APPENDIX H

STATISTICAL ANALYSIS SUMMARY
(Provided in Electronic Format via CD Located on Front Cover of Report)

Mann-Kendall Trend Analysis

For each monitoring well, a Mann-Kendall test for temporal trend (Gilbert 1987) was conducted for all analytes with 4 or more samples. Mann-Kendall Trend Analysis was performed using ProUCL version 5.2, an environmental statistical analysis package available from the U.S. Environmental Protection Agency. ProUCL is a statistical data analysis software for environmental data containing both detects and non-detects. The software was designed for use by the U.S Environmental Protection Agency and its contractors, but has been made available for free to those who work and study in environmental fields (Singh et al. $2015_{a,b,c}$)

Time series data was entered into ProUCL, and the Mann-Kendal trend analysis was selected with a 95 percent confidence interval and a Theil-Sen slope trend line. ProUCL then calculates general statistics including the mean and standard deviation, the values of S, normalized S, the standard deviation of S, and the Theil-Sen slope (Singh et al. $2015_{a,b,c}$). Trends were characterized as increasing if the standardized value of S was greater than zero and the p-value was less than 0.05. Trends were considered decreasing if the standardized value of S was less than zero and the p-value was less than 0.05. Analysis results with a p-value equal to or greater than 0.05 were classified as stable.

References

Gilbert, R.O. 1987. Statistical methods for environmental pollution monitoring, New York: Van Nostrand Reinhold.

Singh, A. Ph.D., Singh, A.K., Ph.D. 1995_a. *ProUCL Version 5.1.002 Technical Guide, Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations.* U.S. Environmental Protection Agency. www.epa.gov. October.

Singh, A. Ph.D., Singh, A.K., PhD. 1995_b. *ProUCL Version 5.1.002 User Guide, Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations.* U.S. Environmental Protection Agency. www.epa.gov. October.

Singh, A.Ph.D., Singh, A.K. PhD. 1995_c. ProUCL Version 5.1.002. U.S. Environmental Protection Agency. www.epa.gov. October.

Grouping	Date Sampled	Julian Date	Nitrate as N (mg/l)	D Nitrate	Chloride (mg/l)	D Chloride	TDS (mg/l)	D TDS
DAD-01	1-Mar-24	45352.00	11	1	420	1	1,520	1
DAD-01	5-Dec-23	45265.00	11	1	360	1	1,450	1
DAD-01	30-Aug-23	45168.00	13	1	390	1	1,310	1
DAD-01	25-May-23	45071.00	13	1	370	1	1,460	1
DAD-01	2-Mar-23	44987.00	16	1	470	1	1,690	1
DAD-01	1-Dec-22	44896.00	12	1	420	1	1,520	1
DAD-01	24-Aug-22	44797.00	10	1	360	1	1,520	1
DAD-01	24-May-22	44705.00	16	1	370	1	1,530	1
DAD-01	3-Mar-22	44623.00	20	1	420	1	1,750	1
DAD-01	23-Nov-21	44523.00	18	1	380	1	819	1
DAD-01	25-Aug-21	44433.00	20	1	350	1	1,520	1
DAD-01	1-Jun-21	44348.00	19	1	340	1	1,510	1
DAD-01	1-Mar-21	44256.00	18	1	410	1	1,660	1
DAD-01	30-Nov-20	44165.00	16	1	430	1	1,640	1
DAD-01	27-Aug-20	44070.00	16	1	310	1	1,390	1
DAD-01	29-May-20	43980.00	15	1	310	1	1,420	1
DAD-01	21-Feb-20	43882.00	13	1	420	1	1,740	1
DAD-01	3-Dec-19	43802.00	12	1	360	1	1,500	1
DAD-01	19-Aug-19	43696.00	12	1	290	1	1,520	1
DAD-01	22-May-19	43607.00	13	1	300	1	1,420	1
DAD-01	5-Mar-19	43529.00	11	1	350	1	1,690	1
DAD-01	28-Nov-18	43432.00	12	1	320	1	1,430	1
DAD-01	24-Aug-18	43336.00	15	1	280	1	1,350	1
DAD-01	31-May-18	43251.00	15	1	250	1	1,310	1
DAD-01	26-Feb-18	43157.00	9.5	1	350	1	1,520	1
DAD-01	20-Nov-17	43059.00	9.46	1	400	1	1,500	1
DAD-01	24-Aug-17	42971.00	10.4	1	396	1	1,560	1
DAD-01	8-Jun-17	42894.00	17.0	1	354	1	1,600	1
DAD-01	7-Mar-17	42801.00	7.90	1	438	1	1,620	1
DAD-01	30-Nov-16	42704.00	5.19	1	482	1	1,690	1
DAD-01	6-Sep-16	42619.00	5.35	1	502	1	1,580	1
DAD-01	2-Jun-16	42523.00	3.27	1	457	1	1,730	1
DAD-01	25-Feb-16	42425.00	2.70	1	512	1	1,770	1
DAD-01	23-Nov-15	42331.00	4.17	1	491	1	1,680	1
DAD-02	4-Mar-24	45355.00	6.4	1	700	1	2,200	1
DAD-02	6-Dec-23	45266.00	6.5	1	670	1	2,290	1
DAD-02	5-Sep-23	45174.00	6.9	1	610	1	2,070	1
DAD-02	26-May-23	45072.00	8.4	1	460	1	1,610	1
DAD-02	3-Mar-23	44988.00	9.2	1	400	1	1,480	1
DAD-02	5-Dec-22	44900.00	8.7	1	380	1	1,560	1
DAD-02	26-Aug-22	44799.00	9.6	1	350	1	1,540	1
DAD-02	25-May-22	44706.00	9.5	1	310	1	1,280	1
DAD-02	16-Mar-22	44636.00	8.8	1	300	1	1,230	1
DAD-02	30-Nov-21	44530.00	9.0	1	270	1	1,140	1
DAD-02	26-Aug-21	44434.00	8.8	1	250	1	1,090	1
DAD-02	3-Jun-21	44350.00	8.7	1	230	1	1,070	1
DAD-02	2-Mar-21	44257.00	9.4	1	240	1	1,110	1

DAD-02	1-Dec-20	44166.00	9.0	1	250	1	1,090	1
DAD-02	28-Aug-20	44071.00	8.1	1	250	1	1,110	1
DAD-02	29-May-20	43980.00	8.5	1	230	1	1,070	1
DAD-02	21-Feb-20	43882.00	8.9	1	250	1	1,240	1
DAD-02	4-Dec-19	43803.00	8.9	1	260	1	1,180	1
DAD-02	19-Aug-19	43696.00	8.3	1	270	1	1,140	1
DAD-02	22-May-19	43607.00	7.8	1	280	1	1,220	1
DAD-02	5-Mar-19	43529.00	7.6	1	290	1	1,350	1
DAD-02	28-Nov-18	43432.00	10	1	350	1	1,410	1
DAD-02	24-Aug-18	43336.00	11	1	390	1	1,440	1
DAD-02	31-May-18	43251.00	9.4	1	430	1	1,570	1
DAD-02	26-Feb-18	43157.00	10	1	490	1	1,640	1
DAD-02	20-Nov-17	43059.00	11.7	1	534	1	1,500	1
DAD-02	24-Aug-17	42971.00	11.4	1	479	1	1,580	1
DAD-02	8-Jun-17	42894.00	11.3	1	473	1	1,570	1
DAD-02	7-Mar-17	42801.00	11.5	1	522	1	1,650	1
DAD-02	30-Nov-16	42704.00	10.1	1	506	1	1,610	1
DAD-02	6-Sep-16	42619.00	9.10	1	500	1	1,460	1
DAD-02	2-Jun-16	42523.00	9.45	1	467	1	1,470	1
DAD-02	25-Feb-16	42425.00	10.7	1	520	1	1,480	1
DAD-02	23-Nov-15	42331.00	10.3	1	493	1	1,600	1
DAD-11	1-Mar-24	45352.00	39.0	1	1,100	1	3,840	1
DAD-11	6-Dec-23	45266.00	31.0	1	1,000	1	3,490	1
DAD-11	31-Aug-23	45169.00	24.0	1	860	1	3,280	1
DAD-11	25-May-23	45071.00	17.0	1	730	1	3,100	1
DAD-11	3-Mar-23	44988.00	13.0	1	770	1	2,970	1
DAD-11	2-Dec-22	44897.00	11.0	1	590	1	2,860	1
DAD-11	25-Aug-22	44798.00	12.0	1	640	1	2,820	1
DAD-11	25-May-22	44706.00	12.0	1	680	1	2,830	1
DAD-11	15-Mar-22	44635.00	11.0	1	640	1	2,850	1
DAD-11	30-Nov-21	44530.00	12.0	1	640	1	2,780	1
DAD-11	25-Aug-21	44433.00	12.0	1	650	1	2,790	1
DAD-11	1-Jun-21	44348.00	12.0	1	640	1	2,810	1
DAD-11	1-Mar-21	44256.00	13.0	1	620	1	2,730	1
DAD-11	1-Dec-20	44166.00	13.0	1	630	1	2,700	1
DAD-11	28-Aug-20	44071.00	11.0	1	610	1	2,670	1
DAD-11	26-Feb-20	43887.00	12.0	1	670	1	2,690	1
DAD-11	12-Dec-19	43811.00	13.0	1	610	1	2,670	1
DAD-11	20-Aug-19	43697.00	13.0	1	690	1	2,820	1
DAD-11	28-May-19	43613.00	13.0	1	690	1	2,840	1
DAD-11	11-Mar-19	43535.00	13.0	1	670	1	2,740	1
DAD-11	3-Dec-18	43437.00	13.0	1	710	1	2,840	1
DAD-11	29-Aug-18	43341.00	16.0	1	730	1	2,960	1
DAD-11	31-May-18	43251.00	14.0	1	690	1	2,930	1
DAD-11	26-Feb-18	43157.00	10.0	1	590	1	2,450	1
DAD-11	29-Nov-17	43068.00	3.8	1	447	1	1,660	1
DAD-11	29-Aug-17	42976.00	11.5	1	550	1	2,350	1
DAD-11	6-Jun-17	42892.00	12.3	1	821	1	3,030	1
DAD-11	8-Mar-17	42802.00	14.0	1	983	1	3,420	1

DAD-11	5-Dec-16	42709.00	7.4	1	691	1	2,680	1
DAD-11	8-Sep-16	42621.00	15.4	1	1,200	1	3,960	1
DAD-11	8-Jun-16	42529.00	14.3	1	1,060	1	4,040	1
DAD-11	29-Feb-16	42429.00	13.5	1	1,060	1	3,040	1
DAD-11	24-Nov-15	42332.00	17	1	1,320	1	4,030	1
DAD-12	1-Mar-24	45352.00	9.6	1	820	1	3,160	1
DAD-12	5-Dec-23	45265.00	10	1	810	1	3,070	1
DAD-12	30-Aug-23	45168.00	11.0	1	800	1	3,040	1
DAD-12	25-May-23	45071.00	10.0	1	720	1	2,980	1
DAD-12	2-Mar-23	44987.00	11	1	810	1	3,120	1
DAD-12	1-Dec-22	44896.00	11	1	930	1	3,210	1
DAD-12	25-Aug-22	44798.00	11	1	800	1	3,200	1
DAD-12	24-May-22	44705.00	11.0	1	900	1	3,230	1
DAD-12	3-Mar-22	44623.00	12.00	1	950	1	3,240	1
DAD-12	23-Nov-21	44523.00	12.00	1	870	1	3,420	1
DAD-12	25-Aug-21	44433.00	13.0	1	1,100	1	3,550	1
DAD-12	1-Jun-21	44348.00	12.0	1	1,100	1	3,550	1
DAD-12	1-Mar-21	44256.00	13.0	1	1,100	1	3,520	1
DAD-12	30-Nov-20	44165.00	14.0	1	1,200	1	3,590	1
DAD-12	27-Aug-20	44070.00	13.0	1	1,100	1	3,510	1
DAD-12	29-May-20	43980.00	15.0	1	1,100	1	3,590	1
DAD-12	26-Feb-20	43887.00	15.0	1	1,200	1	3,660	1
DAD-12	3-Dec-19	43802.00	20	1	480	1	1,960	1
DAD-12	20-Aug-19	43697.00	15	1	1,200	1	3,700	1
DAD-12	28-May-19	43613.00	15	1	1,200	1	3,690	1
DAD-12	11-Mar-19	43535.00	18	1	1,100	1	3,630	1
DAD-12	3-Dec-18	43437.00	17	1	1,100	1	3,650	1
DAD-12	28-Aug-18	43340.00	20	1	1,100	1	3,710	1
DAD-12	1-Jun-18	43252.00	21	1	1,200	1	3,740	1
DAD-12	27-Feb-18	43158.00	21	1	1,200	1	3,820	1
DAD-12	29-Nov-17	43068.00	19	1	1,200	1	3,430	1
DAD-12	28-Aug-17	42975.00	26	1	1,070	1	3,580	1
DAD-12	12-Jun-17	42898.00	21	1	975	1	3,330	1
DAD-12	8-Mar-17	42802.00	26	1	1,200	1	3,690	1
DAD-12	5-Dec-16	42709.00	21	1	1,180	1	3,760	1
DAD-12	8-Sep-16	42621.00	19	1	805	1	2,960	1
DAD-12	8-Jun-16	42529.00	18	1	889	1	2,900	1
DAD-12	29-Feb-16	42429.00	21	1	809	1	2,980	1
DAD-12	24-Nov-15	42332.00	20	1	735	1	2,860	1
DAD-13	1-Mar-24	45352.00	16	1	760	1	2,640	1
DAD-13	5-Dec-23	45265.00	26	1	850	1	2,650	1
DAD-13	30-Aug-23	45168.00	11	1	580	1	2,000	1
DAD-13	25-May-23	45071.00	11	1	570	1	2,230	1
DAD-13	2-Mar-23	44987.00	12	1	690	1	2,330	1
DAD-13	2-Dec-22	44897.00	12	1	630	1	2,390	1
DAD-13	25-Aug-22	44798.00	6.8	1	660	1	2,380	1
DAD-13	24-May-22	44705.00	13	1	580	1	2,250	1
DAD-13	3-Mar-22	44623.00	9.0	1	740	1	2,500	1
DAD-13	23-Nov-21	44523.00	8.3	1	550	1	2,240	1

DAD-13	25-Aug-21	44433.00	8.1	1	520	1	2,180	1
DAD-13	1-Jun-21	44348.00	11	1	500	1	2,110	1
DAD-13	1-Mar-21	44256.00	15	1	530	1	2,110	1
DAD-13	30-Nov-20	44165.00	17	1	460	1	1,920	1
DAD-13	28-Aug-20	44071.00	13	1	600	1	2,210	1
DAD-13	29-May-20	43980.00	13	1	550	1	2,130	1
DAD-13	26-Feb-20	43887.00	14	1	580	1	1,960	1
DAD-13	3-Dec-19	43802.00	16	1	1,100	1	3,640	1
DAD-13	20-Aug-19	43697.00	11	1	640	1	2,170	1
DAD-13	24-May-19	43609.00	12	1	590	1	2,130	1
DAD-13	8-Mar-19	43532.00	10	1	570	1	2,000	1
DAD-13	28-Nov-18	43432.00	6.6	1	470	1	1,910	1
DAD-13	27-Aug-18	43339.00	12	1	450	1	1,800	1
DAD-13	31-May-18	43251.00	16	1	710	1	2,550	1
DAD-13	27-Feb-18	43158.00	27	1	360	1	1,740	1
DAD-13	27-Nov-17	43066.00	21.5	1	418	1	1,850	1
DAD-13	24-Aug-17	42971.00	16.0	1	619	1	2,280	1
DAD-13	12-Jun-17	42898.00	16.0	1	701	1	2,520	1
DAD-13	8-Mar-17	42802.00	14.0	1	523	1	2,020	1
DAD-13	5-Dec-16	42709.00	9.54	1	622	1	2,240	1
DAD-13	8-Sep-16	42621.00	10.9	1	673	1	2,300	1
DAD-13	2-Jun-16	42523.00	10.5	1	676	1	2,310	1
DAD-13	25-Feb-16	42425.00	11.0	1	702	1	2,200	1
DAD-13	24-Nov-15	42332.00	9.98	1	642	1	2,280	1
DAD-14	1-Mar-24	45352.00	76	1	1,300	1	4,100	1
DAD-14	5-Dec-23	45265.00	84	1	1,400	1	4,050	1
DAD-14	31-Aug-23	45169.00	70	1	1,400	1	3,930	1
DAD-14	26-May-23	45072.00	60	1	1,200	1	3,830	1
DAD-14	2-Mar-23	44987.00	45	1	1,100	1	3,490	1
DAD-14	2-Dec-22	44897.00	36	1	930	1	2,310	1
DAD-14	26-Aug-22	44799.00	22	1	690	1	2,850	1
DAD-14	24-May-22	44705.00	18	1	610	1	2,750	1
DAD-14	15-Mar-22	44635.00	17	1	620	1	2,670	1
DAD-14	23-Nov-21	44523.00	17	1	590	1	2,830	1
DAD-14	26-Aug-21	44434.00	16	1	630	1	2,600	1
DAD-14	3-Jun-21	44350.00	15	1	640	1	2,720	1
DAD-14	2-Mar-21	44257.00	17	1	660	1	2,640	1
DAD-14	1-Dec-20	44166.00	17	1	660	1	2,770	1
DAD-14	28-Aug-20	44071.00	18	1	690	1	2,880	1
DAD-14	29-May-20	43980.00	19	1	720	1	2,980	1
DAD-14	26-Feb-20	43887.00	20	1	820	1	3,020	1
DAD-14	3-Dec-19	43802.00	20	1	730	1	3,060	1
DAD-14	20-Aug-19	43697.00	21	1	820	1	3,140	1
DAD-14	24-May-19	43609.00	22	1	860	1	3,260	1
DAD-14	8-Mar-19	43532.00	22	1	830	1	3,310	1
DAD-14	28-Nov-18	43432.00	21	1	840	1	3,240	1
DAD-14	29-Aug-18	43341.00	22	1	890	1	3,180	1
DAD-14	31-May-18	43251.00	21	1	860	1	3,350	1
DAD-14	26-Feb-18	43157.00	24	1	910	1	3,210	1

DAD-14	27-Nov-17	43066.00	25.5	1	1,010	1	3,270	1
DAD-14	28-Aug-17	42975.00	28.5	1	1,010	1	3,170	1
DAD-14	6-Jun-17	42892.00	32.7	1	1,060	1	3,750	1
DAD-14	8-Mar-17	42802.00	39.1	1	1,090	1	3,780	1
DAD-14	2-Dec-16	42706.00	39.0	1	1,140	1	3,750	1
DAD-14	8-Sep-16	42621.00	44.5	1	1,170	1	3,700	1
DAD-14	2-Jun-16	42523.00	40.9	1	1,280	1	3,700	1
DAD-14	29-Feb-16	42429.00	40.2	1	1,280	1	3,540	1
DAD-14	24-Nov-15	42332.00	33.9	1	1,220	1	3,550	1
DAD-23	4-Mar-24	45355.00	15	1	260	1	1,400	1
DAD-23	6-Dec-23	45266.00	17	1	270	1	1,490	1
DAD-23	31-Aug-23	45169.00	18	1	570	1	2,360	1
DAD-23	26-May-23	45072.00	18	1	370	1	1,730	1
DAD-23	3-Mar-23	44988.00	20	1	550	1	2,070	1
DAD-23	5-Dec-22	44900.00	18	1	420	1	2,030	1
DAD-23	26-Aug-22	44799.00	19	1	320	1	1,620	1
DAD-23	25-May-22	44706.00	19	1	400	1	1,700	1
DAD-23	15-Mar-22	44635.00	15	1	620	1	2,550	1
DAD-23	1-Dec-21	44531.00	16	1	640	1	2,670	1
DAD-23	26-Aug-21	44434.00	15	1	300	1	1,420	1
DAD-23	3-Jun-21	44350.00	15	1	540	1	2,320	1
DAD-23	2-Mar-21	44257.00	15	1	460	1	2,310	1
DAD-23	1-Dec-20	44166.00	20	1	480	1	1,890	1
DAD-23	28-Aug-20	44071.00	19	1	280	1	1,440	1
DAD-23	1-Jun-20	43983.00	21	1	520	1	1,960	1
DAD-23	26-Feb-20	43887.00	22	1	350	1	1,570	1
DAD-23	6-Dec-19	43805.00	18	1	540	1	2,410	1
DAD-23	19-Aug-19	43696.00	17	1	540	1	2,220	1
DAD-23	24-May-19	43609.00	19	1	390	1	1,960	1
DAD-23	8-Mar-19	43532.00	17	1	540	1	2,260	1
DAD-23	28-Nov-18	43432.00	18	1	500	1	2,090	1
DAD-23	27-Aug-18	43339.00	21	1	580	1	2,350	1
DAD-23	31-May-18	43251.00	19	1	670	1	2,500	1
DAD-23	26-Feb-18	43157.00	16	1	490	1	1,890	1
DAD-23	29-Nov-17	43068.00	18.2	1	763	1	2,050	1
DAD-23	24-Aug-17	42971.00	19.5	1	676	1	2,500	1
DAD-23	7-Jun-17	42893.00	14.9	1	580	1	2,300	1
DAD-23	7-Mar-17	42801.00	12.0	1	577	1	2,230	1
DAD-23	5-Dec-16	42709.00	5.57	1	566	1	1,940	1
DAD-23	7-Sep-16	42620.00	1.86	1	462	1	1,720	1
DAD-23	2-Jun-16	42523.00	1.10	1	636	1	2,260	1
DAD-23	29-Feb-16	42429.00	<0.305	0	421	1	1,680	1
DAD-23	21-Dec-15	42359.00	6.11	1	450	1	1,860	1
DAD-03	4-Mar-24	45355.00	<2.0	0	300	1	1,800	1
DAD-03	7-Dec-23	45267.00	<1.0	0	310	1	1,580	1
DAD-03	5-Sep-23	45174.00	<1.0	0	290	1	2,070	1
DAD-03	26-May-23	45072.00	<1.0	0	310	1	1,770	1
DAD-03	6-Mar-23	44991.00	<1.0	0	360	1	1,780	1
DAD-03	5-Dec-22	44900.00	<1.0	0	290	1	1,610	1

