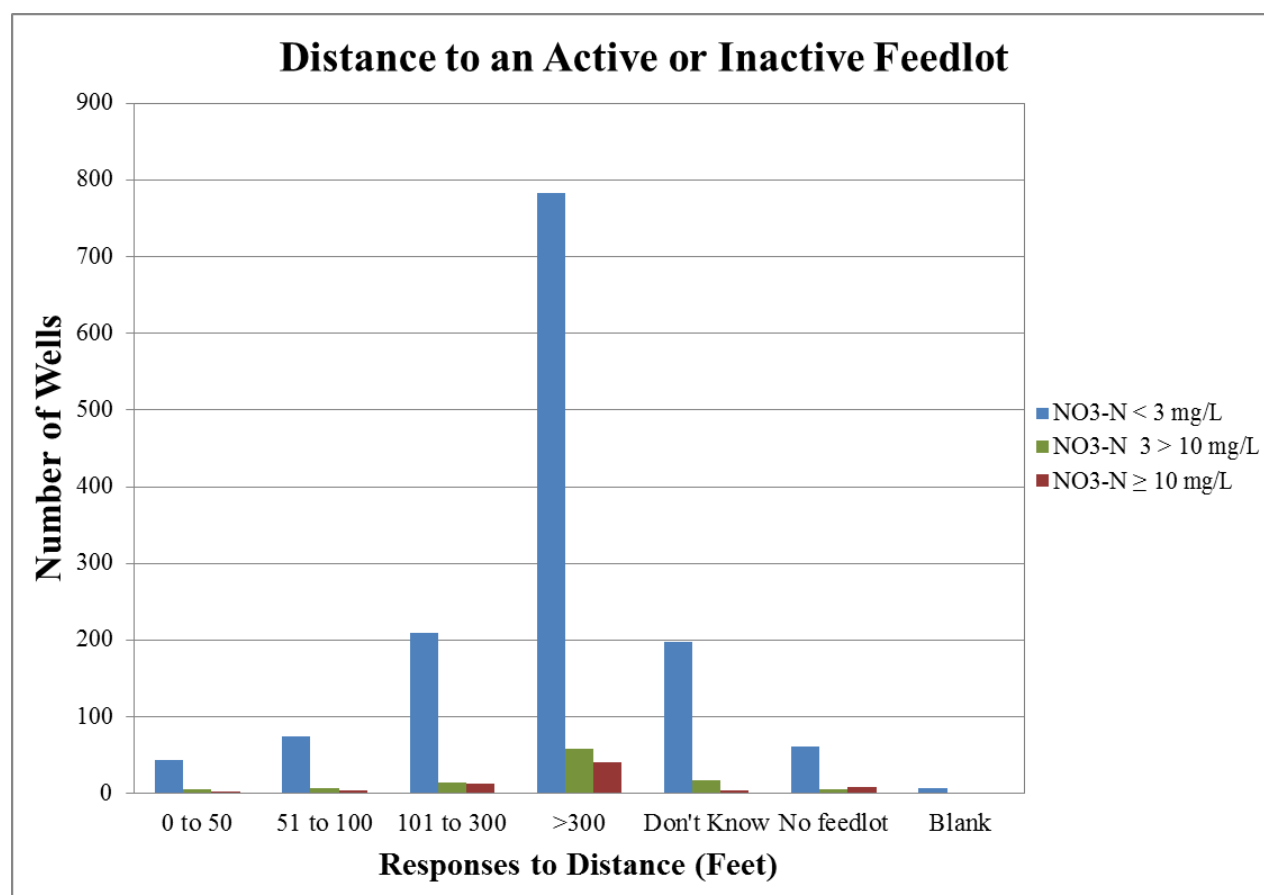


Figure 11. Summary results for the question: What is the distance to an active or inactive feedlot?

Table 12. Summary results for the question: Is this water used for human consumption?