DAD-03	26-Aug-22	44799.00	<1.0	0	350	1	1,700	1
DAD-03	26-May-22	44707.00	<1.0	0	330	1	2,330	1
DAD-03	16-Mar-22	44636.00	<1.0	0	330	1	2,070	1
DAD-03	1-Dec-21	44531.00	<1.0	0	340	1	2,070	1
DAD-03	26-Aug-21	44434.00	<1.0	0	410	1	1,980	1
DAD-03	3-Jun-21	44350.00	<1.0	0	310	1	1,660	1
DAD-03	2-Mar-21	44257.00	<1.0	0	290	1	1,560	1
DAD-03	1-Dec-20	44166.00	<1.0	0	270	1	1,530	1
DAD-03	31-Aug-20	44074.00	<1.0	0	300	1	1,620	1
DAD-03	1-Jun-20	43983.00	<1.0	0	300	1	1,530	1
DAD-03	21-Feb-20	43882.00	<1.0	0	300	1	2,090	1
DAD-03	4-Dec-19	43803.00	<1.0	0	320	1	1,880	1
DAD-03	19-Aug-19	43696.00	<1.0	0	330	1	2,140	1
DAD-03	22-May-19	43607.00	<1.0	0	390	1	2,050	1
DAD-03	5-Mar-19	43529.00	<1.0	0	330	1	2,180	1
DAD-03	28-Nov-18	43432.00	<1.0	0	320	1	2,110	1
DAD-03	24-Aug-18	43336.00	<1.0	0	350	1	2,520	1
DAD-03	31-May-18	43251.00	<1.0	0	370	1	1,930	1
DAD-03	26-Feb-18	43157.00	<1.0	0	360	1	2,220	1
DAD-03	20-Nov-17	43059.00	0.2220	1	446	1	2,060	1
DAD-03	24-Aug-17	42971.00	0.0823	1	440	1	2,240	1
DAD-03	8-Jun-17	42894.00	0.150	1	454	1	2,110	1
DAD-03	7-Mar-17	42801.00	0.251	1	589	1	2,570	1
DAD-03	30-Nov-16	42704.00	0.874	1	647	1	2,820	1
DAD-03	6-Sep-16	42619.00	<0.305	0	289	1	2,520	1
DAD-03	2-Jun-16	42523.00	<0.305	0	540	1	2,410	1
DAD-03	25-Feb-16	42425.00	<0.305	0	558	1	2,340	1
DAD-03	23-Nov-15	42331.00	<0.194	0	603	1	2,440	1
DAD-04	5-Mar-24	45356.00	<2.0	0	410	1	2,200	1
DAD-04	7-Dec-23	45267.00	<1.0	0	410	1	2,130	1
DAD-04	6-Sep-23	45175.00	<1.0	0	390	1	2,240	1
DAD-04	6-Dec-22	44901.00	<1.0	0	400	1	2,020	1
DAD-04	31-Aug-22	44804.00	<1.0	0	80	1	826	1
DAD-04	26-May-22	44707.00	1.1	1	150	1	1,340	1
DAD-04	16-Mar-22	44636.00	2.3	1	500	1	2,510	1
DAD-04	1-Dec-21	44531.00	2.1	1	470	1	2,190	1
DAD-04	31-Aug-21	44439.00	7.5	1	450	1	2,390	1
DAD-04	3-Jun-21	44350.00	5.0	1	380	1	2,300	1
DAD-04	2-Mar-21	44257.00	1.4	1	340	1	2,270	1
DAD-04	2-Dec-20	44167.00	4.4	1	310	1	2,120	1
DAD-04	31-Aug-20	44074.00	<1.0	0	330	1	2,000	1
DAD-04	1-Jun-20	43983.00	<1.0	0	320	1	1,940	1
DAD-04	21-Feb-20	43882.00	<1.0	0	320	1	1,950	1
DAD-04	4-Dec-19	43803.00	<1.0	0	330	1	2,020	1
DAD-04	19-Aug-19	43696.00	<1.0	0	320	1	1,770	1
DAD-04	23-May-19	43608.00	<1.0	0	330	1	1,720	1
DAD-04	5-Mar-19	43529.00	<1.0	0	340	1	1,820	1
DAD-04	28-Nov-18	43432.00	<1.0	0	350	1	1,770	1
DAD-04	24-Aug-18	43336.00	<1.0	0	300	1	1,700	1

DAD-04	31-May-18	43251.00	<1.0	0	280	1	1,710	1
DAD-04	26-Feb-18	43157.00	<1.0	0	230	1	1,520	1
DAD-04	20-Nov-17	43059.00	0.314	1	32.3	1	900	1
DAD-04	24-Aug-17	42971.00	0.109	1	380	1	1,920	1
DAD-04	8-Jun-17	42894.00	0.133	1	349	1	1,800	1
DAD-04	7-Mar-17	42801.00	0.257	1	317	1	1,760	1
DAD-04	2-Dec-16	42706.00	1.46	1	343	1	2,040	1
DAD-04	6-Sep-16	42619.00	<0.305	0	497	1	1,830	1
DAD-04	2-Jun-16	42523.00	0.633	1	547	1	2,060	1
DAD-04	25-Feb-16	42425.00	<0.305	0	434	1	1,730	1
DAD-04	23-Nov-15	42331.00	0.0853	1	443	1	1,690	1
DAD-05	7-Mar-24	45358.00	<1.0	0	310	1	1,300	1
DAD-05	12-Dec-23	45272.00	<1.0	0	180	1	1,180	1
DAD-05	11-Sep-23	45180.00	<1.0	0	97	1	872	1
DAD-05	1-Jun-23	45078.00	<1.0	0	120	1	785	1
DAD-05	8-Mar-23	44993.00	<1.0	0	110	1	830	1
DAD-05	8-Dec-22	44903.00	<1.0	0	100	1	900	1
DAD-05	12-Sep-22	44816.00	<1.0	0	82	1	785	1
DAD-05	31-May-22	44712.00	<1.0	0	300	1	1,610	1
DAD-05	17-Mar-22	44637.00	<1.0	0	310	1	1,840	1
DAD-05	6-Dec-21	44536.00	<1.0	0	400	1	1,950	1
DAD-05	2-Sep-21	44441.00	14	1	410	1	2,370	1
DAD-05	7-Jun-21	44354.00	<1.0	0	370	1	1,890	1
DAD-05	4-Mar-21	44259.00	<1.0	0	310	1	1,630	1
DAD-05	2-Dec-20	44167.00	<1.0	0	290	1	1,660	1
DAD-05	31-Aug-20	44074.00	1.6	1	220	1	1,370	1
DAD-05	1-Jun-20	43983.00	<1.0	0	290	1	1,550	1
DAD-05	21-Feb-20	43882.00	<1.0	0	390	1	2,030	1
DAD-05	5-Dec-19	43804.00	<1.0	0	260	1	1,550	1
DAD-05	22-Aug-19	43699.00	<1.0	0	400	1	1,930	1
DAD-05	23-May-19	43608.00	1.9	1	460	1	2,190	1
DAD-05	5-Mar-19	43529.00	2.0	1	370	1	2,260	1
DAD-05	29-Nov-18	43433.00	2.2	1	570	1	2,570	1
DAD-05	24-Aug-18	43336.00	<1.0	0	650	1	2,820	1
DAD-05	31-May-18	43251.00	<1.0	0	720	1	2,750	1
DAD-05	26-Feb-18	43157.00	<1.0	0	660	1	2,720	1
DAD-05	27-Nov-17	43066.00	2.31	1	721	1	2,720	1
DAD-05	25-Aug-17	42972.00	8.77	1	459	1	1,970	1
DAD-05	8-Jun-17	42894.00	1.56	1	722	1	2,850	1
DAD-05	7-Mar-17	42801.00	8.37	1	434	1	2,150	1
DAD-05	2-Dec-16	42706.00	2.70	1	653	1	2,840	1
DAD-05	6-Sep-16	42619.00	5.00	1	614	1	2,480	1
DAD-05	2-Jun-16	42523.00	5.26	1	611	1	2,710	1
DAD-05	25-Feb-16	42425.00	9.43	1	654	1	2,660	1
DAD-05	23-Nov-15	42331.00	<0.194	0	493	1	2,100	1
DAD-06R	5-Mar-24	45356.00	8.4	1	100	1	690	1
DAD-06R	8-Dec-23	45268.00	9.6	1	98	1	347	1
DAD-06R	6-Sep-23	45175.00	6.3	1	110	1	726	1
DAD-06R	30-May-23	45076.00	6.4	1	84	1	580	1

DAD-06R	7-Mar-23	44992.00	4.5	1	88	1	610	1
DAD-06R	6-Dec-22	44901.00	3.9	1	100	1	696	1
DAD-07	8-Mar-24	45359.00	50	1	950	1	3,900	1
DAD-07	13-Dec-23	45273.00	43	1	720	1	3,220	1
DAD-07	6-Sep-23	45175.00	34	1	560	1	2,800	1
DAD-07	5-Jun-23	45082.00	25	1	530	1	2,400	1
DAD-07	9-Mar-23	44994.00	19	1	450	1	2,120	1
DAD-07	7-Dec-22	44902.00	20	1	410	1	2,060	1
DAD-07	13-Sep-22	44817.00	17	1	370	1	1,890	1
DAD-07	1-Jun-22	44713.00	17	1	410	1	2,000	1
DAD-07	22-Mar-22	44642.00	18	1	480	1	2,160	1
DAD-07	7-Dec-21	44537.00	18	1	500	1	2,200	1
DAD-07	1-Sep-21	44440.00	18	1	600	1	2,310	1
DAD-07	4-Jun-21	44351.00	18	1	630	1	2,340	1
DAD-07	3-Mar-21	44258.00	17	1	630	1	2,420	1
DAD-07	4-Dec-20	44169.00	17	1	650	1	2,550	1
DAD-07	3-Sep-20	44077.00	16	1	740	1	2,520	1
DAD-07	3-Jun-20	43985.00	15	1	570	1	2,310	1
DAD-07	25-Feb-20	43886.00	14	1	570	1	2,190	1
DAD-07	5-Dec-19	43804.00	13	1	520	1	2,140	1
DAD-07	21-Aug-19	43698.00	13	1	560	1	2,190	1
DAD-07	24-May-19	43609.00	12	1	540	1	2,140	1
DAD-07	8-Mar-19	43532.00	12	1	530	1	2,050	1
DAD-07	29-Nov-18	43433.00	11	1	500	1	1,980	1
DAD-07	27-Aug-18	43339.00	12	1	500	1	2,060	1
DAD-07	1-Jun-18	43252.00	12	1	540	1	2,260	1
DAD-07	27-Feb-18	43158.00	12	1	740	1	2,530	1
DAD-07	28-Nov-17	43067.00	12.3	1	701	1	2,160	1
DAD-07	28-Aug-17	42975.00	11.2	1	576	1	2,040	1
DAD-07	6-Jun-17	42892.00	7.69	1	529	1	2,030	1
DAD-07	10-Mar-17	42804.00	6.07	1	480	1	1,800	1
DAD-07	5-Dec-16	42709.00	4.97	1	467	1	1,820	1
DAD-07	7-Sep-16	42620.00	5.50	1	583	1	1,940	1
DAD-07	8-Jun-16	42529.00	4.87	1	526	1	1,820	1
DAD-07	1-Mar-16	42430.00	5.27	1	609	1	2,020	1
DAD-07	30-Nov-15	42338.00	6.82	1	638	1	2,020	1
DAD-08	8-Mar-24	45359.00	46	1	1,500	1	4,300	1
DAD-08	13-Dec-23	45273.00	42	1	1,400	1	4,100	1
DAD-08	12-Sep-23	45181.00	42	1	1,500	1	4,150	1
DAD-08	5-Jun-23	45082.00	44	1	1,600	1	4,240	1
DAD-08	8-Mar-23	44993.00	45	1	1,600	1	4,260	1
DAD-08	8-Dec-22	44903.00	45	1	1,500	1	3,960	1
DAD-08	12-Sep-22	44816.00	46	1	1,600	1	4,780	1
DAD-08	31-May-22	44712.00	47	1	1,800	1	4,700	1
DAD-08	18-Mar-22	44638.00	44	1	1,600	1	4,520	1
DAD-08	6-Dec-21	44536.00	46	1	1,700	1	4,490	1
DAD-08	2-Sep-21	44441.00	46	1	1,900	1	4,580	1
DAD-08	7-Jun-21	44354.00	50	1	2,000	1	5,040	1
DAD-08	3-Mar-21	44258.00	45	1	1,800	1	4,880	1

DAD-08	3-Dec-20	44168.00	42	1	1,800	1	4,660	1
DAD-08	2-Sep-20	44076.00	42	1	1,800	1	4,770	1
DAD-08	2-Jun-20	43984.00	43	1	1,800	1	5,070	1
DAD-08	21-Feb-20	43882.00	40	1	1,800	1	4,930	1
DAD-08	4-Dec-19	43803.00	43	1	1,800	1	4,920	1
DAD-08	19-Aug-19	43696.00	39	1	1,800	1	5,270	1
DAD-08	23-May-19	43608.00	47	1	1,800	1	5,540	1
DAD-08	5-Mar-19	43529.00	42	1	1,900	1	5,460	1
DAD-08	29-Nov-18	43433.00	40	1	1,800	1	4,760	1
DAD-08	24-Aug-18	43336.00	47	1	2,000	1	5,680	1
DAD-08	31-May-18	43251.00	43	1	1,900	1	5,400	1
DAD-08	26-Feb-18	43157.00	51	1	1,700	1	4,710	1
DAD-08	27-Nov-17	43066.00	32.9	1	1,580	1	4,290	1
DAD-08	25-Aug-17	42972.00	32.8	1	1,450	1	6,480	1
DAD-08	8-Jun-17	42894.00	37.9	1	1,670	1	5,140	1
DAD-08	7-Mar-17	42801.00	44.8	1	1,860	1	5,420	1
DAD-08	2-Dec-16	42706.00	45.9	1	1,990	1	5,800	1
DAD-08	6-Sep-16	42619.00	44.4	1	1,950	1	5,940	1
DAD-08	2-Jun-16	42523.00	52.9	1	1,960	1	5,840	1
DAD-08	25-Feb-16	42425.00	51.2	1	1,990	1	5,740	1
DAD-08	23-Nov-15	42331.00	66.1	1	2,070	1	5,980	1
DAD-15	5-Mar-24	45356.00	21	1	720	1	2,700	1
DAD-15	8-Dec-23	45268.00	18	1	720	1	5,060	1
DAD-15	5-Sep-23	45174.00	21	1	710	1	2,660	1
DAD-15	30-May-23	45076.00	15	1	640	1	2,320	1
DAD-15	6-Mar-23	44991.00	17	1	780	1	2,470	1
DAD-15	5-Dec-22	44900.00	17	1	650	1	2,500	1
DAD-15	31-Aug-22	44804.00	22	1	680	1	2,550	1
DAD-15	26-May-22	44707.00	20	1	770	1	2,510	1
DAD-15	23-Mar-22	44643.00	22	1	640	1	2,590	1
DAD-15	2-Dec-21	44532.00	20	1	700	1	2,470	1
DAD-15	31-Aug-21	44439.00	17	1	640	1	2,230	1
DAD-15	4-Jun-21	44351.00	12	1	760	1	2,280	1
DAD-15	4-Mar-21	44259.00	18	1	650	1	2,310	1
DAD-15	4-Dec-20	44169.00	17	1	590	1	2,230	1
DAD-15	3-Sep-20	44077.00	14	1	600	1	2,210	1
DAD-15	1-Jun-20	43983.00	11	1	600	1	2,060	1
DAD-15	26-Feb-20	43887.00	11	1	610	1	2,010	1
DAD-15	5-Dec-19	43804.00	9.8	1	520	1	2,010	1
DAD-15	21-Aug-19	43698.00	13	1	610	1	2,180	1
DAD-15	24-May-19	43609.00	9.9	1	580	1	2,160	1
DAD-15	8-Mar-19	43532.00	7.5	1	540	1	1,970	1
DAD-15	30-Nov-18	43434.00	6.2	1	530	1	1,840	1
DAD-15	27-Aug-18	43339.00	8.9	1	530	1	2,080	1
DAD-15	1-Jun-18	43252.00	7.1	1	520	1	1,960	1
DAD-15	27-Feb-18	43158.00	7.4	1	550	1	1,970	1
DAD-15	20-Nov-17	43059.00	6.98	1	578	1	1,710	1
DAD-15	28-Aug-17	42975.00	4.60	1	502	1	1,670	1
DAD-15	9-Jun-17	42895.00	6.07	1	532	1	1,870	1

DAD-15	13-Mar-17	42807.00	5.74	1	526	1	1,860	1
DAD-15	5-Dec-16	42709.00	5.12	1	496	1	1,660	1
DAD-15	7-Sep-16	42620.00	4.21	1	506	1	1,780	1
DAD-15	8-Jun-16	42529.00	4.41	1	466	1	1,680	1
DAD-15	29-Feb-16	42429.00	4.30	1	536	1	1,720	1
DAD-15	24-Nov-15	42332.00	5.06	1	538	1	1,720	1
DAD-16	5-Mar-24	45356.00	<2.0	0	270	1	1,700	1
DAD-16	7-Dec-23	45267.00	1.1	1	280	1	1,640	1
DAD-16	6-Sep-23	45175.00	<1.0	0	250	1	1,670	1
DAD-16	30-May-23	45076.00	<1.0	0	330	1	1,760	1
DAD-16	6-Mar-23	44991.00	<1.0	0	410	1	1,910	1
DAD-16	6-Dec-22	44901.00	<1.0	0	330	1	1,880	1
DAD-16	31-Aug-22	44804.00	<1.0	0	430	1	2,120	1
DAD-16	26-May-22	44707.00	<1.0	0	530	1	2,180	1
DAD-16	16-Mar-22	44636.00	<1.0	0	490	1	2,100	1
DAD-16	1-Dec-21	44531.00	<1.0	0	540	1	2,160	1
DAD-16	31-Aug-21	44439.00	<1.0	0	530	1	2,170	1
DAD-16	4-Jun-21	44351.00	<1.0	0	560	1	2,250	1
DAD-16	3-Mar-21	44258.00	<1.0	0	430	1	2,030	1
DAD-16	2-Dec-20	44167.00	<1.0	0	500	1	2,170	1
DAD-16	31-Aug-20	44074.00	<1.0	0	520	1	2,200	1
DAD-16	1-Jun-20	43983.00	<1.0	0	520	1	2,080	1
DAD-16	25-Feb-20	43886.00	<1.0	0	400	1	1,950	1
DAD-16	5-Dec-19	43804.00	<1.0	0	470	1	2,130	1
DAD-16	20-Aug-19	43697.00	<1.0	0	480	1	2,100	1
DAD-16	23-May-19	43608.00	<1.0	0	420	1	2,010	1
DAD-16	8-Mar-19	43532.00	<1.0	0	450	1	1,990	1
DAD-16	29-Nov-18	43433.00	<1.0	0	520	1	2,200	1
DAD-16	27-Aug-18	43339.00	<1.0	0	550	1	2,410	1
DAD-16	1-Jun-18	43252.00	<1.0	0	620	1	2,440	1
DAD-16	27-Feb-18	43158.00	0.51	1	390	1	1,780	1
DAD-16	28-Nov-17	43067.00	0.246	1	583	1	2,120	1
DAD-16	28-Aug-17	42975.00	1.18	1	723	1	2,450	1
DAD-16	6-Jun-17	42892.00	0.656	1	666	1	2,710	1
DAD-16	8-Mar-17	42802.00	0.993	1	649	1	2,690	1
DAD-16	2-Dec-16	42706.00	1.76	1	342	1	1,900	1
DAD-16	7-Sep-16	42620.00	1.56	1	821	1	3,000	1
DAD-16	6-Jun-16	42527.00	1.02	1	423	1	2,070	1
DAD-16	29-Feb-16	42429.00	0.327	1	629	1	2,440	1
DAD-16	30-Nov-15	42338.00	1.25	1	611	1	2,520	1
DAD-17	7-Mar-24	45358.00	<1.0	0	99	1	680	1
DAD-17	12-Dec-23	45272.00	<1.0	0	100	1	750	1
DAD-17	11-Sep-23	45180.00	<1.0	0	66	1	613	1
DAD-17	1-Jun-23	45078.00	<1.0	0	190	1	968	1
DAD-17	8-Mar-23	44993.00	<1.0	0	170	1	938	1
DAD-17	8-Dec-22	44903.00	<1.0	0	170	1	878	1
DAD-17	1-Sep-22	44805.00	<1.0	0	140	1	853	1
DAD-17	31-May-22	44712.00	<1.0	0	190	1	936	1
DAD-17	17-Mar-22	44637.00	2.7	1	170	1	985	1

DAD-17	6-Dec-21	44536.00	1.2	1	190	1	985	1
DAD-17	2-Sep-21	44441.00	2.6	1	130	1	742	1
DAD-17	7-Jun-21	44354.00	4.0	1	180	1	972	1
DAD-17	4-Mar-21	44259.00	1.3	1	96	1	634	1
DAD-17	2-Dec-20	44167.00	<1.0	0	92	1	604	1
DAD-17	2-Sep-20	44076.00	1.8	1	73	1	586	1
DAD-17	2-Jun-20	43984.00	1.7	1	86	1	698	1
DAD-17	25-Feb-20	43886.00	<1.0	0	71	1	554	1
DAD-17	5-Dec-19	43804.00	1.5	1	65	1	582	1
DAD-17	21-Aug-19	43698.00	4.9	1	120	1	785	1
DAD-17	23-May-19	43608.00	1.3	1	74	1	650	1
DAD-17	8-Mar-19	43532.00	2.4	1	89	1	638	1
DAD-17	29-Nov-18	43433.00	<1.0	0	70	1	624	1
DAD-17	24-Aug-18	43336.00	2.0	1	56	1	580	1
DAD-17	31-May-18	43251.00	1.2	1	60	1	620	1
DAD-17	27-Feb-18	43158.00	0.62	1	54	1	572	1
DAD-17	28-Nov-17	43067.00	3.17	1	65.4	1	690	1
DAD-17	25-Aug-17	42972.00	10.3	1	454	1	1,740	1
DAD-17	7-Jun-17	42893.00	0.939	1	84.2	1	970	1
DAD-17	13-Mar-17	42807.00	0.509	1	103	1	885	1
DAD-17	5-Dec-16	42709.00	1.46	1	126	1	755	1
DAD-17	8-Sep-16	42621.00	1.89	1	169	1	1,100	1
DAD-17	6-Jun-16	42527.00	0.626	1	240	1	1,440	1
DAD-17	1-Mar-16	42430.00	<0.0610	0	183	1	1,260	1
DAD-17	30-Nov-15	42338.00	<0.0387	0	373	1	1,550	1
DAD-18	8-Mar-24	45359.00	9.8	1	670	1	2,400	1
DAD-18	13-Dec-23	45273.00	10	1	640	1	2,650	1
DAD-18	12-Sep-23	45181.00	7.7	1	630	1	2,600	1
DAD-18	5-Jun-23	45082.00	7.4	1	680	1	2,660	1
DAD-18	8-Mar-23	44993.00	6.9	1	690	1	2,700	1
DAD-18	8-Dec-22	44903.00	6.8	1	720	1	2,670	1
DAD-18	12-Sep-22	44816.00	7.6	1	600	1	2,590	1
DAD-18	31-May-22	44712.00	7.7	1	690	1	2,580	1
DAD-18	18-Mar-22	44638.00	6.3	1	590	1	2,530	1
DAD-18	6-Dec-21	44536.00	7.0	1	640	1	2,510	1
DAD-18	2-Sep-21	44441.00	7.4	1	640	1	2,580	1
DAD-18	7-Jun-21	44354.00	7.4	1	670	1	2,700	1
DAD-18	4-Mar-21	44259.00	7.9	1	690	1	2,660	1
DAD-18	3-Dec-20	44168.00	8.5	1	720	1	2,730	1
DAD-18	2-Sep-20	44076.00	8.0	1	690	1	2,740	1
DAD-18	2-Jun-20	43984.00	8.1	1	670	1	2,760	1
DAD-18	25-Feb-20	43886.00	9.3	1	660	1	2,690	1
DAD-18	5-Dec-19	43804.00	8.7	1	570	1	2,620	1
DAD-18	20-Aug-19	43697.00	10	1	650	1	2,640	1
DAD-18	28-May-19	43613.00	9.5	1	650	1	2,620	1
DAD-18	11-Mar-19	43535.00	9.4	1	620	1	2,600	1
DAD-18	29-Nov-18	43433.00	10	1	680	1	2,650	1
DAD-18	28-Aug-18	43340.00	12	1	630	1	2,720	1
DAD-18	4-Jun-18	43255.00	12	1	720	1	2,740	1

DAD-18	28-Feb-18	43159.00	15	1	560	1	2,750	1
DAD-18	29-Nov-17	43068.00	10.6	1	684	1	2,520	1
DAD-18	29-Aug-17	42976.00	13.6	1	620	1	2,570	1
DAD-18	12-Jun-17	42898.00	10.4	1	710	1	2,760	1
DAD-18	8-Mar-17	42802.00	9.07	1	684	1	2,750	1
DAD-18	5-Dec-16	42709.00	7.88	1	684	1	2,730	1
DAD-18	9-Sep-16	42622.00	6.85	1	688	1	2,650	1
DAD-18	6-Jun-16	42527.00	8.04	1	671	1	2,830	1
DAD-18	1-Mar-16	42430.00	8.55	1	918	1	2,860	1
DAD-18	30-Nov-15	42338.00	8.19	1	923	1	2,760	1
DAD-19	7-Mar-24	45358.00	37	1	1,000	1	3,100	1
DAD-19	12-Dec-23	45272.00	30	1	1,000	1	3,070	1
DAD-19	11-Sep-23	45180.00	31	1	950	1	2,970	1
DAD-19	1-Jun-23	45078.00	33	1	980	1	3,060	1
DAD-19	7-Mar-23	44992.00	31	1	970	1	3,060	1
DAD-19	7-Dec-22	44902.00	30	1	960	1	3,050	1
DAD-19	1-Sep-22	44805.00	32	1	970	1	3,040	1
DAD-19	27-May-22	44708.00	34	1	1,000	1	2,960	1
DAD-19	17-Mar-22	44637.00	27	1	980	1	2,960	1
DAD-19	2-Dec-21	44532.00	36	1	970	1	3,050	1
DAD-19	1-Sep-21	44440.00	36	1	1,000	1	3,060	1
DAD-19	4-Jun-21	44351.00	35	1	1,000	1	2,960	1
DAD-19	3-Mar-21	44258.00	29	1	940	1	2,810	1
DAD-19	4-Dec-20	44169.00	33	1	920	1	2,970	1
DAD-19	3-Sep-20	44077.00	30	1	970	1	2,920	1
DAD-19	2-Jun-20	43984.00	28	1	930	1	2,890	1
DAD-19	25-Feb-20	43886.00	33	1	940	1	3,020	1
DAD-19	4-Dec-19	43803.00	35	1	1,000	1	3,110	1
DAD-19	20-Aug-19	43697.00	46	1	1,000	1	3,170	1
DAD-19	28-May-19	43613.00	41	1	1,000	1	3,090	1
DAD-19	11-Mar-19	43535.00	34	1	970	1	2,920	1
DAD-19	30-Nov-18	43434.00	35	1	990	1	2,960	1
DAD-19	28-Aug-18	43340.00	24	1	960	1	2,950	1
DAD-19	4-Jun-18	43255.00	39	1	980	1	3,070	1
DAD-19	28-Feb-18	43159.00	33	1	890	1	3,040	1
DAD-19	29-Nov-17	43068.00	25.3	1	1,040	1	2,750	1
DAD-19	29-Aug-17	42976.00	30.7	1	864	1	2,770	1
DAD-19	12-Jun-17	42898.00	20.7	1	928	1	2,790	1
DAD-19	13-Mar-17	42807.00	30.7	1	970	1	2,870	1
DAD-19	6-Dec-16	42710.00	22.5	1	944	1	3,420	1
DAD-19	9-Sep-16	42622.00	25.2	1	418	1	2,910	1
DAD-19	8-Jun-16	42529.00	24.5	1	1,830	1	2,920	1
DAD-19	1-Mar-16	42430.00	36.3	1	1,060	1	3,200	1
DAD-19	30-Nov-15	42338.00	41.2	1	1,050	1	3,260	1
DAD-24	7-Mar-24	45358.00	6.0	1	1,100	1	2,900	1
DAD-24	8-Dec-23	45268.00	6.2	1	1,100	1	2,850	1
DAD-24	11-Sep-23	45180.00	6.0	1	980	1	2,890	1
DAD-24	1-Jun-23	45078.00	6.0	1	990	1	2,790	1
DAD-24	7-Mar-23	44992.00	5.9	1	970	1	2,790	1

DAD-24	7-Dec-22	44902.00	5.7	1	940	1	2,780	1
DAD-24	1-Sep-22	44805.00	5.4	1	1,000	1	2,710	1
DAD-24	27-May-22	44708.00	5.9	1	1,000	1	2,610	1
DAD-24	17-Mar-22	44637.00	5.5	1	890	1	2,620	1
DAD-24	2-Dec-21	44532.00	5.4	1	980	1	2,610	1
DAD-24	1-Sep-21	44440.00	6.5	1	960	1	2,690	1
DAD-24	4-Jun-21	44351.00	5.6	1	1,000	1	2,560	1
DAD-24	3-Mar-21	44258.00	5.5	1	970	1	2,540	1
DAD-24	4-Dec-20	44169.00	5.4	1	920	1	2,600	1
DAD-24	2-Sep-20	44076.00	5.6	1	940	1	2,630	1
DAD-24	2-Jun-20	43984.00	5.5	1	910	1	2,650	1
DAD-24	25-Feb-20	43886.00	5.5	1	920	1	2,510	1
DAD-24	4-Dec-19	43803.00	6.2	1	950	1	2,550	1
DAD-24	20-Aug-19	43697.00	5.8	1	950	1	2,630	1
DAD-24	28-May-19	43613.00	6.1	1	980	1	2,590	1
DAD-24	11-Mar-19	43535.00	6.0	1	940	1	2,490	1
DAD-24	30-Nov-18	43434.00	6.5	1	940	1	2,560	1
DAD-24	31-Aug-18	43343.00	6.1	1	930	1	2,600	1
DAD-24	4-Jun-18	43255.00	6.5	1	960	1	2,570	1
DAD-24	28-Feb-18	43159.00	5.8	1	810	1	2,480	1
DAD-24	29-Nov-17	43068.00	6.25	1	994	1	2,220	1
DAD-24	29-Aug-17	42976.00	4.10	1	910	1	2,420	1
DAD-24	12-Jun-17	42898.00	6.94	1	969	1	2,630	1
DAD-24	13-Mar-17	42807.00	6.84	1	947	1	2,530	1
DAD-24	6-Dec-16	42710.00	6.19	1	938	1	2,630	1
DAD-24	9-Sep-16	42622.00	1.84	1	425	1	1,620	1
DAD-24	8-Jun-16	42529.00	2.55	1	482	1	1,620	1
DAD-24	1-Mar-16	42430.00	2.22	1	511	1	1,670	1
DAD-25	8-Mar-24	45359.00	9.3	1	900	1	2,200	1
DAD-25	13-Dec-23	45273.00	8.4	1	840	1	2,180	1
DAD-25	12-Sep-23	45181.00	7.6	1	800	1	2,380	1
DAD-25	5-Jun-23	45082.00	7.9	1	780	1	2,160	1
DAD-25	9-Mar-23	44994.00	7.7	1	740	1	1,740	1
DAD-25	8-Dec-22	44903.00	5.8	1	590	1	1,940	1
DAD-25	12-Sep-22	44816.00	4.8	1	550	1	1,820	1
DAD-25	1-Jun-22	44713.00	4.4	1	420	1	1,780	1
DAD-25	18-Mar-22	44638.00	3.4	1	120	1	840	1
DAD-25	7-Dec-21	44537.00	2.8	1	170	1	1,220	1
DAD-25	3-Sep-21	44442.00	9.5	1	140	1	880	1
DAD-25	7-Jun-21	44354.00	9.0	1	940	1	2,440	1
DAD-25	4-Mar-21	44259.00	8.2	1	880	1	2,030	1
DAD-25	3-Dec-20	44168.00	7.7	1	850	1	2,080	1
DAD-25	2-Sep-20	44076.00	7.4	1	760	1	2,180	1
DAD-25	2-Jun-20	43984.00	7.5	1	700	1	2,500	1
DAD-25	26-Feb-20	43887.00	7.6	1	760	1	2,100	1
DAD-25	6-Dec-19	43805.00	7.0	1	640	1	1,800	1
DAD-25	22-Aug-19	43699.00	5.6	1	600	1	1,830	1
DAD-25	28-May-19	43613.00	5.5	1	600	1	1,790	1
DAD-25	11-Mar-19	43535.00	4.8	1	560	1	1,570	1

DAD-25	29-Nov-18	43433.00	5.0	1	550	1	1,580	1
DAD-25	28-Aug-18	43340.00	5.0	1	510	1	1,800	1
DAD-25	4-Jun-18	43255.00	5.6	1	550	1	1,540	1
DAD-25	27-Feb-18	43158.00	6.3	1	490	1	1,480	1
DAD-25	27-Nov-17	43066.00	6.78	1	456	1	1,310	1
DAD-25	25-Aug-17	42972.00	20.1	1	414	1	1,660	1
DAD-25	8-Jun-17	42894.00	10.1	1	678	1	1,940	1
DAD-25	10-Mar-17	42804.00	22.5	1	954	1	2,920	1
DAD-25	2-Dec-16	42706.00	31.9	1	1,350	1	3,750	1
DAD-25	8-Sep-16	42621.00	32.6	1	1,420	1	4,010	1
DAD-25	6-Jun-16	42527.00	24.8	1	1,390	1	3,400	1
DAD-25	1-Mar-16	42430.00	52.5	1	1,380	1	4,020	1
DAD-25	22-Dec-15	42360.00	57.9	1	1,580	1	4,640	1
DAD-09	11-Mar-24	45362.00	49	1	430	1	1,800	1
DAD-09	14-Dec-23	45274.00	33	1	430	1	1,860	1
DAD-09	13-Sep-23	45182.00	30	1	410	1	1,640	1
DAD-09	6-Jun-23	45083.00	33	1	520	1	1,890	1
DAD-09	9-Mar-23	44994.00	35	1	520	1	1,880	1
DAD-09	9-Dec-22	44904.00	36	1	570	1	1,920	1
DAD-09	13-Sep-22	44817.00	32	1	480	1	1,960	1
DAD-09	1-Jun-22	44713.00	33	1	510	1	1,960	1
DAD-09	22-Mar-22	44642.00	32	1	510	1	1,860	1
DAD-09	7-Dec-21	44537.00	35	1	380	1	1,540	1
DAD-09	3-Sep-21	44442.00	42	1	93	1	785	1
DAD-09	28-May-21	44344.00	24	1	450	1	1,800	1
DAD-09	8-Mar-21	44263.00	29	1	510	1	1,900	1
DAD-09	7-Dec-20	44172.00	24	1	490	1	1,840	1
DAD-09	3-Sep-20	44077.00	22	1	450	1	1,720	1
DAD-09	3-Jun-20	43985.00	46	1	550	1	2,350	1
DAD-09	19-Feb-20	43880.00	72	1	610	1	2,230	1
DAD-09	6-Dec-19	43805.00	40	1	250	1	1,340	1
DAD-09	21-Aug-19	43698.00	120	1	890	1	3,380	1
DAD-09	24-May-19	43609.00	120	1	900	1	3,410	1
DAD-09	7-Mar-19	43531.00	100	1	950	1	3,290	1
DAD-09	30-Nov-18	43434.00	74	1	910	1	3,080	1
DAD-09	27-Aug-18	43339.00	76	1	780	1	2,910	1
DAD-09	4-Jun-18	43255.00	66	1	870	1	2,690	1
DAD-09	28-Feb-18	43159.00	60	1	680	1	2,560	1
DAD-09	28-Nov-17	43067.00	49.0	1	816	1	2,290	1
DAD-09	23-Aug-17	42970.00	43.9	1	665	1	2,050	1
DAD-09	9-Jun-17	42895.00	66.8	1	773	1	3,300	1
DAD-09	10-Mar-17	42804.00	55.4	1	667	1	2,530	1
DAD-09	6-Dec-16	42710.00	50.2	1	676	1	2,470	1
DAD-09	7-Sep-16	42620.00	36.0	1	619	1	2,280	1
DAD-09	6-Jun-16	42527.00	34.9	1	583	1	2,240	1
DAD-09	29-Feb-16	42429.00	16.2	1	574	1	2,050	1
DAD-09	23-Nov-15	42331.00	4.95	1	563	1	1,940	1
DAD-10	11-Mar-24	45362.00	<2.0	0	400	1	1,400	1
DAD-10	14-Dec-23	45274.00	1.1	1	380	1	1,450	1

DAD-10	13-Sep-23	45182.00	1.0	1	360	1	1,340	1
DAD-10	9-Jun-23	45086.00	1.1	1	400	1	1,330	1
DAD-10	10-Mar-23	44995.00	1.3	1	440	1	1,530	1
DAD-10	9-Dec-22	44904.00	1.2	1	420	1	1,280	1
DAD-10	14-Sep-22	44818.00	<1.0	0	360	1	1,250	1
DAD-10	2-Jun-22	44714.00	1.2	1	390	1	1,400	1
DAD-10	23-Mar-22	44643.00	1.4	1	390	1	1,660	1
DAD-10	8-Dec-21	44538.00	1.4	1	460	1	1,750	1
DAD-10	24-Aug-21	44432.00	1.0	1	400	1	1,490	1
DAD-10	28-May-21	44344.00	<1.0	0	390	1	1,330	1
DAD-10	8-Mar-21	44263.00	1.5	1	410	1	1,550	1
DAD-10	24-Nov-20	44159.00	1.5	1	420	1	1,330	1
DAD-10	3-Sep-20	44077.00	1.3	1	400	1	1,380	1
DAD-10	4-Jun-20	43986.00	1.3	1	390	1	1,460	1
DAD-10	19-Feb-20	43880.00	1.5	1	380	1	1,480	1
DAD-10	2-Dec-19	43801.00	1.7	1	390	1	1,380	1
DAD-10	22-Aug-19	43699.00	1.7	1	390	1	1,330	1
DAD-10	24-May-19	43609.00	1.7	1	390	1	1,670	1
DAD-10	11-Mar-19	43535.00	2.5	1	380	1	1,280	1
DAD-10	30-Nov-18	43434.00	4.9	1	420	1	1,510	1
DAD-10	27-Aug-18	43339.00	4.1	1	380	1	1,410	1
DAD-10	4-Jun-18	43255.00	5.5	1	410	1	1,430	1
DAD-10	28-Feb-18	43159.00	9.1	1	360	1	1,440	1
DAD-10	28-Nov-17	43067.00	14.5	1	457	1	1,540	1
DAD-10	25-Aug-17	42972.00	1.14	1	100	1	790	1
DAD-10	9-Jun-17	42895.00	15.5	1	446	1	1,790	1
DAD-10	8-Mar-17	42802.00	8.40	1	435	1	1,610	1
DAD-10	6-Dec-16	42710.00	15.6	1	443	1	1,710	1
DAD-10	7-Sep-16	42620.00	14.8	1	451	1	1,620	1
DAD-10	6-Jun-16	42527.00	16.9	1	426	1	1,720	1
DAD-10	29-Feb-16	42429.00	10.5	1	457	1	1,610	1
DAD-10	24-Nov-15	42332.00	0.723	1	146	1	1,560	1
DAD-20	14-Sep-23	45183.00	33	1	690	1	2,340	1
DAD-20	9-Jun-23	45086.00	29	1	940	1	2,520	1
DAD-20	10-Mar-23	44995.00	30	1	840	1	2,220	1
DAD-20	12-Dec-22	44907.00	25	1	630	1	2,050	1
DAD-20	14-Sep-22	44818.00	21	1	790	1	2,620	1
DAD-20	2-Jun-22	44714.00	23	1	1,000	1	2,730	1
DAD-20	23-Mar-22	44643.00	21	1	730	1	2,300	1
DAD-20	8-Dec-21	44538.00	28	1	910	1	2,540	1
DAD-20	7-Sep-21	44446.00	26	1	860	1	2,480	1
DAD-20	28-May-21	44344.00	24	1	870	1	2,340	1
DAD-20	8-Mar-21	44263.00	28	1	860	1	2,490	1
DAD-20	7-Dec-20	44172.00	26	1	880	1	2,740	1
DAD-20	8-Sep-20	44082.00	30	1	960	1	2,730	1
DAD-20	4-Jun-20	43986.00	31	1	890	1	2,840	1
DAD-20	19-Feb-20	43880.00	34	1	820	1	2,470	1
DAD-20	2-Dec-19	43801.00	36	1	790	1	2,430	1
DAD-20	21-Aug-19	43698.00	40	1	780	1	2,500	1

DAD-20	28-May-19	43613.00	37	1	850	1	2,600	1
DAD-20	7-Mar-19	43531.00	35	1	900	1	2,530	1
DAD-20	30-Nov-18	43434.00	36	1	870	1	2,530	1
DAD-20	28-Aug-18	43340.00	36	1	850	1	2,510	1
DAD-20	1-Jun-18	43252.00	35	1	850	1	2,530	1
DAD-20	28-Feb-18	43159.00	32	1	710	1	2,390	1
DAD-20	28-Nov-17	43067.00	36.6	1	891	1	2,350	1
DAD-20	24-Aug-17	42971.00	31.4	1	760	1	2,310	1
DAD-20	7-Jun-17	42893.00	30.6	1	727	1	2,300	1
DAD-20	10-Mar-17	42804.00	29.0	1	797	1	2,410	1
DAD-20	5-Dec-16	42709.00	22.7	1	798	1	2,360	1
DAD-20	7-Sep-16	42620.00	22.7	1	864	1	2,460	1
DAD-20	6-Jun-16	42527.00	23.8	1	784	1	2,420	1
DAD-20	1-Mar-16	42430.00	22.5	1	867	1	2,390	1
DAD-20	24-Nov-15	42332.00	21.8	1	810	1	2,350	1
DAD-21	11-Mar-24	45362.00	16	1	650	1	2,300	1
DAD-21	14-Dec-23	45274.00	28	1	660	1	2,430	1
DAD-21	13-Sep-23	45182.00	35	1	710	1	2,590	1
DAD-21	6-Jun-23	45083.00	46	1	780	1	2,620	1
DAD-21	9-Mar-23	44994.00	24	1	640	1	2,380	1
DAD-21	9-Dec-22	44904.00	24	1	640	1	2,300	1
DAD-21	13-Sep-22	44817.00	26	1	690	1	2,590	1
DAD-21	1-Jun-22	44713.00	41	1	870	1	2,980	1
DAD-21	22-Mar-22	44642.00	41	1	900	1	2,840	1
DAD-21	7-Dec-21	44537.00	54	1	1,200	1	2,740	1
DAD-21	3-Sep-21	44442.00	64	1	920	1	3,030	1
DAD-21	28-May-21	44344.00	120	1	950	1	3,330	1
DAD-21	8-Mar-21	44263.00	110	1	980	1	3,440	1
DAD-21	7-Dec-20	44172.00	120	1	990	1	3,610	1
DAD-21	3-Sep-20	44077.00	120	1	970	1	3,580	1
DAD-21	3-Jun-20	43985.00	100	1	860	1	3,370	1
DAD-21	19-Feb-20	43880.00	110	1	950	1	3,430	1
DAD-21	6-Dec-19	43805.00	110	1	770	1	3,200	1
DAD-21	21-Aug-19	43698.00	86	1	880	1	3,040	1
DAD-21	24-May-19	43609.00	87	1	860	1	2,920	1
DAD-21	7-Mar-19	43531.00	80	1	860	1	3,030	1
DAD-21	30-Nov-18	43434.00	110	1	910	1	3,180	1
DAD-21	27-Aug-18	43339.00	90	1	830	1	3,010	1
DAD-21	4-Jun-18	43255.00	81	1	750	1	2,900	1
DAD-21	28-Feb-18	43159.00	76	1	700	1	2,820	1
DAD-21	28-Nov-17	43067.00	70.7	1	928	1	2,860	1
DAD-21	23-Aug-17	42970.00	51.1	1	826	1	2,910	1
DAD-21	9-Jun-17	42895.00	71.3	1	977	1	3,360	1
DAD-21	10-Mar-17	42804.00	69.2	1	939	1	3,190	1
DAD-21	6-Dec-16	42710.00	59.9	1	936	1	3,020	1
DAD-21	7-Sep-16	42620.00	58.9	1	1,020	1	3,180	1
DAD-21	6-Jun-16	42527.00	55.2	1	1,350	1	2,920	1
DAD-21	29-Feb-16	42429.00	35.6	1	815	1	2,360	1
DAD-21	23-Nov-15	42331.00	6.28	1	708	1	2,090	1