Q14. Is This Water Used for Human Consumption?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	<3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Yes	1,365	106	68	1,539
No	9	1	4	14
Blank	2	0	0	2
Total	1,376	107	72	1,555

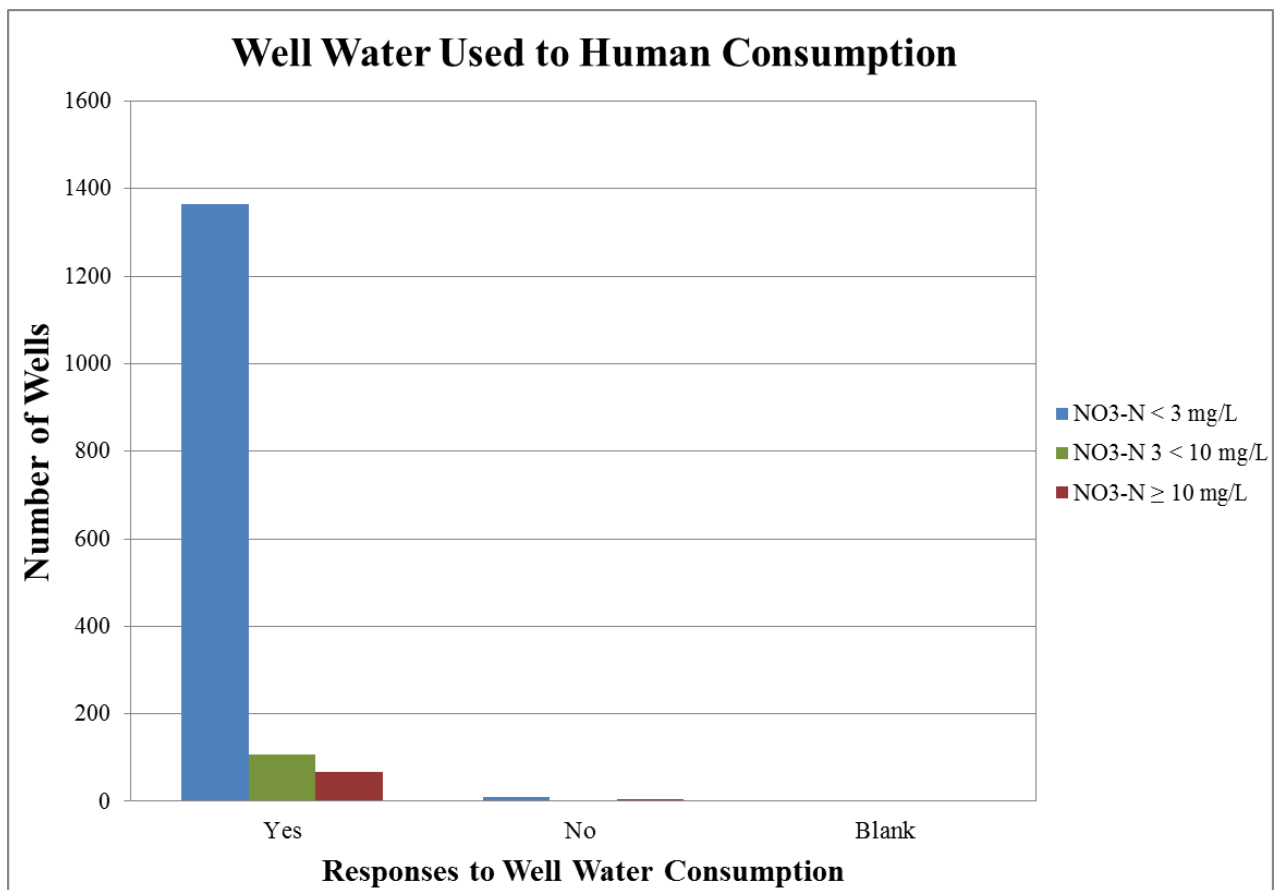


Figure 12. Summary results for the question: Is this water used for human consumption?

Table 13. Summary results for the question: Do you use a reverse osmosis treatment system?