DAD-22	11-Mar-24	45362.00	16	1	810	1	2,300	1
DAD-22	14-Dec-23	45274.00	15	1	820	1	2,370	1
DAD-22	13-Sep-23	45182.00	14	1	740	1	2,410	1
DAD-22	6-Jun-23	45083.00	15	1	870	1	2,360	1
DAD-22	9-Mar-23	44994.00	15	1	870	1	2,320	1
DAD-22	9-Dec-22	44904.00	16	1	880	1	2,340	1
DAD-22	14-Sep-22	44818.00	15	1	780	1	2,420	1
DAD-22	2-Jun-22	44714.00	16	1	880	1	2,440	1
DAD-22	23-Mar-22	44643.00	16	1	780	1	2,440	1
DAD-22	8-Dec-21	44538.00	14	1	880	1	2,350	1
DAD-22	3-Sep-21	44442.00	14	1	860	1	2,430	1
DAD-22	28-May-21	44344.00	11	1	840	1	2,390	1
DAD-22	8-Mar-21	44263.00	13	1	890	1	2,360	1
DAD-22	7-Dec-20	44172.00	12	1	870	1	2,490	1
DAD-22	8-Sep-20	44082.00	12	1	850	1	2,410	1
DAD-22	3-Jun-20	43985.00	11	1	840	1	2,460	1
DAD-22	19-Feb-20	43880.00	11	1	870	1	2,340	1
DAD-22	6-Dec-19	43805.00	6.7	1	780	1	2,360	1
DAD-22	21-Aug-19	43698.00	17	1	840	1	2,390	1
DAD-22	24-May-19	43609.00	20	1	770	1	2,320	1
DAD-22	7-Mar-19	43531.00	26	1	670	1	2,200	1
DAD-22	30-Nov-18	43434.00	18	1	670	1	2,120	1
DAD-22	24-Aug-18	43336.00	29	1	700	1	2,380	1
DAD-22	1-Jun-18	43252.00	20	1	810	1	2,390	1
DAD-22	27-Feb-18	43158.00	12	1	860	1	2,420	1
DAD-22	28-Nov-17	43067.00	16.2	1	4.03	1	2,250	1
DAD-22	23-Aug-17	42970.00	19.0	1	803	1	2,410	1
DAD-22	7-Jun-17	42893.00	22.2	1	846	1	2,500	1
DAD-22	7-Mar-17	42801.00	27.3	1	817	1	2,360	1
DAD-22	5-Dec-16	42709.00	25.4	1	808	1	2,480	1
DAD-22	6-Sep-16	42619.00	23.6	1	863	1	2,380	1
DAD-22	8-Jun-16	42529.00	21.8	1	815	1	2,420	1
DAD-22	25-Feb-16	42425.00	18.5	1	932	1	2,380	1
DAD-22	23-Nov-15	42331.00	6.52	1	964	1	2,340	1
DAD-26	11-Mar-24	45362.00	24	1	970	1	2,700	1
DAD-26	15-Dec-23	45275.00	14	1	1,000	1	3,070	1
DAD-26	14-Sep-23	45183.00	16	1	930	1	3,030	1
DAD-26	6-Jun-23	45083.00	22	1	610	1	2,010	1
DAD-26	10-Mar-23	44995.00	23	1	720	1	2,070	1
DAD-26	12-Dec-22	44907.00	24	1	500	1	1,740	1
DAD-26	14-Sep-22	44818.00	26	1	490	1	1,940	1
DAD-26	2-Jun-22	44714.00	26	1	520	1	1,860	1
DAD-26	23-Mar-22	44643.00	22	1	560	1	1,790	1
DAD-26	8-Dec-21	44538.00	15	1	470	1	1,610	1
DAD-26	7-Sep-21	44446.00	3.8	1	560	1	1,820	1
DAD-26	28-May-21	44344.00	10	1	640	1	2,060	1
DAD-26	8-Mar-21	44263.00	6.8	1	810	1	2,460	1
DAD-26	7-Dec-20	44172.00	25	1	580	1	2,010	1
DAD-26	8-Sep-20	44082.00	38	1	640	1	2,270	1

DAD-26	3-Jun-20	43985.00	35	1	640	1	2,320	1
DAD-26	19-Feb-20	43880.00	16	1	480	1	1,680	1
DAD-26	6-Dec-19	43805.00	1.8	1	300	1	1,060	1
DAD-26	21-Aug-19	43698.00	43	1	700	1	2,410	1
DAD-26	28-May-19	43613.00	41	1	730	1	2,360	1
DAD-26	7-Mar-19	43531.00	50	1	800	1	2,670	1
DAD-26	30-Nov-18	43434.00	48	1	860	1	2,770	1
DAD-26	28-Aug-18	43340.00	110	1	870	1	3,020	1
DAD-26	4-Jun-18	43255.00	47	1	920	1	3,240	1
DAD-26	28-Feb-18	43159.00	59	1	940	1	3,000	1
DAD-26	28-Nov-17	43067.00	65.1	1	1,160	1	3,110	1
DAD-26	28-Aug-17	42975.00	59.8	1	1,090	1	3,110	1
DAD-26	9-Jun-17	42895.00	60.5	1	1,090	1	3,270	1
DAD-26	10-Mar-17	42804.00	66.3	1	1,110	1	3,280	1
DAD-26	28-Dec-16	42732.00	NA	1	NA	1	3,420	1
DAD-26	6-Dec-16	42710.00	69.6	1	1,090	1	3,160 R	1
DAD-26	8-Sep-16	42621.00	63.2	1	1,030	1	3,210	1
DAD-26	6-Jun-16	42527.00	67.0	1	858	1	2,900	1
DAD-26	1-Mar-16	42430.00	61.1	1	837	1	2,760	1
DAD-26	22-Dec-15	42360.00	59.6	1	749	1	2,540	1
DAD-27	11-Mar-24	45362.00	7.0	1	470	1	2,000	1
DAD-27	14-Dec-23	45274.00	6.4	1	450	1	2,000	1
DAD-27	14-Sep-23	45183.00	6.8	1	450	1	2,100	1
DAD-27	6-Jun-23	45083.00	7.0	1	490	1	1,490	1
DAD-27	10-Mar-23	44995.00	5.9	1	460	1	1,900	1
DAD-27	12-Dec-22	44907.00	6.1	1	470	1	1,870	1
70-03	12-Feb-24	45334.00	37	1	1,800	1	4,560	1
70-03	9-Nov-23	45239.00	38	1	1,700	1	4,520	1
70-03	9-Aug-23	45147.00	38	1	1,600	1	4,400	1
70-03	8-May-23	45054.00	39	1	1,500	1	4,640	1
70-03	9-Feb-23	44966.00	39	1	1,800	1	4,140	1
70-03	8-Nov-22	44873.00	41	1	1,900	1	4,690	1
70-03	9-Aug-22	44782.00	39	1	1,600	1	4,750	1
70-03	9-May-22	44690.00	37	1	1,500	1	4,430	1
70-03	15-Feb-22	44607.00	38	1	1,600	1	4,240	1
70-03	5-Nov-21	44505.00	39	1	1,800	1	4,600	1
70-03	10-Aug-21	44418.00	41	1	1,800	1	4,770	1
70-03	10-May-21	44326.00	40	1	1,800	1	4,760	1
70-03	16-Feb-21	44243.00	41	1	1,700	1	4,600	1
70-03	11-Nov-20	44146.00	43	1	1,900	1	5,050	1
70-03	14-Aug-20	44057.00	47	1	2,100	1	5,590	1
70-03	13-May-20	43964.00	50	1	2,200	1	5,810	1
70-03	7-Feb-20	43868.00	50	1	2,400	1	6,080	1
70-03	15-Nov-19	43784.00	48	1	2,200	1	6,350	1
70-03	6-Aug-19	43683.00	53	1	2,800	1	6,810	1
70-03	16-May-19	43601.00	50	1	3,100	1	6,850	1
70-03	26-Feb-19	43522.00	51	1	3,000	1	7,320	1
70-03	15-Nov-18	43419.00	52	1	3,300	1	7,530	1
70-03	15-Aug-18	43327.00	50	1	3,100	1	7,900	1

70-03	21-May-18	43241.00	50	1	3,200	1	8,080	1
70-03	13-Feb-18	43144.00	46	1	3,400	1	8,490	1
70-03	9-Nov-17	43048.00	44.7	1	3,320	1	7,940	1
70-03	14-Aug-17	42961.00	45.4	1	3,380	1	8,370	1
70-03	19-May-17	42874.00	43.5	1	3,330	1	8,370	1
70-03	20-Feb-17	42786.00	43.6	1	3,200	1	8,270	1
70-03	22-Nov-16	42696.00	43.4	1	3,250	1	8,430	1
70-03	18-Aug-16	42600.00	45.2	1	6,010	1	9,340	1
70-03	24-May-16	42514.00	47.4	1	3,220	1	8,330	1
70-03	16-Feb-16	42416.00	49.1	1	3,340	1	8,380	1
70-03	12-Nov-15	42320.00	46.9	1	2,850	1	7,040	1
70/86/340	9-Feb-24	45331.00	24	1	2,000	1	6,290	1
70/86/340	8-Nov-23	45238.00	33	1	1,900	1	6,290	1
70/86/340	8-Aug-23	45146.00	69	1	2,400	1	7,090	1
70/86/340	5-May-23	45051.00	24	1	1,900	1	6,060	1
70/86/340	8-Feb-23	44965.00	29	1	2,000	1	6,560	1
70/86/340	7-Nov-22	44872.00	27	1	1,800	1	6,570	1
70/86/340	8-Aug-22	44781.00	20	1	1,900	1	6,250	1
70/86/340	5-May-22	44686.00	20	1	1,900	1	6,120	1
70/86/340	14-Feb-22	44606.00	20	1	1,700	1	5,440	1
70/86/340	4-Nov-21	44504.00	20	1	1,500	1	4,260	1
70/86/340	9-Aug-21	44417.00	3.9	1	1,000	1	3,060	1
70/86/340	6-May-21	44322.00	7.9	1	1,300	1	3,550	1
70/86/340	15-Feb-21	44242.00	9.8	1	1,500	1	3,790	1
70/86/340	11-Nov-20	44146.00	12	1	1,700	1	4,320	1
70/86/340	13-Aug-20	44056.00	18	1	1,600	1	4,500	1
70/86/340	18-May-20	43969.00	18	1	1,800	1	4,520	1
70/86/340	7-Feb-20	43868.00	22	1	1,700	1	4,590	1
70/86/340	15-Nov-19	43784.00	22	1	1,500	1	4,660	1
70/86/340	7-Aug-19	43684.00	23	1	1,700	1	4,720	1
70/86/340	16-May-19	43601.00	23	1	1,800	1	4,720	1
70/86/340	25-Feb-19	43521.00	21	1	1,700	1	4,750	1
70/86/340	16-Nov-18	43420.00	23	1	1,700	1	4,560	1
70/86/340	14-Aug-18	43326.00	19	1	1,700	1	4,680	1
70/86/340	21-May-18	43241.00	18	1	1,600	1	4,600	1
70/86/340	12-Feb-18	43143.00	19	1	1,500	1	4,580	1
70/86/340	9-Nov-17	43048.00	19.6	1	1,510	1	4,190	1
70/86/340	11-Aug-17	42958.00	20.6	1	1,790	1	5,170	1
70/86/340	18-May-17	42873.00	20.3	1	1,730	1	5,410	1
70/86/340	16-Feb-17	42782.00	30.1	1	1,350	1	4,430	1
70/86/340	10-Nov-16	42684.00	22.6	1	817	1	5,080	1
70/86/340	23-Aug-16	42605.00	24.1	1	3,450	1	5,170	1
70/86/340	19-May-16	42509.00	17.3	1	1,630	1	4,680	1
70/86/340	15-Feb-16	42415.00	12.1	1	1,750	1	4,730	1
70/86/340	10-Nov-15	42318.00	16.0	1	1,740	1	4,940	1
86/340-01	9-Feb-24	45331.00	3.0	1	260	1	2,160	1
86/340-01	8-Nov-23	45238.00	2.3	1	260	1	2,250	1
86/340-01	8-Aug-23	45146.00	2.5	1	260	1	2,280	1
86/340-01	5-May-23	45051.00	2.9	1	270	1	2,220	1

86/340-01	8-Feb-23	44965.00	3.2	1	260	1	2,210	1
86/340-01	7-Nov-22	44872.00	2.9	1	230	1	2,190	1
86/340-01	8-Aug-22	44781.00	3.4	1	240	1	2,190	1
86/340-01	5-May-22	44686.00	3.1	1	220	1	2,150	1
86/340-01	14-Feb-22	44606.00	3.2	1	230	1	2,170	1
86/340-01	4-Nov-21	44504.00	3.1	1	260	1	2,190	1
86/340-01	9-Aug-21	44417.00	2.8	1	240	1	2,190	1
86/340-01	6-May-21	44322.00	3.2	1	230	1	1,890	1
86/340-01	15-Feb-21	44242.00	2.9	1	240	1	2,120	1
86/340-01	11-Nov-20	44146.00	3.4	1	200	1	2,080	1
86/340-01	13-Aug-20	44056.00	3.6	1	220	1	2,030	1
86/340-01	18-May-20	43969.00	5.1	1	250	1	2,010	1
86/340-01	7-Feb-20	43868.00	4.7	1	230	1	1,990	1
86/340-01	15-Nov-19	43784.00	5.0	1	210	1	2,010	1
86/340-01	7-Aug-19	43684.00	5.9	1	240	1	1,940	1
86/340-01	16-May-19	43601.00	7.5	1	260	1	1,930	1
86/340-01	25-Feb-19	43521.00	7.0	1	250	1	1,910	1
86/340-01	16-Nov-18	43420.00	7.0	1	240	1	1,900	1
86/340-01	14-Aug-18	43326.00	7.4	1	230	1	1,890	1
86/340-01	21-May-18	43241.00	8.3	1	240	1	1,890	1
86/340-01	12-Feb-18	43143.00	9.6	1	300	1	1,920	1
86/340-01	9-Nov-17	43048.00	10.5	1	293	1	1,670	1
86/340-01	11-Aug-17	42958.00	11.9	1	338	1	2,030	1
86/340-01	18-May-17	42873.00	13.4	1	445	1	2,410	1
86/340-01	16-Feb-17	42782.00	13.1	1	387	1	2,240	1
86/340-01	10-Nov-16	42684.00	11.6	1	384	1	2,200	1
86/340-01	23-Aug-16	42605.00	12.1	1	408	1	2,210	1
86/340-01	19-May-16	42509.00	11.2	1	421	1	2,220	1
86/340-01	15-Feb-16	42415.00	12.9	1	422	1	2,300	1
86/340-01	10-Nov-15	42318.00	11.7	1	421	1	2,260	1
126-12	10-Jan-24	45301.00	4.2	1	480	1	2,210	1
126-12	19-Nov-23	45249.00	3.8	1	430	1	2,140	1
126-12	27-Aug-23	45165.00	4.3	1	450	1	1,120	1
126-12	24-May-23	45070.00	3.2	1	400	1	2,110	1
126-12	11-Jan-23	44937.00	4.3	1	420	1	2,210	1
126-12	8-Nov-22	44873.00	3.4	1	430	1	2,160	1
126-12	17-Aug-22	44790.00	3.8	1	410	1	2,200	1
126-12	5-May-22	44686.00	3.8	1	360	1	2,120	1
126-12	24-Feb-22	44616.00	4.6	1	420	1	2,180	1
126-12	9-Nov-21	44509.00	4.6	1	390	1	2,120	1
126-12	11-Aug-21	44419.00	6.7	1	430	1	2,170	1
126-12	4-May-21	44320.00	6.9	1	370	1	2,220	1
126-12	9-Feb-21	44236.00	6.0	1	350	1	2,220	1
126-12	10-Nov-20	44145.00	8.9	1	400	1	2,240	1
126-12	12-Aug-20	44055.00	11	1	420	1	2,350	1
126-12	12-Aug-20	44055.00	11	1	420	1	2,260	1
126-12	14-May-20	43965.00	6.4	1	350	1	2,190	1
126-12	10-Feb-20	43871.00	2.8	1	310	1	2,100	1
126-12	12-Nov-19	43781.00	8.3	1	350	1	2,200	1

126-12	5-Aug-19	43682.00	13	1	370	1	2,270	1
126-12	14-May-19	43599.00	8.1	1	350	1	2,180	1
126-12	22-Feb-19	43518.00	8.2	1	370	1	2,270	1
126-12	14-Nov-18	43418.00	13	1	390	1	2,300	1
126-12	15-Aug-18	43327.00	17	1	430	1	2,500	1
126-12	7-Jun-18	43258.00	11	1	420	1	2,550	1
126-12	9-Feb-18	43140.00	3.9	1	420	1	2,430	1
126-12	8-Nov-17	43047.00	3.26	1	24.5	1	2,440	1
126-12	10-Aug-17	42957.00	7.40	1	520	1	2,780	1
126-12	17-May-17	42872.00	17.6	1	455	1	2,480	1
126-12	20-Feb-17	42786.00	13.0	1	420	1	2,430	1
126-12	9-Nov-16	42683.00	17.1	1	430	1	2,520	1
126-12	18-Aug-16	42600.00	19.4	1	363	1	2,580	1
126-12	18-May-16	42508.00	17.6	1	391	1	2,310	1
126-12	15-Feb-16	42415.00	13.9	1	416	1	2,450	1
126-12	9-Nov-15	42317.00	10.8	1	428	1	2,460	1
126-13	10-Jan-24	45301.00	15	1	750	1	3,320	1
126-13	19-Nov-23	45249.00	14	1	710	1	3,110	1
126-13	27-Aug-23	45165.00	14	1	710	1	645	1
126-13	24-May-23	45070.00	14	1	710	1	3,160	1
126-13	11-Jan-23	44937.00	14	1	700	1	1,600	1
126-13	8-Nov-22	44873.00	14	1	720	1	3,210	1
126-13	17-Aug-22	44790.00	14	1	690	1	3,210	1
126-13	5-May-22	44686.00	14	1	700	1	3,330	1
126-13	24-Feb-22	44616.00	15	1	760	1	3,380	1
126-13	9-Nov-21	44509.00	16	1	780	1	3,320	1
126-13	11-Aug-21	44419.00	18	1	830	1	3,360	1
126-13	4-May-21	44320.00	17	1	780	1	3,420	1
126-13	9-Feb-21	44236.00	19	1	740	1	3,440	1
126-13	10-Nov-20	44145.00	20	1	780	1	3,390	1
126-13	12-Aug-20	44055.00	23	1	860	1	3,520	1
126-13	13-May-20	43964.00	26	1	860	1	3,860	1
126-13	7-Feb-20	43868.00	34	1	880	1	3,640	1
126-13	12-Nov-19	43781.00	32	1	830	1	3,730	1
126-13	5-Aug-19	43682.00	32	1	900	1	3,790	1
126-13	14-May-19	43599.00	36	1	970	1	3,570	1
126-13	22-Feb-19	43518.00	39	1	990	1	3,620	1
126-13	14-Nov-18	43418.00	42	1	950	1	3,420	1
126-13	15-Aug-18	43327.00	40	1	890	1	3,670	1
126-13	18-May-18	43238.00	37	1	890	1	3,250	1
126-13	9-Feb-18	43140.00	31	1	820	1	3,330	1
126-13	8-Nov-17	43047.00	28.6	1	771	1	2,810	1
126-13	10-Aug-17	42957.00	24.4	1	784	1	3,080	1
126-13	17-May-17	42872.00	23.2	1	796	1	3,180	1
126-13	17-Feb-17	42783.00	23.8	1	869	1	3,920	1
126-13	9-Nov-16	42683.00	23.2	1	594	1	3,090	1
126-13	18-Aug-16	42600.00	23.4	1	703	1	3,090	1
126-13	18-May-16	42508.00	26.1	1	799	1	3,000	1
126-13	15-Feb-16	42415.00	36.9	1	891	1	2,960	1

126-13	9-Nov-15	42317.00	29.6	1	760	1	2,850	1
70-01	12-Feb-24	45334.00	14	1	670	1	3,100	1
70-01	9-Nov-23	45239.00	14	1	680	1	3,180	1
70-01	9-Aug-23	45147.00	13	1	640	1	3,180	1
70-01	8-May-23	45054.00	13	1	770	1	3,100	1
70-01	9-Feb-23	44966.00	17	1	720	1	3,160	1
70-01	8-Nov-22	44873.00	17	1	700	1	3,180	1
70-01	9-Aug-22	44782.00	16	1	690	1	3,350	1
70-01	9-May-22	44690.00	15	1	700	1	3,330	1
70-01	15-Feb-22	44607.00	20	1	690	1	3,170	1
70-01	5-Nov-21	44505.00	20	1	850	1	3,320	1
70-01	10-Aug-21	44418.00	23	1	750	1	3,130	1
70-01	10-May-21	44326.00	22	1	750	1	3,180	1
70-01	16-Feb-21	44243.00	23	1	800	1	3,140	1
70-01	12-Nov-20	44147.00	26	1	720	1	3,030	1
70-01	14-Aug-20	44057.00	27	1	770	1	3,150	1
70-01	13-May-20	43964.00	27	1	710	1	3,000	1
70-01	10-Feb-20	43871.00	28	1	770	1	3,210	1
70-01	15-Nov-19	43784.00	29	1	770	1	3,460	1
70-01	7-Aug-19	43684.00	31	1	850	1	3,450	1
70-01	16-May-19	43601.00	34	1	850	1	3,370	1
70-01	26-Feb-19	43522.00	33	1	840	1	3,390	1
70-01	15-Nov-18	43419.00	32	1	770	1	3,080	1
70-01	15-Aug-18	43327.00	37	1	900	1	3,530	1
70-01	21-May-18	43241.00	39	1	860	1	3,410	1
70-01	13-Feb-18	43144.00	30	1	810	1	3,010	1
70-01	9-Nov-17	43048.00	25.6	1	687	1	2,620	1
70-01	14-Aug-17	42961.00	24.3	1	723	1	2,740	1
70-01	19-May-17	42874.00	22.4	1	660	1	2,540	1
70-01	20-Feb-17	42786.00	21.8	1	643	1	2,530	1
70-01	22-Nov-16	42696.00	20.8	1	696	1	2,790	1
70-01	19-Aug-16	42601.00	23.5	1	532	1	2,740	1
70-01	24-May-16	42514.00	22.8	1	629	1	2,720	1
70-01	16-Feb-16	42416.00	25.6	1	673	1	2,650	1
70-01	12-Nov-15	42320.00	26.0	1	630	1	2,560	1
70-02	12-Feb-24	45334.00	32	1	820	1	2,760	1
70-02	9-Aug-23	45147.00	24	1	580	1	2,910	1
70-02	8-May-23	45054.00	29	1	740	1	2,890	1
70-02	9-Feb-23	44966.00	32	1	920	1	2,920	1
70-02	8-Nov-22	44873.00	31	1	830	1	2,840	1
70-02	9-Aug-22	44782.00	33	1	740	1	2,980	1
70-02	9-May-22	44690.00	33	1	760	1	3,020	1
70-02	15-Feb-22	44607.00	34	1	860	1	2,980	1
70-02	5-Nov-21	44505.00	35	1	780	1	2,990	1
70-02	10-Aug-21	44418.00	34	1	810	1	2,990	1
70-02	10-May-21	44326.00	33	1	770	1	2,980	1
70-02	16-Feb-21	44243.00	34	1	790	1	3,020	1
70-02	12-Nov-20	44147.00	35	1	770	1	2,870	1
70-02	14-Aug-20	44057.00	34	1	800	1	3,040	1

70-02	13-May-20	43964.00	34	1	810	1	3,070	1
70-02	10-Feb-20	43871.00	33	1	810	1	2,980	1
70-02	12-Nov-19	43781.00	33	1	780	1	2,930	1
70-02	6-Aug-19	43683.00	35	1	830	1	2,980	1
70-02	16-May-19	43601.00	36	1	840	1	2,960	1
70-02	26-Feb-19	43522.00	32	1	780	1	3,030	1
70-02	14-Nov-18	43418.00	31	1	880	1	2,950	1
70-02	15-Aug-18	43327.00	34	1	800	1	3,140	1
70-02	21-May-18	43241.00	33	1	790	1	2,960	1
70-02	13-Feb-18	43144.00	29	1	850	1	3,060	1
70-02	9-Nov-17	43048.00	30.7	1	770	1	2,680	1
70-02	14-Aug-17	42961.00	33.4	1	824	1	3,220	1
70-02	19-May-17	42874.00	31.3	1	791	1	3,070	1
70-02	20-Feb-17	42786.00	31.0	1	808	1	3,120	1
70-02	22-Nov-16	42696.00	31.3	1	831	1	3,150	1
70-02	18-Aug-16	42600.00	35.0	1	849	1	3,270	1
70-02	23-May-16	42513.00	35.9	1	801	1	3,250	1
70-02	16-Feb-16	42416.00	37.7	1	837	1	3,180	1
70-02	12-Nov-15	42320.00	36.1	1	811	1	3,210	1
70-04	12-Feb-24	45334.00	14	1	620	1	3,020	1
70-04	9-Nov-23	45239.00	17	1	690	1	3,080	1
70-04	9-Aug-23	45147.00	19	1	580	1	3,040	1
70-04	8-May-23	45054.00	22	1	700	1	3,020	1
70-04	9-Feb-23	44966.00	33	1	730	1	3,090	1
70-04	8-Nov-22	44873.00	35	1	660	1	3,000	1
70-04	9-Aug-22	44782.00	25	1	540	1	3,020	1
70-04	9-May-22	44690.00	24	1	550	1	3,220	1
70-04	15-Feb-22	44607.00	17	1	600	1	3,000	1
70-04	5-Nov-21	44505.00	19	1	600	1	3,030	1
70-04	10-Aug-21	44418.00	14	1	610	1	2,990	1
70-04	10-May-21	44326.00	12	1	560	1	3,010	1
70-04	16-Feb-21	44243.00	22	1	600	1	2,940	1
70-04	12-Nov-20	44147.00	35	1	630	1	2,940	1
70-04	14-Aug-20	44057.00	21	1	600	1	2,900	1
70-04	13-May-20	43964.00	20	1	610	1	2,750	1
70-04	10-Feb-20	43871.00	37	1	670	1	3,190	1
70-04	12-Nov-19	43781.00	42	1	640	1	3,020	1
70-04	6-Aug-19	43683.00	38	1	640	1	2,940	1
70-04	16-May-19	43601.00	27	1	680	1	3,020	1
70-04	26-Feb-19	43522.00	25	1	720	1	3,020	1
70-04	14-Nov-18	43418.00	29	1	780	1	2,980	1
70-04	15-Aug-18	43327.00	27	1	680	1	3,070	1
70-04	21-May-18	43241.00	27	1	720	1	3,150	1
70-04	13-Feb-18	43144.00	27	1	710	1	2,860	1
70-04	9-Nov-17	43048.00	26.5	1	651	1	2,740	1
70-04	14-Aug-17	42961.00	24.6	1	655	1	2,820	1
70-04	19-May-17	42874.00	23.9	1	618	1	2,680	1
70-04	20-Feb-17	42786.00	26.1	1	644	1	2,970	1
70-04	22-Nov-16	42696.00	26.5	1	625	1	2,900	1

70-04	18-Aug-16	42600.00	27.8	1	739	1	2,920	1
70-04	23-May-16	42513.00	27.3	1	423	1	2,780	1
70-04	16-Feb-16	42416.00	31.4	1	626	1	2,670	1
70-04	12-Nov-15	42320.00	28.9	1	604	1	2,700	1
340-01	9-Feb-24	45331.00	64	1	640	1	3,140	1
340-01	8-Nov-23	45238.00	67	1	630	1	2,740	1
340-01	8-Aug-23	45146.00	65	1	610	1	2,870	1
340-01	5-May-23	45051.00	62	1	610	1	2,870	1
340-01	8-Feb-23	44965.00	61	1	600	1	2,840	1
340-01	8-Nov-22	44873.00	60	1	680	1	2,940	1
340-01	27-Oct-22	44861.00	58	1	560	1	2,970	1
340-01	5-May-22	44686.00	47	1	610	1	2,990	1
340-01	14-Feb-22	44606.00	48	1	630	1	2,950	1
340-01	4-Nov-21	44504.00	46	1	610	1	2,980	1
340-01	9-Aug-21	44417.00	46	1	580	1	2,940	1
340-01	6-May-21	44322.00	41	1	580	1	2,900	1
340-01	15-Feb-21	44242.00	42	1	570	1	2,930	1
340-01	11-Nov-20	44146.00	41	1	560	1	2,940	1
340-01	13-Aug-20	44056.00	42	1	550	1	2,950	1
340-01	14-May-20	43965.00	42	1	590	1	2,950	1
340-01	7-Feb-20	43868.00	46	1	560	1	2,850	1
340-01	12-Nov-19	43781.00	46	1	560	1	2,920	1
340-01	6-Aug-19	43683.00	48	1	590	1	2,830	1
340-01	14-May-19	43599.00	49	1	610	1	2,990	1
340-01	25-Feb-19	43521.00	50	1	630	1	3,020	1
340-01	15-Nov-18	43419.00	49	1	540	1	2,880	1
340-01	14-Aug-18	43326.00	45	1	560	1	2,830	1
340-01	21-May-18	43241.00	44	1	560	1	2,700	1
340-01	12-Feb-18	43143.00	44	1	640	1	2,870	1
340-01	8-Nov-17	43047.00	46.5	1	576	1	2,920	1
340-01	11-Aug-17	42958.00	46.5	1	417	1	2,830	1
340-01	18-May-17	42873.00	40.7	1	579	1	2,890	1
340-01	16-Feb-17	42782.00	40.3	1	591	1	2,820	1
340-01	10-Nov-16	42684.00	38.2	1	584	1	2,820	1
340-01	23-Aug-16	42605.00	35.3	1	618	1	3,050	1
340-01	18-May-16	42508.00	32.6	1	594	1	2,980	1
340-01	11-Feb-16	42411.00	34.0	1	621	1	3,080	1
340-01	9-Nov-15	42317.00	29.8	1	578	1	2,820	1
42-02	14-Feb-24	45336.00	6.1	1	540	1	2,800	1
42-02	16-Nov-23	45246.00	7.4	1	500	1	2,570	1
42-02	14-Aug-23	45152.00	8.1	1	490	1	2,450	1
42-02	10-May-23	45056.00	8.8	1	610	1	2,710	1
42-02	13-Feb-23	44970.00	9.2	1	550	1	2,830	1
42-02	10-Nov-22	44875.00	9.1	1	490	1	2,660	1
42-02	11-Aug-22	44784.00	9.4	1	470	1	2,620	1
42-02	11-May-22	44692.00	10	1	530	1	2,740	1
42-02	16-Feb-22	44608.00	7.3	1	520	1	2,850	1
42-02	9-Nov-21	44509.00	6.6	1	560	1	2,710	1
42-02	11-Aug-21	44419.00	11	1	520	1	2,660	1

42-02	11-May-21	44327.00	7.3	1	490	1	2,720	1
42-02	18-Feb-21	44245.00	7.1	1	540	1	2,860	1
42-02	16-Nov-20	44151.00	7.5	1	550	1	2,800	1
42-02	18-Aug-20	44061.00	8.5	1	410	1	2,400	1
42-02	22-May-20	43973.00	10	1	460	1	2,570	1
42-02	11-Feb-20	43872.00	10	1	490	1	2,680	1
42-02	22-Nov-19	43791.00	9.1	1	430	1	2,620	1
42-02	16-Aug-19	43693.00	9.3	1	420	1	2,440	1
42-02	29-May-19	43614.00	7.4	1	470	1	2,750	1
42-02	6-Mar-19	43530.00	7.0	1	460	1	2,750	1
42-02	4-Dec-18	43438.00	7.8	1	580	1	3,090	1
42-02	22-Aug-18	43334.00	7.3	1	450	1	2,600	1
42-02	29-May-18	43249.00	7.6	1	610	1	3,050	1
42-02	21-Feb-18	43152.00	8.1	1	610	1	2,960	1
42-02	1-Dec-17	43070.00	10.2	1	590	1	2,510	1
42-02	22-Aug-17	42969.00	14.8	1	514	1	2,630	1
42-02	2-Jun-17	42888.00	11.0	1	542	1	2,730	1
42-02	6-Mar-17	42800.00	12.3	1	501	1	2,650	1
42-02	28-Nov-16	42702.00	11.1	1	506	1	2,760	1
42-02	31-Aug-16	42613.00	12.8	1	539	1	2,700	1
42-02	1-Jun-16	42522.00	8.79	1	469	1	2,580	1
42-02	23-Feb-16	42423.00	9.10	1	535	1	2,560	1
42-02	1-Dec-15	42339.00	7.55	1	510	1	2,420	1
42-03	13-Feb-24	45335.00	37	1	990	1	3,160	1
42-03	16-Nov-23	45246.00	38	1	980	1	3,170	1
42-03	11-Aug-23	45149.00	36	1	1,000	1	3,160	1
42-03	9-May-23	45055.00	34	1	1,200	1	3,160	1
42-03	10-Feb-23	44967.00	31	1	1,000	1	3,230	1
42-03	9-Nov-22	44874.00	33	1	980	1	3,230	1
42-03	10-Aug-22	44783.00	34	1	1,000	1	3,290	1
42-03	10-May-22	44691.00	33	1	970	1	3,280	1
42-03	16-Feb-22	44608.00	31	1	1,000	1	3,240	1
42-03	8-Nov-21	44508.00	31	1	1,100	1	3,240	1
42-03	10-Aug-21	44418.00	28	1	1,100	1	3,220	1
42-03	11-May-21	44327.00	28	1	1,000	1	3,230	1
42-03	17-Feb-21	44244.00	29	1	1,100	1	3,210	1
42-03	16-Nov-20	44151.00	30	1	1,100	1	3,340	1
42-03	18-Aug-20	44061.00	30	1	1,100	1	3,340	1
42-03	20-May-20	43971.00	28	1	1,100	1	3,300	1
42-03	11-Feb-20	43872.00	26	1	1,200	1	3,370	1
42-03	22-Nov-19	43791.00	29	1	1,000	1	3,380	1
42-03	16-Aug-19	43693.00	34	1	1,200	1	3,420	1
42-03	30-May-19	43615.00	30	1	1,200	1	3,380	1
42-03	6-Mar-19	43530.00	32	1	1,100	1	3,390	1
42-03	4-Dec-18	43438.00	41	1	1,200	1	3,550	1
42-03	22-Aug-18	43334.00	40	1	1,100	1	3,530	1
42-03	29-May-18	43249.00	43	1	1,200	1	3,590	1
42-03	21-Feb-18	43152.00	36	1	1,200	1	3,570	1
42-03	1-Dec-17	43070.00	43.6	1	1,350	1	3,350	1

42-03	23-Aug-17	42970.00	54.5	1	1,010	1	3,540	1
42-03	2-Jun-17	42888.00	57.1	1	1,120	1	3,630	1
42-03	6-Mar-17	42800.00	49.2	1	1,170	1	3,690	1
42-03	28-Nov-16	42702.00	50.2	1	1,180	1	3,730	1
42-03	31-Aug-16	42613.00	93.5	1	983	1	3,400	1
42-03	1-Jun-16	42522.00	90.0	1	956	1	3,680	1
42-03	23-Feb-16	42423.00	68.0	1	1,190	1	3,740	1
42-03	1-Dec-15	42339.00	97.9	1	933	1	3,380	1
42-06	13-Feb-24	45335.00	47	1	340	1	2,150	1
42-06	16-Nov-23	45246.00	66	1	330	1	2,090	1
42-06	11-Aug-23	45149.00	60	1	330	1	2,170	1
42-06	9-May-23	45055.00	91	1	370	1	2,530	1
42-06	10-Feb-23	44967.00	120	1	390	1	2,530	1
42-06	9-Nov-22	44874.00	82	1	360	1	2,400	1
42-06	10-Aug-22	44783.00	91	1	360	1	2,520	1
42-06	10-May-22	44691.00	170	1	520	1	3,420	1
42-06	17-Feb-22	44609.00	170	1	570	1	3,510	1
42-06	8-Nov-21	44508.00	200	1	650	1	3,620	1
42-06	11-Aug-21	44419.00	200	1	590	1	3,500	1
42-06	11-May-21	44327.00	210	1	630	1	3,710	1
42-06	18-Feb-21	44245.00	230	1	720	1	3,800	1
42-06	16-Nov-20	44151.00	190	1	560	1	3,260	1
42-06	18-Aug-20	44061.00	150	1	480	1	3,030	1
42-06	22-May-20	43973.00	200	1	620	1	3,480	1
42-06	12-Feb-20	43873.00	150	1	470	1	2,850	1
42-06	22-Nov-19	43791.00	180	1	360	1	2,760	1
42-06	16-Aug-19	43693.00	150	1	440	1	2,740	1
42-06	30-May-19	43615.00	140	1	350	1	2,540	1
42-06	6-Mar-19	43530.00	130	1	470	1	2,810	1
42-06	4-Dec-18	43438.00	97	1	560	1	2,690	1
42-06	22-Aug-18	43334.00	140	1	420	1	2,850	1
42-06	29-May-18	43249.00	160	1	610	1	3,060	1
42-06	21-Feb-18	43152.00	140	1	590	1	2,920	1
42-06	1-Dec-17	43070.00	129	1	522	1	2,350	1
42-06	22-Aug-17	42969.00	123	1	295	1	2,250	1
42-06	2-Jun-17	42888.00	98.1	1	424	1	2,340	1
42-06	6-Mar-17	42800.00	102	1	280	1	2,180	1
42-06	28-Nov-16	42702.00	66.9	1	291	1	2,100	1
42-06	31-Aug-16	42613.00	67.9	1	275	1	1,970	1
42-06	1-Jun-16	42522.00	87.7	1	300	1	2,250	1
42-06	23-Feb-16	42423.00	60.0	1	308	1	2,050	1
42-06	1-Dec-15	42339.00	84.5	1	358	1	2,220	1
42-08	13-Feb-24	45335.00	49	1	330	1	2,180	1
42-08	16-Nov-23	45246.00	7.3	1	500	1	2,540	1
42-08	14-Aug-23	45152.00	21	1	270	1	1,860	1
42-08	10-May-23	45056.00	11	1	530	1	2,600	1
42-08	13-Feb-23	44970.00	22	1	280	1	1,860	1
42-08	9-Nov-22	44874.00	16	1	370	1	2,160	1
42-08	10-Aug-22	44783.00	19	1	310	1	2,090	1

42-08	11-May-22	44692.00	24	1	260	1	1,800	1
42-08	17-Feb-22	44609.00	25	1	270	1	1,830	1
42-08	9-Nov-21	44509.00	32	1	230	1	1,640	1
42-08	11-Aug-21	44419.00	36	1	220	1	1,700	1
42-08	11-May-21	44327.00	40	1	180	1	1,460	1
42-08	18-Feb-21	44245.00	35	1	250	1	1,730	1
42-08	16-Nov-20	44151.00	42	1	170	1	1,680	1
42-08	18-Aug-20	44061.00	17	1	370	1	2,290	1
42-08	22-May-20	43973.00	42	1	240	1	1,780	1
42-08	12-Feb-20	43873.00	40	1	240	1	1,830	1
42-08	22-Nov-19	43791.00	35	1	290	1	2,000	1
42-08	16-Aug-19	43693.00	42	1	290	1	1,920	1
42-08	29-May-19	43614.00	60	1	130	1	1,410	1
42-08	6-Mar-19	43530.00	49	1	96	1	1,310	1
42-08	4-Dec-18	43438.00	36	1	54	1	1,280	1
42-08	22-Aug-18	43334.00	29	1	200	1	1,700	1
42-08	29-May-18	43249.00	27	1	93	1	1,200	1
42-08	21-Feb-18	43152.00	20	1	130	1	1,290	1
42-08	2-Dec-17	43071.00	24.0	1	135	1	1,160	1
42-08	22-Aug-17	42969.00	30.6	1	203	1	1,580	1
42-08	2-Jun-17	42888.00	32.3	1	43	1	1,030	1
42-08	6-Mar-17	42800.00	36.8	1	41	1	1,200	1
42-08	28-Nov-16	42702.00	37.0	1	43	1	1,160	1
42-08	31-Aug-16	42613.00	40.6	1	53	1	1,300	1
42-10	14-Feb-24	45336.00	5.8	1	540	1	2,680	1
42-10	16-Aug-23	45154.00	7.6	1	430	1	1,510	1
42-10	11-May-23	45057.00	7.9	1	410	1	1,610	1
42-10	14-Feb-23	44971.00	6.3	1	420	1	1,610	1
42-10	10-Nov-22	44875.00	7.4	1	410	1	1,630	1
42-10	11-Aug-22	44784.00	6.7	1	400	1	1,470	1
42-10	11-May-22	44692.00	6.4	1	420	1	1,610	1
42-10	15-Feb-22	44607.00	6.1	1	410	1	1,590	1
42-10	9-Nov-21	44509.00	4.5	1	410	1	1,540	1
42-10	12-Aug-21	44420.00	3.8	1	400	1	1,520	1
42-10	12-May-21	44328.00	3.0	1	370	1	1,490	1
42-10	17-Feb-21	44244.00	2.1	1	400	1	1,470	1
42-10	13-Nov-20	44148.00	1.4	1	380	1	1,460	1
42-10	19-Aug-20	44062.00	<1.0	0	380	1	1,440	1
42-10	22-May-20	43973.00	1.3	1	390	1	1,540	1
42-10	12-Feb-20	43873.00	1.2	1	370	1	1,490	1
42-10	25-Nov-19	43794.00	0.84	1	370	1	1,550	1
42-10	19-Aug-19	43696.00	<1.0	0	400	1	1,540	1
42-10	30-May-19	43615.00	<1.0	0	390	1	1,470	1
42-10	6-Mar-19	43530.00	<1.0	0	370	1	1,410	1
42-10	4-Dec-18	43438.00	<1.0	0	410	1	1,410	1
42-10	22-Aug-18	43334.00	<1.0	0	370	1	1,390	1
42-10	30-May-18	43250.00	0.21	1	380	1	1,360	1
42-10	19-Feb-18	43150.00	<1.0	0	400	1	1,390	1
42-10	4-Dec-17	43073.00	0.592	1	380	1	1,300	1

42-10	23-Aug-17	42970.00	0.469	1	396	1	1,350	1
42-10	2-Jun-17	42888.00	0.429	1	405	1	1,300	1
42-10	6-Mar-17	42800.00	0.542	1	403	1	1,270	1
42-10	29-Nov-16	42703.00	1.45	1	425	1	1,380	1
42-10	1-Sep-16	42614.00	<0.305	0	414	1	1,370	1
42-10	1-Jun-16	42522.00	0.354	1	425	1	1,520	1
42-10	23-Feb-16	42423.00	<0.0610	0	459	1	1,460	1
42-10	1-Dec-15	42339.00	0.165	1	439	1	1,300	1
42-11	14-Feb-24	45336.00	6.2	1	550	1	2,790	1
42-11	15-Nov-23	45245.00	<1.0	0	310	1	1,120	1
42-11	14-Aug-23	45152.00	<1.0	0	350	1	1,310	1
42-11	10-May-23	45056.00	<1.0	0	440	1	1,420	1
42-11	14-Feb-23	44971.00	<1.0	0	350	1	1,370	1
42-11	10-Nov-22	44875.00	<1.0	0	360	1	1,380	1
42-11	11-Aug-22	44784.00	<1.0	0	340	1	1,390	1
42-11	11-May-22	44692.00	<1.0	0	350	1	1,390	1
42-11	17-Feb-22	44609.00	<1.0	0	380	1	1,410	1
42-11	9-Nov-21	44509.00	<1.0	0	390	1	1,400	1
42-11	12-Aug-21	44420.00	<1.0	0	360	1	1,350	1
42-11	12-May-21	44328.00	<1.0	0	350	1	1,390	1
42-11	17-Feb-21	44244.00	<1.0	0	360	1	1,350	1
42-11	13-Nov-20	44148.00	<1.0	0	330	1	1,310	1
42-11	19-Aug-20	44062.00	<1.0	0	300	1	1,250	1
42-11	22-May-20	43973.00	1.1	1	310	1	1,200	1
42-11	12-Feb-20	43873.00	1.3	1	290	1	1,220	1
42-11	25-Nov-19	43794.00	1.4	1	310	1	1,200	1
42-11	19-Aug-19	43696.00	1.2	1	280	1	1,200	1
42-11	30-May-19	43615.00	1.3	1	280	1	1,180	1
42-11	6-Mar-19	43530.00	1.3	1	260	1	1,160	1
42-11	4-Dec-18	43438.00	1.3	1	290	1	1,160	1
42-11	22-Aug-18	43334.00	1.4	1	270	1	1,190	1
42-11	30-May-18	43250.00	1.4	1	330	1	1,160	1
42-11	19-Feb-18	43150.00	1.4	1	310	1	1,200	1
42-11	4-Dec-17	43073.00	1.66	1	268	1	1,040	1
42-11	23-Aug-17	42970.00	1.72	1	291	1	1,100	1
42-11	2-Jun-17	42888.00	1.38	1	293	1	1,090	1
42-11	3-Mar-17	42797.00	1.66	1	298	1	1,140	1
42-11	29-Nov-16	42703.00	2.39	1	301	1	1,120	1
42-11	1-Sep-16	42614.00	1.23	1	305	1	1,180	1
42-11	1-Jun-16	42522.00	1.34	1	302	1	1,190	1
42-11	23-Feb-16	42423.00	1.23	1	319	1	1,190	1
42-11	1-Dec-15	42339.00	1.16	1	303	1	1,160	1
42-12	14-Feb-24	45336.00	<1.0	0	270	1	1,080	1
42-12	16-Aug-23	45154.00	<1.0	0	270	1	1,030	1
42-12	11-May-23	45057.00	<1.0	0	250	1	1,010	1
42-12	14-Feb-23	44971.00	1.8	1	260	1	1,080	1
42-12	10-Nov-22	44875.00	<1.0	0	270	1	1,090	1
42-12	11-Aug-22	44784.00	1.0	1	260	1	1,070	1
42-12	11-May-22	44692.00	1.6	1	250	1	1,080	1