Q15a. Do You Use a Reverse Osmosis Treatment System?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	< 3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Yes	129	7	9	145
No	1,244	100	63	1,407
Blank	3	0	0	3
Total	1,376	107	72	1,555

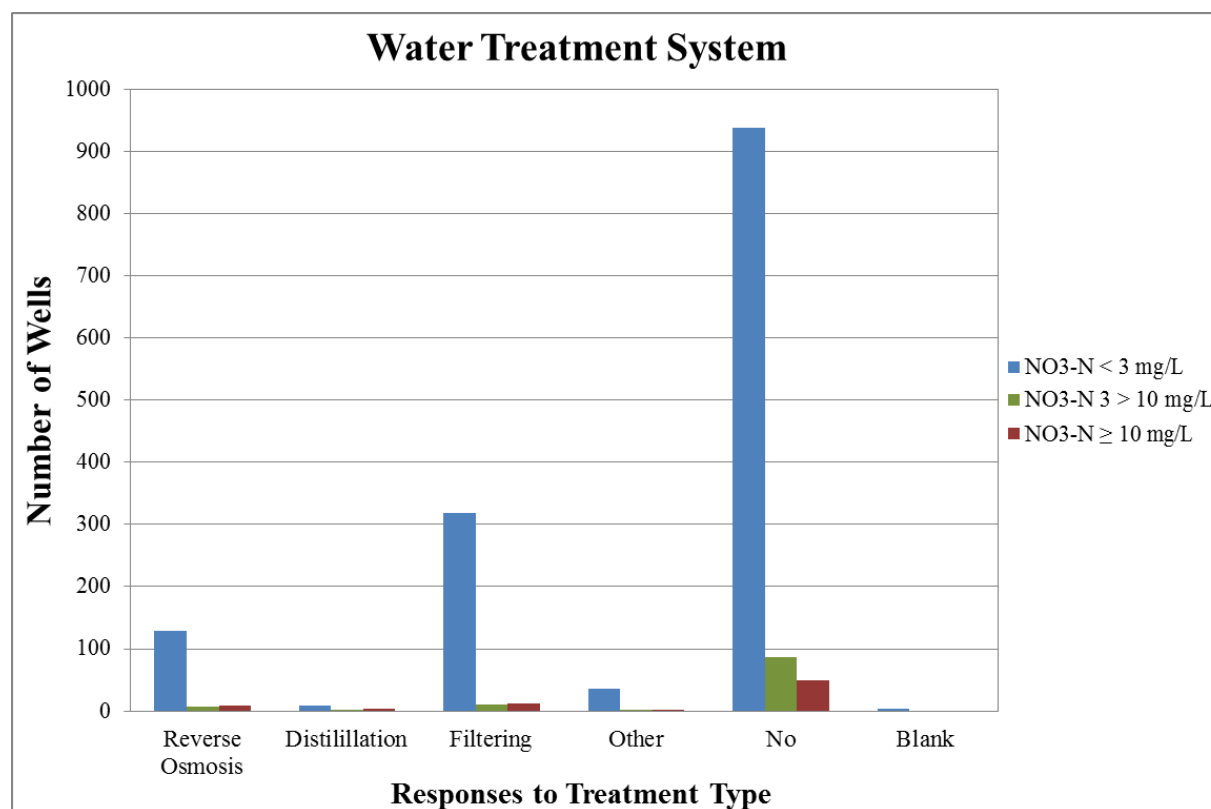


Figure 13. Summary results for the question: Do you use a treatment system?

Table 14. Summary results for the question: Do you use a distillation treatment system?

Q15b. Do You Use a Distillation Treatment System?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	<3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Yes	129	1	3	133
No	1,244	106	69	1,419
Blank	3	0	0	3
Total	1,376	107	72	1,555

Table 15. Summary results for the question: Do you use a filtering treatment system?

Q15c. Do You Use a Filtering Treatment System?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	<3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Yes	318	11	12	341
No	1,055	96	60	1,211
Blank	3	0	0	3
Total	1,376	107	72	1,555

Table 16. Summary results for the question: Do you use another treatment system?

Q15d. Do You Use Another Treatment System?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	<3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Yes	35	2	1	38
No	1,338	105	71	1,514
Blank	3	0	0	3
Total	1,376	107	72	1,555

Table 17. Summary results for the question: Do you use any treatment system?