42-12	17-Feb-22	44609.00	1.9	1	270	1	1,090	1
42-12	9-Nov-21	44509.00	1.8	1	270	1	1,080	1
42-12	12-Aug-21	44420.00	1.6	1	290	1	1,110	1
42-12	12-May-21	44328.00	1.7	1	270	1	1,120	1
42-12	17-Feb-21	44244.00	1.7	1	290	1	1,090	1
42-12	13-Nov-20	44148.00	1.3	1	310	1	1,100	1
42-12	19-Aug-20	44062.00	<1.0	0	310	1	1,130	1
42-12	22-May-20	43973.00	1.1	1	310	1	1,130	1
42-12	12-Feb-20	43873.00	1.3	1	330	1	1,160	1
42-12	25-Nov-19	43794.00	1.1	1	350	1	1,170	1
42-12	19-Aug-19	43696.00	<1.0	0	330	1	1,170	1
42-12	30-May-19	43615.00	1.0	1	320	1	1,180	1
42-12	6-Mar-19	43530.00	<1.0	0	300	1	1,190	1
42-12	4-Dec-18	43438.00	<1.0	0	330	1	1,190	1
42-12	22-Aug-18	43334.00	1.0	1	330	1	1,190	1
42-12	30-May-18	43250.00	0.78	1	370	1	1,200	1
42-12	19-Feb-18	43150.00	<1.0	0	330	1	1,240	1
42-12	4-Dec-17	43073.00	0.825	1	321	1	1,030	1
42-12	23-Aug-17	42970.00	0.684	1	325	1	1,170	1
42-12	2-Jun-17	42888.00	0.913	1	328	1	1,170	1
42-12	6-Mar-17	42800.00	1.07	1	330	1	1,210	1
42-12	29-Nov-16	42703.00	1.84	1	346	1	1,200	1
42-12	1-Sep-16	42614.00	0.731	1	344	1	1,210	1
42-12	1-Jun-16	42522.00	0.949	1	341	1	1,250	1
42-12	23-Feb-16	42423.00	0.789	1	352	1	1,140	1
42-12	1-Dec-15	42339.00	0.917	1	341	1	1,140	1
42-13	13-Feb-24	45335.00	37	1	1,000	1	3,170	1
42-13	16-Nov-23	45246.00	38	1	990	1	3,150	1
42-13	11-Aug-23	45149.00	36	1	1,000	1	3,230	1
42-13	9-May-23	45055.00	11	1	900	1	3,060	1
42-13	10-Feb-23	44967.00	15	1	1,000	1	3,250	1
42-13	9-Nov-22	44874.00	16	1	980	1	3,270	1
42-13	10-Aug-22	44783.00	16	1	950	1	3,290	1
42-13	10-May-22	44691.00	21	1	940	1	3,380	1
42-13	16-Feb-22	44608.00	16	1	1,000	1	3,330	1
42-13	8-Nov-21	44508.00	16	1	1,000	1	3,310	1
42-13	11-Aug-21	44419.00	20	1	1,000	1	3,330	1
42-13	11-May-21	44327.00	20	1	1,000	1	3,340	1
42-13	17-Feb-21	44244.00	39	1	1,100	1	3,510	1
42-13	16-Nov-20	44151.00	48	1	1,100	1	3,670	1
42-13	18-Aug-20	44061.00	69	1	1,000	1	3,710	1
42-13	22-May-20	43973.00	42	1	950	1	3,390	1
42-13	11-Feb-20	43872.00	41	1	990	1	3,520	1
42-13	22-Nov-19	43791.00	33	1	1,000	1	3,570	1
42-13	6-Mar-19	43530.00	54	1	910	1	3,510	1
42-13	22-Aug-18	43334.00	43	1	1,000	1	3,470	1
42-13	29-May-18	43249.00	61	1	970	1	3,590	1
42-13	21-Feb-18	43152.00	57	1	1,000	1	3,540	1
42-13	1-Dec-17	43070.00	48.0	1	1,090	1	3,240	1

42-13	6-Mar-17	42800.00	43.6	1	838	1	3,410	1
42-13	28-Nov-16	42702.00	43.5	1	839	1	3,340	1
624-01	15-Feb-24	45337.00	17	1	860	1	2,730	1
624-01	10-Nov-23	45240.00	17	1	920	1	2,720	1
624-01	17-Aug-23	45155.00	18	1	880	1	2,750	1
624-01	12-May-23	45058.00	12	1	850	1	2,680	1
624-01	16-Feb-23	44973.00	13	1	860	1	2,770	1
624-01	11-Nov-22	44876.00	12	1	840	1	2,880	1
624-01	12-Aug-22	44785.00	12	1	920	1	2,820	1
624-01	12-May-22	44693.00	19	1	750	1	2,550	1
624-01	18-Feb-22	44610.00	6.1	1	670	1	2,340	1
624-01	10-Nov-21	44510.00	4.5	1	650	1	2,220	1
624-01	27-Aug-21	44435.00	10	1	700	1	2,400	1
624-01	14-May-21	44330.00	6.7	1	560	1	1,960	1
624-01	18-Feb-21	44245.00	3.1	1	540	1	1,950	1
624-01	13-Nov-20	44148.00	4.3	1	540	1	1,990	1
624-01	17-Aug-20	44060.00	3.7	1	500	1	1,910	1
624-01	15-May-20	43966.00	6.6	1	520	1	1,980	1
624-01	12-Feb-20	43873.00	8.7	1	510	1	2,050	1
624-01	15-Nov-19	43784.00	13	1	550	1	2,190	1
624-01	13-Aug-19	43690.00	9.2	1	660	1	2,390	1
624-01	20-May-19	43605.00	12	1	910	1	2,860	1
624-01	28-Feb-19	43524.00	11	1	1,000	1	3,170	1
624-01	20-Nov-18	43424.00	16	1	630	1	2,180	1
624-01	29-Aug-18	43341.00	9.9	1	990	1	3,700	1
624-01	22-May-18	43242.00	13	1	1,000	1	3,240	1
624-01	14-Feb-18	43145.00	13	1	940	1	3,110	1
624-01	14-Nov-17	43053.00	12.7	1	979	1	2,750	1
624-01	15-Aug-17	42962.00	14.8	1	1,050	1	3,080	1
624-01	23-May-17	42878.00	14.6	1	1,060	1	3,030	1
624-01	22-Feb-17	42788.00	15.3	1	997	1	3,210	1
624-01	14-Nov-16	42688.00	11.3	1	1,040	1	3,260	1
624-01	19-Aug-16	42601.00	7.25	1	926	1	2,970	1
624-01	19-May-16	42509.00	20.6	1	808	1	2,710	1
624-01	16-Feb-16	42416.00	11.0	1	744	1	2,480	1
624-01	10-Nov-15	42318.00	7.06	1	703	1	2,440	1
624-02	15-Feb-24	45337.00	7.6	1	690	1	2,640	1
624-02	10-Nov-23	45240.00	8.2	1	660	1	2,590	1
624-02	17-Aug-23	45155.00	9.8	1	750	1	3,010	1
624-02	12-May-23	45058.00	9.3	1	690	1	2,680	1
624-02	16-Feb-23	44973.00	9.2	1	640	1	2,720	1
624-02	11-Nov-22	44876.00	8.7	1	600	1	2,740	1
624-02	12-Aug-22	44785.00	13	1	850	1	3,240	1
624-02	12-May-22	44693.00	13	1	800	1	3,430	1
624-02	18-Feb-22	44610.00	12	1	830	1	3,240	1
624-02	11-Nov-21	44511.00	7.2	1	680	1	2,840	1
624-02	27-Aug-21	44435.00	4.1	1	480	1	2,160	1
624-02	14-May-21	44330.00	5.6	1	740	1	2,710	1
624-02	19-Feb-21	44246.00	3.6	1	650	1	2,320	1

624-02	12-Nov-20	44147.00	5.2	1	480	1	2,300	1
624-02	17-Aug-20	44060.00	5.4	1	610	1	2,350	1
624-02	15-May-20	43966.00	4.3	1	550	1	2,300	1
624-02	12-Feb-20	43873.00	4.4	1	480	1	2,210	1
624-02	15-Nov-19	43784.00	5.2	1	530	1	2,470	1
624-02	13-Aug-19	43690.00	7.7	1	790	1	2,860	1
624-02	20-May-19	43605.00	7.4	1	770	1	2,860	1
624-02	28-Feb-19	43524.00	8.2	1	950	1	3,130	1
624-02	20-Nov-18	43424.00	9.4	1	850	1	3,010	1
624-02	29-Aug-18	43341.00	8.9	1	710	1	2,160	1
624-02	22-May-18	43242.00	10	1	860	1	3,290	1
624-02	14-Feb-18	43145.00	9.1	1	720	1	2,920	1
624-02	14-Nov-17	43053.00	8.97	1	706	1	2,780	1
624-02	15-Aug-17	42962.00	10.9	1	796	1	3,020	1
624-02	23-May-17	42878.00	14.2	1	827	1	3,590	1
624-02	22-Feb-17	42788.00	11.7	1	793	1	3,060	1
624-02	14-Nov-16	42688.00	8.58	1	747	1	2,850	1
624-02	19-Aug-16	42601.00	6.46	1	692	1	2,590	1
624-02	19-May-16	42509.00	18.5	1	914	1	3,280	1
624-02	16-Feb-16	42416.00	10.2	1	785	1	2,800	1
624-02	10-Nov-15	42318.00	17.2	1	1,050	1	3,290	1
624-09	16-Feb-24	45338.00	3.7	1	360	1	1,940	1
624-09	15-Nov-23	45245.00	1.8	1	330	1	1,750	1
624-09	16-Aug-23	45154.00	<1.0	0	240	1	1,360	1
624-09	11-May-23	45057.00	<1.0	0	250	1	1,470	1
624-09	16-Feb-23	44973.00	<1.0	0	180	1	1,050	1
624-09	14-Nov-22	44879.00	<1.0	0	140	1	1,020	1
624-09	15-Aug-22	44788.00	<0.50	0	140	1	1,180	1
624-09	13-May-22	44694.00	2.4	1	270	1	1,700	1
624-09	18-Feb-22	44610.00	1.6	1	310	1	1,880	1
624-09	10-Nov-21	44510.00	2.8	1	370	1	2,010	1
624-09	12-Aug-21	44420.00	2.6	1	380	1	2,070	1
624-09	12-May-21	44328.00	6.8	1	440	1	2,420	1
624-09	19-Feb-21	44246.00	13	1	600	1	2,820	1
624-09	13-Nov-20	44148.00	1.3	1	260	1	1,440	1
624-09	17-Aug-20	44060.00	3.5	1	370	1	1,970	1
624-09	14-May-20	43965.00	<1.0	0	320	1	1,480	1
624-09	13-Feb-20	43874.00	<1.0	0	320	1	2,130	1
624-10	16-Feb-24	45338.00	1.0	1	620	1	3,180	1
624-10	15-Nov-23	45245.00	<1.0	0	570	1	2,870	1
624-10	16-Aug-23	45154.00	<1.0	0	610	1	2,990	1
624-10	11-May-23	45057.00	<1.0	0	690	1	3,240	1
624-10	16-Feb-23	44973.00	<1.0	0	550	1	2,860	1
624-10	14-Nov-22	44879.00	<1.0	0	510	1	2,760	1
624-10	12-Aug-22	44785.00	<1.0	0	480	1	2,690	1
624-10	12-May-22	44693.00	5.8	1	410	1	2,420	1
624-10	18-Feb-22	44610.00	14	1	390	1	2,200	1
624-10	10-Nov-21	44510.00	8.9	1	440	1	2,330	1
624-10	12-Aug-21	44420.00	19	1	350	1	2,190	1

624-10	12-May-21	44328.00	17	1	420	1	2,320	1
624-10	19-Feb-21	44246.00	2.9	1	540	1	2,690	1
624-10	13-Nov-20	44148.00	2.3	1	500	1	2,710	1
624-10	17-Aug-20	44060.00	5.7	1	520	1	2,700	1
624-10	14-May-20	43965.00	2.3	1	490	1	2,640	1
624-10	13-Feb-20	43874.00	4.2	1	450	1	2,720	1
624-11	15-Feb-24	45337.00	7.2	1	1,700	1	4,320	1
624-11	10-Nov-23	45240.00	7.4	1	1,700	1	4,150	1
624-11	17-Aug-23	45155.00	8.2	1	1,600	1	4,110	1
624-11	12-May-23	45058.00	8.9	1	1,300	1	3,600	1
624-11	17-Feb-23	44974.00	10	1	1,200	1	3,500	1
624-11	11-Nov-22	44876.00	8.8	1	1,200	1	3,500	1
624-11	12-Aug-22	44785.00	9.2	1	1,100	1	3,230	1
624-11	12-May-22	44693.00	9.6	1	1,000	1	3,340	1
624-11	18-Feb-22	44610.00	9.7	1	1,100	1	3,220	1
624-11	11-Nov-21	44511.00	9.8	1	1,000	1	3,330	1
624-11	27-Aug-21	44435.00	14	1	1,000	1	3,320	1
624-11	14-May-21	44330.00	11	1	1,100	1	3,330	1
624-11	19-Feb-21	44246.00	11	1	1,100	1	3,300	1
624-11	12-Nov-20	44147.00	11	1	1,100	1	3,200	1
624-11	17-Aug-20	44060.00	11	1	1,200	1	3,440	1
624-11	15-May-20	43966.00	12	1	1,200	1	3,510	1
624-11	13-Feb-20	43874.00	9.2	1	910	1	3,650	1
74-01	19-Feb-24	45341.00	33	1	890	1	3,050	1
74-01	17-Nov-23	45247.00	30	1	820	1	2,830	1
74-01	18-Aug-23	45156.00	31	1	790	1	2,830	1
74-01	15-May-23	45061.00	43	1	770	1	2,950	1
74-01	17-Feb-23	44974.00	29	1	770	1	2,980	1
74-01	15-Nov-22	44880.00	27	1	800	1	2,980	1
74-01	16-Aug-22	44789.00	25	1	800	1	3,000	1
74-01	13-May-22	44694.00	15	1	780	1	3,020	1
74-01	22-Feb-22	44614.00	7.2	1	850	1	2,940	1
74-01	12-Nov-21	44512.00	17	1	880	1	3,130	1
74-01	7-Sep-21	44446.00	35	1	900	1	3,410	1
74-01	17-May-21	44333.00	11	1	980	1	3,590	1
74-01	22-Feb-21	44249.00	8.6	1	1,100	1	3,940	1
74-01	17-Nov-20	44152.00	5.9	1	1,200	1	9,800	1
74-01	21-Aug-20	44064.00	17	1	820	1	2,790	1
74-01	18-May-20	43969.00	66	1	1,100	1	3,570	1
74-01	14-Feb-20	43875.00	72	1	1,200	1	4,050	1
74-01	19-Nov-19	43788.00	68	1	1,100	1	3,960	1
74-01	14-Aug-19	43691.00	24	1	820	1	2,910	1
74-01	21-May-19	43606.00	39	1	850	1	3,110	1
74-01	28-Feb-19	43524.00	52	1	930	1	3,460	1
74-01	16-Nov-18	43420.00	65	1	1,100	1	3,820	1
74-01	29-Aug-18	43341.00	64	1	1,100	1	3,000	1
74-01	23-May-18	43243.00	34	1	790	1	3,140	1
74-01	19-Feb-18	43150.00	49	1	960	1	3,290	1
74-01	14-Nov-17	43053.00	41.5	1	871	1	3,100	1

74-01	16-Aug-17	42963.00	56.7	1	1,030	1	3,590	1
74-01	26-May-17	42881.00	26.2	1	756	1	2,810	1
74-01	24-Feb-17	42790.00	35.2	1	799	1	3,060	1
74-01	14-Nov-16	42688.00	46.8	1	702	1	3,360	1
74-01	24-Aug-16	42606.00	60.2	1	1,000	1	3,690	1
74-01	25-May-16	42515.00	51.1	1	739	1	3,060	1
74-01	18-Feb-16	42418.00	32.1	1	763	1	2,840	1
74-01	12-Nov-15	42320.00	15.9	1	725	1	2,630	1
74-02	16-Feb-24	45338.00	11	1	890	1	3,250	1
74-02	17-Nov-23	45247.00	7.8	1	850	1	3,010	1
74-02	18-Aug-23	45156.00	<1.0	0	650	1	2,540	1
74-02	12-May-23	45058.00	1.3	1	650	1	2,500	1
74-02	17-Feb-23	44974.00	4.3	1	670	1	2,440	1
74-02	14-Nov-22	44879.00	<1.0	0	620	1	2,460	1
74-02	15-Aug-22	44788.00	<0.50	0	680	1	2,480	1
74-02	13-May-22	44694.00	<1.0	0	630	1	2,430	1
74-02	22-Feb-22	44614.00	<1.0	0	650	1	2,360	1
74-02	11-Nov-21	44511.00	<1.0	0	600	1	2,470	1
74-02	7-Sep-21	44446.00	<0.50	0	690	1	2,550	1
74-02	14-May-21	44330.00	<1.0	0	650	1	3,220	1
74-02	22-Feb-21	44249.00	<1.0	0	650	1	9,470	1
74-02	17-Nov-20	44152.00	30	1	510	1	18,900	1
74-02	21-Aug-20	44064.00	44	1	600	1	2,410	1
74-02	15-May-20	43966.00	43	1	610	1	2,430	1
74-02	14-Feb-20	43875.00	43	1	640	1	2,540	1
74-02	19-Nov-19	43788.00	37	1	640	1	2,630	1
74-02	14-Aug-19	43691.00	38	1	560	1	2,310	1
74-02	21-May-19	43606.00	37	1	600	1	2,380	1
74-02	28-Feb-19	43524.00	36	1	560	1	2,400	1
74-02	15-Nov-18	43419.00	31	1	550	1	2,230	1
74-02	23-Aug-18	43335.00	27	1	490	1	2,220	1
74-02	23-May-18	43243.00	33	1	560	1	2,360	1
74-02	15-Feb-18	43146.00	26	1	640	1	2,260	1
74-02	14-Nov-17	43053.00	23.5	1	521	1	2,110	1
74-02	15-Aug-17	42962.00	23.5	1	539	1	2,100	1
74-02	25-May-17	42880.00	25.6	1	548	1	2,470	1
74-02	24-Feb-17	42790.00	33.4	1	587	1	2,240	1
74-02	14-Nov-16	42688.00	34.4	1	603	1	2,440	1
74-02	24-Aug-16	42606.00	37.6	1	581	1	2,480	1
74-02	25-May-16	42515.00	40.7	1	593	1	2,480	1
74-02	18-Feb-16	42418.00	29.9	1	592	1	2,420	1
74-02	11-Nov-15	42319.00	22.5	1	562	1	2,120	1
74-03	16-Feb-24	45338.00	1.2	1	230	1	1,800	1
74-03	17-Nov-23	45247.00	<1.0	0	220	1	1,650	1
74-03	18-Aug-23	45156.00	<1.0	0	210	1	1,260	1
74-03	12-May-23	45058.00	<1.0	0	250	1	1,670	1
74-03	17-Feb-23	44974.00	2.7	1	300	1	1,690	1
74-03	14-Nov-22	44879.00	1.2	1	220	1	1,490	1
74-03	15-Aug-22	44788.00	0.61	1	240	1	1,360	1

74-03	13-May-22	44694.00	<1.0	0	200	1	1,240	1
74-03	22-Feb-22	44614.00	<1.0	0	250	1	1,340	1
74-03	11-Nov-21	44511.00	<1.0	0	230	1	1,420	1
74-03	27-Aug-21	44435.00	<1.0	0	240	1	1,570	1
74-03	14-May-21	44330.00	<1.0	0	250	1	1,440	1
74-03	22-Feb-21	44249.00	<1.0	0	260	1	1,500	1
74-03	17-Nov-20	44152.00	<0.50	0	250	1	1,460	1
74-03	19-Aug-20	44062.00	<1.0	0	240	1	1,570	1
74-03	15-May-20	43966.00	<1.0	0	260	1	1,570	1
74-03	14-Feb-20	43875.00	<1.0	0	260	1	1,510	1
74-03	19-Nov-19	43788.00	<1.0	0	230	1	1,550	1
74-03	14-Aug-19	43691.00	<1.0	0	260	1	1,520	1
74-03	21-May-19	43606.00	<1.0	0	260	1	1,390	1
74-03	28-Feb-19	43524.00	<1.0	0	250	1	1,550	1
74-03	15-Nov-18	43419.00	1.0	1	300	1	1,760	1
74-03	23-Aug-18	43335.00	1.2	1	360	1	1,900	1
74-03	23-May-18	43243.00	1.4	1	430	1	2,000	1
74-03	15-Feb-18	43146.00	1.4	1	530	1	2,100	1
74-03	14-Nov-17	43053.00	1.21	1	548	1	2,340	1
74-03	15-Aug-17	42962.00	0.187	1	514	1	2,150	1
74-03	25-May-17	42880.00	0.941	1	641	1	2,640	1
74-03	24-Feb-17	42790.00	0.209	1	668	1	2,520	1
74-03	14-Nov-16	42688.00	1.25	1	654	1	2,500	1
74-03	24-Aug-16	42606.00	3.36	1	728	1	2,590	1
74-03	25-May-16	42515.00	0.646	1	693	1	2,780	1
74-03	18-Feb-16	42418.00	<0.194	0	804	1	2,920	1
74-03	12-Nov-15	42320.00	<0.194	0	1,000	1	3,480	1
74-04	19-Feb-24	45341.00	11	1	740	1	2,310	1
74-04	17-Nov-23	45247.00	10	1	680	1	2,270	1
74-04	21-Aug-23	45159.00	13	1	640	1	2,160	1
74-04	15-May-23	45061.00	12	1	460	1	1,830	1
74-04	21-Feb-23	44978.00	13	1	670	1	2,280	1
74-04	15-Nov-22	44880.00	16	1	580	1	2,170	1
74-04	16-Aug-22	44789.00	12	1	630	1	2,150	1
74-04	16-May-22	44697.00	11	1	590	1	2,080	1
74-04	23-Feb-22	44615.00	12	1	730	1	2,300	1
74-04	12-Nov-21	44512.00	12	1	620	1	2,280	1
74-04	7-Sep-21	44446.00	<0.50	0	610	1	2,030	1
74-04	17-May-21	44333.00	8.1	1	580	1	2,160	1
74-04	22-Feb-21	44249.00	11	1	690	1	2,140	1
74-04	17-Nov-20	44152.00	<0.50	0	530	1	3,840	1
74-04	21-Aug-20	44064.00	11	1	640	1	2,200	1
74-04	18-May-20	43969.00	10	1	470	1	1,670	1
74-04	14-Feb-20	43875.00	12	1	600	1	2,120	1
74-04	20-Nov-19	43789.00	12	1	630	1	2,180	1
74-04	14-Aug-19	43691.00	11	1	640	1	2,250	1
74-04	21-May-19	43606.00	15	1	490	1	1,890	1
74-04	1-Mar-19	43525.00	12	1	600	1	2,140	1
74-04	16-Nov-18	43420.00	12	1	620	1	2,140	1

74-04	31-Aug-18	43343.00	12	1	590	1	2,140	1
74-04	23-May-18	43243.00	12	1	580	1	2,060	1
74-04	19-Feb-18	43150.00	9.2	1	500	1	1,960	1
74-04	14-Nov-17	43053.00	10.6	1	532	1	1,840	1
74-04	16-Aug-17	42963.00	11.6	1	569	1	2,020	1
74-04	26-May-17	42881.00	18.6	1	516	1	1,910	1
74-04	24-Feb-17	42790.00	11.5	1	555	1	1,920	1
74-04	15-Nov-16	42689.00	11.3	1	551	1	2,070	1
74-04	25-Aug-16	42607.00	13.1	1	596	1	2,060	1
74-04	25-May-16	42515.00	20.0	1	530	1	2,060	1
74-04	18-Feb-16	42418.00	12.9	1	582	1	2,010	1
74-04	12-Nov-15	42320.00	13.5	1	584	1	2,040	1
74-05	19-Feb-24	45341.00	16	1	720	1	2,270	1
74-05	17-Nov-23	45247.00	16	1	630	1	2,200	1
74-05	21-Aug-23	45159.00	16	1	620	1	2,250	1
74-05	15-May-23	45061.00	20	1	600	1	2,170	1
74-05	21-Feb-23	44978.00	15	1	630	1	2,240	1
74-05	15-Nov-22	44880.00	15	1	580	1	2,230	1
74-05	16-Aug-22	44789.00	16	1	660	1	2,270	1
74-05	16-May-22	44697.00	15	1	680	1	2,210	1
74-05	23-Feb-22	44615.00	13	1	660	1	2,190	1
74-05	15-Nov-21	44515.00	13	1	<0.50	0	2,200	1
74-05	31-Aug-21	44439.00	14	1	670	1	2,160	1
74-05	17-May-21	44333.00	11	1	790	1	2,280	1
74-05	23-Feb-21	44250.00	6.3	1	690	1	2,210	1
74-05	17-Nov-20	44152.00	<0.50	0	610	1	3,320	1
74-05	21-Aug-20	44064.00	14	1	630	1	2,170	1
74-05	18-May-20	43969.00	15	1	650	1	2,160	1
74-05	14-Feb-20	43875.00	14	1	600	1	2,050	1
74-05	20-Nov-19	43789.00	14	1	540	1	2,080	1
74-05	13-Aug-19	43690.00	14	1	580	1	2,100	1
74-05	21-May-19	43606.00	15	1	580	1	2,160	1
74-05	1-Mar-19	43525.00	15	1	590	1	2,140	1
74-05	16-Nov-18	43420.00	14	1	560	1	2,070	1
74-05	29-Aug-18	43341.00	14	1	560	1	2,890	1
74-05	23-May-18	43243.00	14	1	580	1	2,110	1
74-05	19-Feb-18	43150.00	14	1	570	1	2,100	1
74-05	14-Nov-17	43053.00	12.0	1	539	1	1,860	1
74-05	16-Aug-17	42963.00	12.7	1	561	1	1,950	1
74-05	26-May-17	42881.00	13.4	1	590	1	2,140	1
74-05	24-Feb-17	42790.00	12.8	1	568	1	2,080	1
74-05	15-Nov-16	42689.00	12.0	1	560	1	2,020	1
74-05	25-Aug-16	42607.00	14.7	1	455	1	2,040	1
74-05	25-May-16	42515.00	15.6	1	533	1	2,010	1
74-05	18-Feb-16	42418.00	15.3	1	569	1	2,040	1
74-05	12-Nov-15	42320.00	15.4	1	561	1	2,020	1
833-02	20-Feb-24	45342.00	31	1	1,300	1	3,780	1
833-02	20-Nov-23	45250.00	35	1	1,400	1	4,080	1
833-02	22-Aug-23	45160.00	40	1	1,400	1	3,990	1

833-02	16-May-23	45062.00	37	1	1,300	1	3,760	1
833-02	22-Feb-23	44979.00	33	1	1,400	1	3,690	1
833-02	17-Nov-22	44882.00	72	1	930	1	3,280	1
833-02	17-Aug-22	44790.00	89	1	810	1	3,030	1
833-02	18-May-22	44699.00	36	1	1,400	1	4,030	1
833-02	24-Feb-22	44616.00	53	1	1,200	1	3,580	1
833-02	16-Nov-21	44516.00	41	1	1,300	1	3,920	1
833-02	17-Aug-21	44425.00	80	1	1,300	1	4,100	1
833-02	18-May-21	44334.00	67	1	1,400	1	4,280	1
833-02	24-Feb-21	44251.00	59	1	1,300	1	3,920	1
833-02	18-Nov-20	44153.00	89	1	1,100	1	3,960	1
833-02	24-Aug-20	44067.00	88	1	1,000	1	3,300	1
833-02	20-May-20	43971.00	81	1	950	1	3,180	1
833-02	17-Feb-20	43878.00	63	1	1,200	1	3,790	1
833-02	21-Nov-19	43790.00	100	1	1,000	1	3,520	1
833-02	14-Aug-19	43691.00	65	1	1,400	1	4,240	1
833-02	22-May-19	43607.00	68	1	1,400	1	4,230	1
833-02	4-Mar-19	43528.00	66	1	1,300	1	4,180	1
833-02	26-Nov-18	43430.00	62	1	1,300	1	4,240	1
833-02	31-Aug-18	43343.00	67	1	1,300	1	4,190	1
833-02	29-May-18	43249.00	63	1	1,300	1	4,210	1
833-02	21-Feb-18	43152.00	65	1	1,200	1	4,240	1
833-02	16-Nov-17	43055.00	66.4	1	1,300	1	3,730	1
833-02	1-Sep-17	42979.00	90.2	1	977	1	3,140	1
833-02	30-May-17	42885.00	71.2	1	1,340	1	4,380	1
833-02	28-Feb-17	42794.00	62.3	1	1,240	1	4,290	1
833-02	18-Nov-16	42692.00	68.5	1	1,340	1	4,210	1
833-02	29-Aug-16	42611.00	69.5	1	1,360	1	4,360	1
833-02	31-May-16	42521.00	79.9	1	1,400	1	4,440	1
833-02	22-Feb-16	42422.00	48.0	1	796	1	2,400	1
833-02	18-Nov-15	42326.00	74.5	1	1,300	1	4,240	1
833-04	20-Feb-24	45342.00	30	1	870	1	2,870	1
833-04	20-Nov-23	45250.00	35	1	930	1	3,060	1
833-04	22-Aug-23	45160.00	37	1	900	1	2,970	1
833-04	16-May-23	45062.00	29	1	790	1	2,650	1
833-04	21-Feb-23	44978.00	37	1	900	1	2,960	1
833-04	17-Nov-22	44882.00	35	1	820	1	2,870	1
833-04	17-Aug-22	44790.00	21	1	650	1	2,390	1
833-04	16-May-22	44697.00	36	1	950	1	3,000	1
833-04	24-Feb-22	44616.00	29	1	890	1	2,860	1
833-04	15-Nov-21	44515.00	24	1	940	1	2,830	1
833-04	17-Aug-21	44425.00	32	1	830	1	2,770	1
833-04	17-May-21	44333.00	20	1	680	1	2,410	1
833-04	23-Feb-21	44250.00	21	1	740	1	2,350	1
833-04	18-Nov-20	44153.00	22	1	620	1	2,510	1
833-04	24-Aug-20	44067.00	18	1	690	1	2,240	1
833-04	20-May-20	43971.00	18	1	670	1	2,290	1
833-04	17-Feb-20	43878.00	20	1	720	1	2,450	1
833-04	20-Nov-19	43789.00	31	1	840	1	2,800	1

833-04	15-Aug-19	43692.00	40	1	980	1	3,170	1
833-04	23-May-19	43608.00	29	1	800	1	2,800	1
833-04	4-Mar-19	43528.00	31	1	830	1	2,900	1
833-04	26-Nov-18	43430.00	42	1	950	1	3,230	1
833-04	4-Sep-18	43347.00	40	1	960	1	3,190	1
833-04	24-May-18	43244.00	34	1	910	1	3,010	1
833-04	20-Feb-18	43151.00	20	1	680	1	2,390	1
833-04	20-Nov-17	43059.00	32.6	1	902	1	2,930	1
833-04	31-Aug-17	42978.00	37.3	1	797	1	2,640	1
833-04	30-May-17	42885.00	32.0	1	880	1	3,000	1
833-04	1-Mar-17	42795.00	31.5	1	866	1	3,080	1
833-04	18-Nov-16	42692.00	39.8	1	586	1	3,300	1
833-04	29-Aug-16	42611.00	40.6	1	977	1	3,160	1
833-04	27-May-16	42517.00	21.6	1	781	1	2,660	1
833-04	22-Feb-16	42422.00	12.7	1	746	1	2,130	1
833-04	19-Nov-15	42327.00	11.8	1	762	1	2,310	1
833-05	22-Feb-24	45344.00	28	1	1,300	1	3,240	1
833-05	21-Nov-23	45251.00	21	1	1,000	1	3,000	1
833-05	23-Aug-23	45161.00	22	1	1,000	1	2,960	1
833-05	3-Jul-23	45110.00	24	1	1,000	1	3,120	1
833-05	23-Feb-23	44980.00	30	1	1,300	1	3,300	1
833-05	21-Nov-22	44886.00	28	1	1,100	1	3,190	1
833-05	18-Aug-22	44791.00	26	1	1,200	1	3,560	1
833-05	18-May-22	44699.00	32	1	1,200	1	3,500	1
833-05	10-Mar-22	44630.00	45	1	1,200	1	3,490	1
833-05	16-Nov-21	44516.00	41	1	1,200	1	3,510	1
833-05	17-Aug-21	44425.00	34	1	1,300	1	3,490	1
833-05	19-May-21	44335.00	32	1	1,100	1	3,460	1
833-05	25-Feb-21	44252.00	45	1	1,300	1	3,460	1
833-05	19-Nov-20	44154.00	46	1	1,200	1	3,460	1
833-05	25-Aug-20	44068.00	44	1	1,300	1	3,550	1
833-05	19-May-20	43970.00	19	1	1,100	1	3,180	1
833-05	17-Feb-20	43878.00	46	1	1,300	1	3,620	1
833-05	20-Nov-19	43789.00	35	1	1,300	1	3,500	1
833-05	15-Aug-19	43692.00	41	1	1,300	1	3,600	1
833-05	22-May-19	43607.00	29	1	1,300	1	3,430	1
833-05	5-Mar-19	43529.00	46	1	1,200	1	3,520	1
833-05	26-Nov-18	43430.00	45	1	1,200	1	3,530	1
833-05	31-Aug-18	43343.00	35	1	1,300	1	3,530	1
833-05	24-May-18	43244.00	46	1	1,100	1	3,350	1
833-05	22-Feb-18	43153.00	42	1	1,200	1	3,530	1
833-05	17-Nov-17	43056.00	51.7	1	931	1	3,330	1
833-05	31-Aug-17	42978.00	42.5	1	1,220	1	3,350	1
833-05	31-May-17	42886.00	25.9	1	1,260	1	3,540	1
833-05	1-Mar-17	42795.00	20.9	1	1,290	1	3,320	1
833-05	17-Nov-16	42691.00	22.4	1	1,330	1	3,560	1
833-05	29-Aug-16	42611.00	21.9	1	1,230	1	3,560	1
833-05	26-May-16	42516.00	20.7	1	1,080	1	3,120	1
833-05	19-Feb-16	42419.00	22.3	1	1,190	1	3,080	1

833-05	18-Nov-15	42326.00	20.9	1	958	1	2,720	1
833-06	20-Feb-24	45342.00	17	1	1,000	1	2,750	1
833-06	20-Nov-23	45250.00	15	1	770	1	2,350	1
833-06	21-Aug-23	45159.00	14	1	790	1	2,500	1
833-06	15-May-23	45061.00	44	1	820	1	2,740	1
833-06	21-Feb-23	44978.00	14	1	890	1	2,700	1
833-06	17-Nov-22	44882.00	38	1	850	1	2,610	1
833-06	17-Aug-22	44790.00	55	1	770	1	2,860	1
833-06	16-May-22	44697.00	44	1	890	1	2,840	1
833-06	23-Feb-22	44615.00	14	1	880	1	2,560	1
833-06	15-Nov-21	44515.00	50	1	820	1	2,850	1
833-06	17-Aug-21	44425.00	46	1	860	1	2,680	1
833-06	18-May-21	44334.00	46	1	800	1	2,820	1
833-06	23-Feb-21	44250.00	23	1	920	1	2,630	1
833-06	18-Nov-20	44153.00	53	1	760	1	2,800	1
833-06	24-Aug-20	44067.00	70	1	900	1	2,790	1
833-06	19-May-20	43970.00	44	1	820	1	2,790	1
833-06	17-Feb-20	43878.00	19	1	870	1	2,700	1
833-06	20-Nov-19	43789.00	43	1	810	1	2,660	1
833-06	15-Aug-19	43692.00	47	1	880	1	2,760	1
833-06	23-May-19	43608.00	47	1	840	1	2,740	1
833-06	5-Mar-19	43529.00	47	1	780	1	2,710	1
833-06	27-Nov-18	43431.00	24	1	820	1	2,660	1
833-06	4-Sep-18	43347.00	16	1	670	1	2,260	1
833-06	29-May-18	43249.00	11	1	740	1	2,260	1
833-06	22-Feb-18	43153.00	15	1	820	1	2,500	1
833-06	16-Nov-17	43055.00	16.9	1	786	1	2,300	1
833-06	1-Sep-17	42979.00	18.5	1	803	1	2,470	1
833-06	31-May-17	42886.00	39.9	1	800	1	2,560	1
833-06	1-Mar-17	42795.00	40.4	1	792	1	2,740	1
833-06	17-Nov-16	42691.00	43.2	1	809	1	2,680	1
833-06	26-Aug-16	42608.00	32.7	1	660	1	2,640	1
833-06	27-May-16	42517.00	28.8	1	711	1	2,380	1
833-06	22-Feb-16	42422.00	22.0	1	706	1	2,300	1
833-06	19-Nov-15	42327.00	51.1	1	752	1	2,560	1
833-07	22-Feb-24	45344.00	86	1	1,400	1	4,120	1
833-07	21-Nov-23	45251.00	77	1	1,300	1	4,020	1
833-07	23-Aug-23	45161.00	96	1	1,400	1	4,620	1
833-07	16-May-23	45062.00	92	1	1,300	1	4,450	1
833-07	22-Feb-23	44979.00	70	1	1,200	1	3,730	1
833-07	18-Nov-22	44883.00	63	1	1,200	1	3,950	1
833-07	18-Aug-22	44791.00	91	1	1,200	1	4,420	1
833-07	18-May-22	44699.00	92	1	1,100	1	4,170	1
833-07	10-Mar-22	44630.00	66	1	1,100	1	3,580	1
833-07	16-Nov-21	44516.00	67	1	1,000	1	3,790	1
833-07	18-Aug-21	44426.00	70	1	1,100	1	3,700	1
833-07	18-May-21	44334.00	65	1	1,000	1	3,680	1
833-07	24-Feb-21	44251.00	62	1	1,000	1	3,430	1
833-07	19-Nov-20	44154.00	62	1	970	1	3,670	1

833-07	25-Aug-20	44068.00	68	1	1,100	1	3,750	1
833-07	19-May-20	43970.00	67	1	1,000	1	3,830	1
833-07	17-Feb-20	43878.00	68	1	1,100	1	3,440	1
833-07	20-Nov-19	43789.00	74	1	1,100	1	3,680	1
833-07	15-Aug-19	43692.00	74	1	1,100	1	3,630	1
833-07	22-May-19	43607.00	69	1	1,100	1	3,760	1
833-07	4-Mar-19	43528.00	65	1	1,100	1	3,680	1
833-07	26-Nov-18	43430.00	70	1	1,100	1	3,630	1
833-07	31-Aug-18	43343.00	74	1	1,100	1	3,800	1
833-07	24-May-18	43244.00	74	1	1,000	1	3,670	1
833-07	22-Feb-18	43153.00	63	1	1,000	1	3,760	1
833-07	17-Nov-17	43056.00	68.2	1	808	1	3,540	1
833-07	31-Aug-17	42978.00	78.7	1	1,050	1	3,630	1
833-07	30-May-17	42885.00	83.3	1	1,120	1	4,080	1
833-07	1-Mar-17	42795.00	78.0	1	1,140	1	3,990	1
833-07	17-Nov-16	42691.00	85.3	1	1,180	1	4,180	1
833-07	29-Aug-16	42611.00	92.2	1	1,230	1	5,970	1
833-07	27-May-16	42517.00	100	1	1,230	1	4,620	1
833-07	18-Feb-16	42418.00	97.4	1	1,260	1	4,540	1
833-07	18-Nov-15	42326.00	91.0	1	1,130	1	4,150	1
833-08	20-Feb-24	45342.00	64	1	1,100	1	3,340	1
833-08	21-Nov-23	45251.00	67	1	1,100	1	3,460	1
833-08	22-Aug-23	45160.00	67	1	1,000	1	3,300	1
833-08	16-May-23	45062.00	49	1	1,100	1	3,210	1
833-08	22-Feb-23	44979.00	30	1	1,300	1	3,160	1
833-08	18-Nov-22	44883.00	25	1	1,100	1	2,990	1
833-08	18-Aug-22	44791.00	47	1	1,200	1	3,650	1
833-08	18-May-22	44699.00	45	1	1,200	1	3,740	1
833-08	10-Mar-22	44630.00	45	1	1,600	1	4,200	1
833-08	16-Nov-21	44516.00	46	1	1,100	1	3,590	1
833-08	18-Aug-21	44426.00	11	1	730	1	2,360	1
833-08	18-May-21	44334.00	35	1	1,200	1	3,540	1
833-08	24-Feb-21	44251.00	36	1	1,300	1	4,010	1
833-08	18-Nov-20	44153.00	32	1	850	1	3,450	1
833-08	24-Aug-20	44067.00	21	1	880	1	2,650	1
833-08	19-May-20	43970.00	38	1	820	1	2,860	1
833-08	17-Feb-20	43878.00	49	1	990	1	3,110	1
833-08	20-Nov-19	43789.00	43	1	850	1	2,930	1
833-08	14-Aug-19	43691.00	46	1	880	1	3,010	1
833-08	23-May-19	43608.00	43	1	900	1	2,980	1
833-08	5-Mar-19	43529.00	48	1	890	1	3,040	1
833-08	27-Nov-18	43431.00	47	1	860	1	2,950	1
833-08	4-Sep-18	43347.00	46	1	830	1	2,820	1
833-08	24-May-18	43244.00	52	1	840	1	2,980	1
833-08	22-Feb-18	43153.00	48	1	890	1	3,030	1
833-08	17-Nov-17	43056.00	54.3	1	631	1	2,970	1
833-08	1-Sep-17	42979.00	52.3	1	917	1	3,250	1
833-08	31-May-17	42886.00	67.6	1	984	1	3,230	1
833-08	1-Mar-17	42795.00	70.3	1	960	1	3,350	1