Q15e. Do You Use Any Treatment System?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	<3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
Yes	435	21	21	477
No	938	86	51	1,075
Blank	3	0	0	3
Total	1,376	107	72	1,555

Table 18. Summary results for the question: When did you last have your water tested?

Q16. When Did You Last Have Your Water Tested?	Nitrate Concentration (NO ₃ -N)			Total Number of Wells
	<3 mg/L Number of Wells	3 < 10 mg/L Number of Wells	≥ 10 mg/L Number of Wells	
< 1	52	6	5	63
1 to 3	127	15	12	154
3 to 10	319	26	13	358
> 10	267	24	17	308
Don't Know	291	17	9	317
Never	320	19	16	355
Total	1,376	107	72	1,555

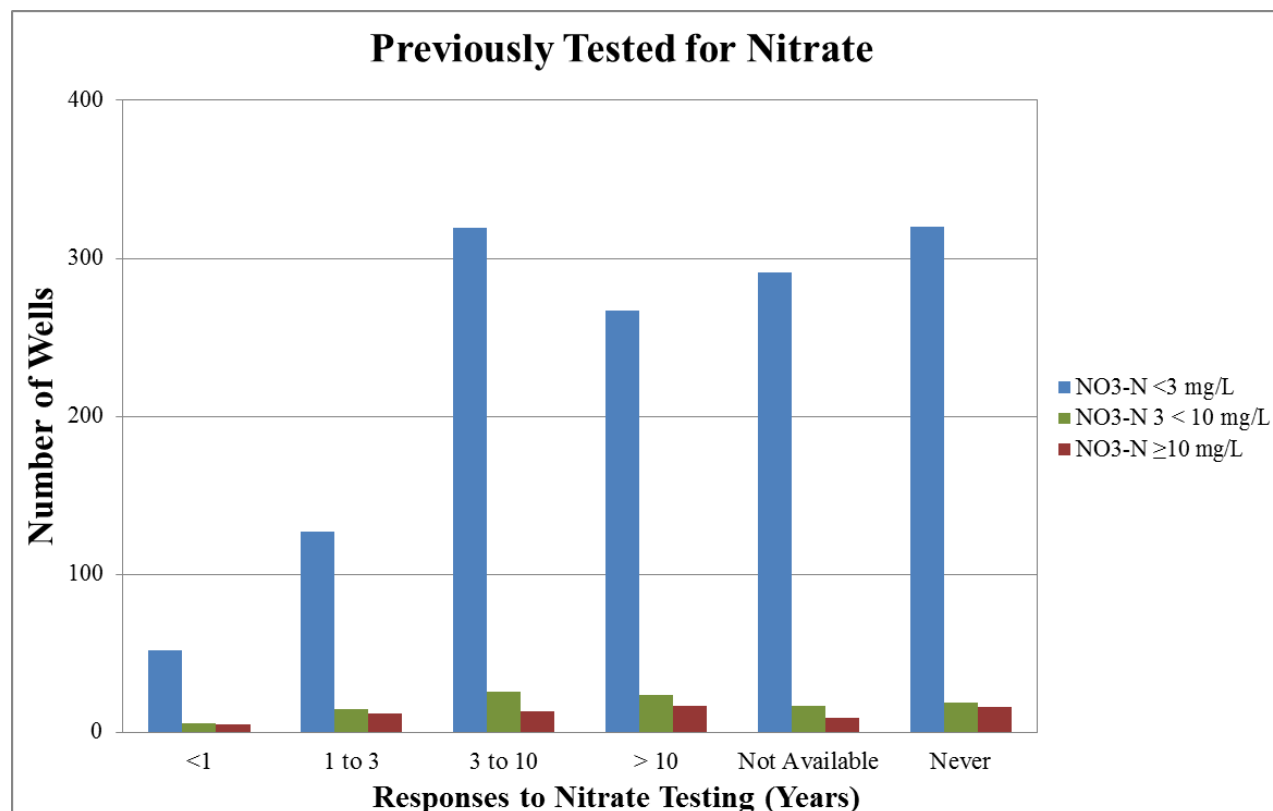


Figure 14. Summary results for the question: When did you last have your water tested?