833-08	18-Nov-16	42692.00	48.3	1	1,020	1	3,720	1
833-08	29-Aug-16	42611.00	25.6	1	1,150	1	3,310	1
833-08	27-May-16	42517.00	46.5	1	1,010	1	3,080	1
833-08	19-Feb-16	42419.00	52.9	1	1,140	1	3,020	1
833-08	18-Nov-15	42326.00	56.9	1	533	1	2,010	1
833-09	22-Feb-24	45344.00	68	1	840	1	3,510	1
833-09	27-Nov-23	45257.00	64	1	830	1	3,500	1
833-09	23-Aug-23	45161.00	64	1	780	1	3,560	1
833-09	17-May-23	45063.00	110	1	850	1	4,100	1
833-09	23-Feb-23	44980.00	100	1	850	1	4,160	1
833-09	21-Nov-22	44886.00	130	1	840	1	4,260	1
833-09	18-Aug-22	44791.00	190	1	980	1	5,040	1
833-09	19-May-22	44700.00	190	1	1,000	1	4,700	1
833-09	10-Mar-22	44630.00	120	1	910	1	4,160	1
833-09	17-Nov-21	44517.00	110	1	800	1	3,990	1
833-09	18-Aug-21	44426.00	150	1	1,100	1	4,340	1
833-09	19-May-21	44335.00	19	1	690	1	2,760	1
833-09	25-Feb-21	44252.00	21	1	750	1	2,740	1
833-09	19-Nov-20	44154.00	21	1	800	1	2,750	1
833-09	25-Aug-20	44068.00	24	1	790	1	2,970	1
833-09	19-May-20	43970.00	23	1	760	1	2,870	1
833-09	18-Feb-20	43879.00	36	1	800	1	3,100	1
833-09	21-Nov-19	43790.00	33	1	750	1	3,110	1
833-09	14-Aug-19	43691.00	32	1	790	1	3,030	1
833-09	22-May-19	43607.00	26	1	790	1	2,930	1
833-09	4-Mar-19	43528.00	45	1	760	1	3,130	1
833-09	26-Nov-18	43430.00	42	1	790	1	3,140	1
833-09	4-Sep-18	43347.00	43	1	810	1	3,140	1
833-09	24-May-18	43244.00	43	1	770	1	3,110	1
833-09	21-Feb-18	43152.00	55	1	730	1	3,200	1
833-09	16-Nov-17	43055.00	59.0	1	1,190	1	2,740	1
833-09	31-Aug-17	42978.00	51.5	1	701	1	3,190	1
833-09	30-May-17	42885.00	59.2	1	799	1	3,410	1
833-09	28-Feb-17	42794.00	65.6	1	779	1	3,440	1
833-09	17-Nov-16	42691.00	64.9	1	763	1	3,410	1
833-09	26-Aug-16	42608.00	63.3	1	793	1	3,440	1
833-09	26-May-16	42516.00	71.8	1	726	1	3,510	1
833-09	19-Feb-16	42419.00	112	1	942	1	3,880	1
833-09	18-Nov-15	42326.00	109	1	902	1	3,860	1
833-10	22-Feb-24	45344.00	3.0	1	760	1	2,750	1
833-10	27-Nov-23	45257.00	3.2	1	710	1	2,770	1
833-10	24-Aug-23	45162.00	3.4	1	680	1	2,740	1
833-10	17-May-23	45063.00	2.2	1	700	1	2,790	1
833-10	23-Feb-23	44980.00	1.5	1	730	1	2,790	1
833-10	21-Nov-22	44886.00	1.6	1	680	1	2,830	1
833-10	19-Aug-22	44792.00	1.7	1	730	1	2,830	1
833-10	19-May-22	44700.00	1.5	1	740	1	2,870	1
833-10	28-Feb-22	44620.00	1.0	1	890	1	2,830	1
833-10	17-Nov-21	44517.00	1.2	1	750	1	2,800	1

833-10	18-Aug-21	44426.00	1.3	1	730	1	2,750	1
833-10	19-May-21	44335.00	<1.0	0	700	1	2,750	1
833-10	25-Feb-21	44252.00	<1.0	0	710	1	2,590	1
833-10	19-Nov-20	44154.00	<1.0	0	730	1	2,650	1
833-10	25-Aug-20	44068.00	<1.0	0	710	1	2,710	1
833-10	20-May-20	43971.00	<1.0	0	700	1	2,690	1
833-10	18-Feb-20	43879.00	<1.0	0	680	1	2,630	1
833-10	21-Nov-19	43790.00	1.5	1	630	1	2,630	1
833-10	14-Aug-19	43691.00	2.0	1	660	1	2,560	1
833-10	22-May-19	43607.00	1.8	1	640	1	2,560	1
833-10	4-Mar-19	43528.00	1.8	1	580	1	2,520	1
833-10	26-Nov-18	43430.00	2.6	1	620	1	2,520	1
833-10	31-Aug-18	43343.00	3.3	1	600	1	2,540	1
833-10	24-May-18	43244.00	3.6	1	610	1	2,510	1
833-10	22-Feb-18	43153.00	3.5	1	630	1	2,480	1
833-10	16-Nov-17	43055.00	5.74	1	613	1	2,060	1
833-10	31-Aug-17	42978.00	6.75	1	606	1	2,430	1
833-10	30-May-17	42885.00	3.83	1	650	1	2,560	1
833-10	1-Mar-17	42795.00	3.90	1	639	1	2,670	1
833-10	17-Nov-16	42691.00	4.64	1	534	1	2,620	1
833-10	26-Aug-16	42608.00	4.38	1	677	1	2,660	1
833-10	26-May-16	42516.00	4.22	1	637	1	2,680	1
833-10	19-Feb-16	42419.00	2.50	1	691	1	2,550	1
833-10	18-Nov-15	42326.00	2.69	1	660	1	2,580	1
257-01	23-Feb-24	45345.00	33	1	880	1	3,520	1
257-01	28-Nov-23	45258.00	32	1	890	1	3,590	1
257-01	24-Aug-23	45162.00	34	1	890	1	3,540	1
257-01	17-May-23	45063.00	31	1	860	1	3,610	1
257-01	24-Feb-23	44981.00	30	1	890	1	3,460	1
257-01	22-Nov-22	44887.00	30	1	930	1	3,440	1
257-01	19-Aug-22	44792.00	35	1	920	1	3,570	1
257-01	19-May-22	44700.00	33	1	1,100	1	3,700	1
257-01	28-Feb-22	44620.00	35	1	870	1	3,400	1
257-01	17-Nov-21	44517.00	34	1	940	1	3,500	1
257-01	8-Sep-21	44447.00	36	1	910	1	3,560	1
257-01	20-May-21	44336.00	30	1	890	1	3,640	1
257-01	25-Feb-21	44252.00	32	1	870	1	3,620	1
257-01	20-Nov-20	44155.00	35	1	910	1	3,610	1
257-01	25-Aug-20	44068.00	39	1	960	1	4,110	1
257-01	26-May-20	43977.00	36	1	850	1	3,640	1
257-01	18-Feb-20	43879.00	31	1	890	1	3,640	1
257-01	21-Nov-19	43790.00	35	1	800	1	3,720	1
257-01	6-Aug-19	43683.00	43	1	910	1	3,740	1
257-01	21-May-19	43606.00	41	1	890	1	3,800	1
257-01	1-Mar-19	43525.00	42	1	900	1	3,620	1
257-01	27-Nov-18	43431.00	45	1	890	1	3,780	1
257-01	23-Aug-18	43335.00	43	1	770	1	3,890	1
257-01	23-May-18	43243.00	42	1	900	1	4,020	1
257-01	20-Feb-18	43151.00	50	1	920	1	3,820	1

257-01	16-Nov-17	43055.00	51.1	1	870	1	3,740	1
257-01	18-Aug-17	42965.00	48.5	1	867	1	3,620	1
257-01	31-May-17	42886.00	49.3	1	848	1	3,570	1
257-01	2-Mar-17	42796.00	45.5	1	847	1	3,860	1
257-01	16-Nov-16	42690.00	44.4	1	681	1	3,940	1
257-01	25-Aug-16	42607.00	48.7	1	817	1	3,620	1
257-01	26-May-16	42516.00	47.7	1	797	1	3,700	1
257-01	22-Feb-16	42422.00	51.9	1	873	1	3,650	1
257-01	19-Nov-15	42327.00	49.1	1	821	1	3,680	1
257-02	23-Feb-24	45345.00	3.8	1	690	1	2,600	1
257-02	28-Nov-23	45258.00	8.6	1	650	1	2,530	1
257-02	24-Aug-23	45162.00	4.5	1	660	1	2,470	1
257-02	18-May-23	45064.00	4.6	1	710	1	2,680	1
257-02	24-Feb-23	44981.00	6.7	1	780	1	2,860	1
257-02	22-Nov-22	44887.00	11	1	860	1	2,780	1
257-02	19-Aug-22	44792.00	6.4	1	760	1	1,370	1
257-02	19-May-22	44700.00	6.9	1	730	1	2,760	1
257-02	28-Feb-22	44620.00	9.4	1	600	1	2,440	1
257-02	18-Nov-21	44518.00	39	1	1,000	1	3,600	1
257-02	8-Sep-21	44447.00	20	1	560	1	2,280	1
257-02	19-May-21	44335.00	10	1	770	1	2,950	1
257-02	1-Mar-21	44256.00	13	1	780	1	2,940	1
257-02	20-Nov-20	44155.00	12	1	770	1	2,930	1
257-02	26-Aug-20	44069.00	12	1	790	1	2,930	1
257-02	26-May-20	43977.00	11	1	710	1	2,810	1
257-02	18-Feb-20	43879.00	7.1	1	710	1	2,680	1
257-02	21-Nov-19	43790.00	5.3	1	620	1	2,690	1
257-02	6-Aug-19	43683.00	9.3	1	650	1	2,590	1
257-02	21-May-19	43606.00	10	1	620	1	2,480	1
257-02	1-Mar-19	43525.00	8.7	1	690	1	2,570	1
257-02	27-Nov-18	43431.00	9.1	1	650	1	2,680	1
257-02	23-Aug-18	43335.00	14	1	540	1	2,640	1
257-02	23-May-18	43243.00	14	1	690	1	2,530	1
257-02	20-Feb-18	43151.00	14	1	610	1	2,640	1
257-02	16-Nov-17	43055.00	14.0	1	679	1	2,430	1
257-02	18-Aug-17	42965.00	10.3	1	754	1	2,890	1
257-02	31-May-17	42886.00	10.0	1	696	1	2,520	1
257-02	2-Mar-17	42796.00	16.2	1	634	1	2,760	1
257-02	16-Nov-16	42690.00	10.2	1	671	1	3,090	1
257-02	25-Aug-16	42607.00	4.62	1	814	1	2,940	1
257-02	26-May-16	42516.00	7.28	1	572	1	2,480	1
257-02	22-Feb-16	42422.00	4.98	1	455	1	1,920	1
257-02	19-Nov-15	42327.00	12.2	1	800	1	2,890	1
257-03	24-Aug-23	45162.00	30	1	370	1	2,000	1
257-03	22-Nov-22	44887.00	11	1	630	1	2,630	1
257-03	22-Aug-22	44795.00	5.2	1	570	1	2,620	1
257-03	8-Sep-21	44447.00	15	1	780	1	2,900	1
257-03	1-Mar-21	44256.00	17	1	700	1	2,870	1
257-03	20-Nov-20	44155.00	19	1	590	1	2,890	1

257-03	26-Aug-20	44069.00	9.9	1	720	1	2,830	1
257-03	18-Feb-20	43879.00	16	1	660	1	2,730	1
257-03	21-Nov-19	43790.00	4.4	1	570	1	2,640	1
257-03	6-Aug-19	43683.00	5.9	1	750	1	2,900	1
257-03	1-Mar-19	43525.00	12	1	710	1	2,670	1
257-03	27-Nov-18	43431.00	5.8	1	570	1	2,480	1
257-03	23-Aug-18	43335.00	11	1	600	1	2,760	1
257-03	23-May-18	43243.00	11	1	430	1	2,060	1
257-03	20-Feb-18	43151.00	12	1	530	1	2,510	1
257-03	16-Nov-17	43055.00	13.8	1	523	1	2,150	1
257-03	18-Aug-17	42965.00	14.3	1	605	1	2,540	1
257-03	31-May-17	42886.00	10.1	1	402	1	2,330	1
257-03	2-Mar-17	42796.00	15.4	1	346	1	2,220	1
257-03	16-Nov-16	42690.00	12.50	1	344	1	1,860	1
257-03	25-Aug-16	42607.00	9.97	1	333	1	1,860	1
MW-4	23-Feb-24	45345.00	1.1	1	1,300	1	3,950	1
MW-4	28-Nov-23	45258.00	1.1	1	1,400	1	4,310	1
MW-4	24-Aug-23	45162.00	1.2	1	1,200	1	4,010	1
MW-4	18-May-23	45064.00	<1.0	0	1,500	1	4,700	1
MW-4	24-Feb-23	44981.00	1.1	1	1,400	1	4,290	1
MW-4	22-Nov-22	44887.00	<1.0	0	1,500	1	4,640	1
MW-4	22-Aug-22	44795.00	1.3	1	1,800	1	5,140	1
MW-4	20-May-22	44701.00	1.5	1	1,300	1	4,170	1
MW-4	28-Feb-22	44620.00	1.3	1	1,300	1	4,150	1
MW-4	18-Nov-21	44518.00	2.7	1	1,200	1	3,860	1
MW-4	8-Sep-21	44447.00	1.8	1	1,400	1	4,270	1
MW-4	20-May-21	44336.00	2.2	1	1,300	1	3,980	1
MW-4	1-Mar-21	44256.00	1.5	1	1,600	1	4,820	1
MW-4	20-Nov-20	44155.00	1.1	1	1,500	1	4,550	1
MW-4	26-Aug-20	44069.00	1.2	1	1,500	1	4,640	1
MW-4	26-May-20	43977.00	<1.0	0	1,400	1	4,460	1
MW-4	6-Mar-20	43896.00	<1.0	0	1,600	1	4,620	1
MW-4	26-Nov-19	43795.00	0.39	1	1,400	1	4,800	1
MW-4	19-Jun-18	43270.00	4.6	1	1,200	1	980	1
692-02	27-Feb-24	45349.00	23	1	480	1	1,850	1
692-02	29-Nov-23	45259.00	13	1	450	1	1,720	1
692-02	25-Aug-23	45163.00	31	1	480	1	1,830	1
692-02	18-May-23	45064.00	25	1	440	1	1,590	1
692-02	27-Feb-23	44984.00	21	1	410	1	1,430	1
692-02	28-Nov-22	44893.00	17	1	360	1	1,410	1
692-02	22-Aug-22	44795.00	11	1	350	1	1,260	1
692-02	20-May-22	44701.00	4.4	1	300	1	1,050	1
692-02	1-Mar-22	44621.00	5.0	1	300	1	1,060	1
692-02	19-Nov-21	44519.00	1.1	1	270	1	953	1
692-02	23-Aug-21	44431.00	<1.0	0	290	1	912	1
692-02	20-May-21	44336.00	<1.0	0	280	1	892	1
692-02	9-Mar-21	44264.00	<1.0	0	270	1	877	1
692-02	23-Nov-20	44158.00	<1.0	0	250	1	879	1
692-02	26-Aug-20	44069.00	<1.0	0	280	1	871	1

692-02	26-May-20	43977.00	<1.0	0	280	1	868	1
692-02	19-Feb-20	43880.00	<1.0	0	270	1	882	1
692-02	2-Dec-19	43801.00	<1.0	0	260	1	890	1
692-02	15-Aug-19	43692.00	2.2	1	380	1	1,210	1
692-02	29-May-19	43614.00	2.5	1	290	1	964	1
692-02	7-Mar-19	43531.00	67	1	640	1	2,560	1
692-02	27-Nov-18	43431.00	58	1	620	1	2,440	1
692-02	23-Aug-18	43335.00	66	1	610	1	2,690	1
692-02	30-May-18	43250.00	64	1	690	1	2,770	1
692-02	23-Feb-18	43154.00	82	1	840	1	2,960	1
692-02	30-Nov-17	43069.00	43.4	1	746	1	2,300	1
692-02	23-Aug-17	42970.00	24.4	1	660	1	2,290	1
692-02	5-Jun-17	42891.00	2.82	1	421	1	1,640	1
692-02	2-Mar-17	42796.00	17.8	1	583	1	2,250	1
692-02	30-Nov-16	42704.00	103	1	803	1	3,300	1
692-02	6-Sep-16	42619.00	111	1	869	1	3,340	1
692-02	31-May-16	42521.00	124	1	879	1	3,520	1
692-02	24-Feb-16	42424.00	140	1	990	1	3,480	1
692-02	2-Dec-15	42340.00	134	1	967	1	3,500	1
692-05	28-Feb-24	45350.00	16	1	420	1	1,570	1
692-05	1-Dec-23	45261.00	19	1	430	1	1,610	1
692-05	28-Aug-23	45166.00	16	1	410	1	1,570	1
692-05	23-May-23	45069.00	14	1	400	1	1,500	1
692-05	28-Feb-23	44985.00	16	1	430	1	1,560	1
692-05	30-Nov-22	44895.00	18	1	390	1	1,610	1
692-05	23-Aug-22	44796.00	17	1	430	1	1,600	1
692-05	20-May-22	44701.00	15	1	380	1	1,550	1
692-05	2-Mar-22	44622.00	16	1	400	1	1,550	1
692-05	19-Nov-21	44519.00	19	1	400	1	1,600	1
692-05	23-Aug-21	44431.00	18	1	430	1	1,570	1
692-05	21-May-21	44337.00	14	1	430	1	1,620	1
692-05	9-Mar-21	44264.00	17	1	410	1	1,550	1
692-05	23-Nov-20	44158.00	14	1	400	1	1,580	1
692-05	27-Aug-20	44070.00	14	1	410	1	1,580	1
692-05	27-May-20	43978.00	12	1	400	1	1,640	1
692-05	19-Feb-20	43880.00	14	1	420	1	1,780	1
692-05	2-Dec-19	43801.00	13	1	390	1	1,510	1
692-05	16-Aug-19	43693.00	12	1	420	1	1,570	1
692-05	29-May-19	43614.00	13	1	420	1	1,600	1
692-05	14-Mar-19	43538.00	12	1	410	1	1,540	1
692-05	23-Aug-18	43335.00	9.1	1	400	1	1,500	1
692-05	30-Nov-17	43069.00	11.9	1	433	1	1,300	1
692-05	22-Aug-17	42969.00	10.6	1	450	1	1,470	1
692-05	5-Jun-17	42891.00	9.24	1	440	1	1,430	1
692-05	3-Mar-17	42797.00	8.32	1	425	1	1,430	1
692-05	29-Nov-16	42703.00	6.85	1	430	1	1,420	1
692-05	2-Sep-16	42615.00	8.07	1	452	1	1,420	1
692-05	31-May-16	42521.00	7.29	1	459	1	1,470	1
692-05	24-Feb-16	42424.00	6.72	1	463	1	1,540	1

692-05	2-Dec-15	42340.00	5.68	1	457	1	1,370	1
692-06	28-Feb-24	45350.00	4.3	1	400	1	1,450	1
692-06	1-Dec-23	45261.00	4.3	1	430	1	1,450	1
692-06	28-Aug-23	45166.00	4.9	1	410	1	1,470	1
692-06	23-May-23	45069.00	4.8	1	390	1	1,410	1
692-06	28-Feb-23	44985.00	4.6	1	440	1	1,430	1
692-06	30-Nov-22	44895.00	4.6	1	390	1	1,470	1
692-06	23-Aug-22	44796.00	4.9	1	440	1	1,490	1
692-06	23-May-22	44704.00	3.9	1	420	1	1,420	1
692-06	2-Mar-22	44622.00	3.7	1	400	1	1,380	1
692-06	22-Nov-21	44522.00	4.3	1	430	1	1,500	1
692-06	24-Aug-21	44432.00	3.6	1	410	1	1,490	1
692-06	21-May-21	44337.00	3.4	1	420	1	1,470	1
692-06	11-Mar-21	44266.00	3.0	1	390	1	1,390	1
692-06	24-Nov-20	44159.00	4.0	1	420	1	1,470	1
692-06	27-Aug-20	44070.00	3.6	1	400	1	1,450	1
692-06	27-May-20	43978.00	3.1	1	370	1	1,440	1
692-06	18-Feb-20	43879.00	3.2	1	420	1	1,400	1
692-06	26-Nov-19	43795.00	4.0	1	420	1	1,490	1
692-06	15-Aug-19	43692.00	3.8	1	420	1	1,440	1
692-06	29-May-19	43614.00	3.3	1	400	1	1,430	1
692-06	7-Mar-19	43531.00	3.1	1	420	1	1,450	1
692-06	4-Dec-18	43438.00	3.7	1	450	1	1,490	1
692-06	23-Aug-18	43335.00	3.5	1	370	1	1,450	1
692-06	30-May-18	43250.00	3.9	1	410	1	1,420	1
692-06	23-Feb-18	43154.00	2.9	1	420	1	1,430	1
692-06	30-Nov-17	43069.00	3.46	1	420	1	1,290	1
692-06	23-Aug-17	42970.00	3.29	1	420	1	1,480	1
692-06	5-Jun-17	42891.00	3.20	1	428	1	1,580	1
692-06	2-Mar-17	42796.00	2.84	1	404	1	1,530	1
692-06	30-Nov-16	42704.00	3.12	1	414	1	1,420	1
692-06	6-Sep-16	42619.00	2.86	1	471	1	1,420	1
692-06	31-May-16	42521.00	2.27	1	467	1	1,420	1
692-06	24-Feb-16	42424.00	2.93	1	465	1	1,410	1
692-06	2-Dec-15	42340.00	3.04	1	450	1	1,420	1
692-07	28-Feb-24	45350.00	3.0	1	510	1	1,590	1
692-07	1-Dec-23	45261.00	2.6	1	550	1	1,600	1
692-07	29-Aug-23	45167.00	2.8	1	510	1	1,550	1
692-07	24-May-23	45070.00	3.0	1	510	1	1,510	1
692-07	28-Feb-23	44985.00	2.7	1	540	1	1,560	1
692-07	1-Dec-22	44896.00	3.0	1	540	1	1,650	1
692-07	24-Aug-22	44797.00	3.2	1	480	1	1,720	1
692-07	23-May-22	44704.00	3.6	1	570	1	1,670	1
692-07	2-Mar-22	44622.00	2.5	1	510	1	1,530	1
692-07	22-Nov-21	44522.00	3.1	1	580	1	1,700	1
692-07	24-Aug-21	44432.00	3.9	1	590	1	1,760	1
692-07	21-May-21	44337.00	3.6	1	570	1	1,620	1
692-07	11-Mar-21	44266.00	2.8	1	540	1	1,640	1
692-07	24-Nov-20	44159.00	3.5	1	590	1	1,620	1

692-07	27-Aug-20	44070.00	3.2	1	570	1	1,720	1
692-07	19-Jun-20	44001.00	2.9	1	550	1	1,790	1
692-07	26-Nov-19	43795.00	3.4	1	570	1	1,650	1
692-07	16-Aug-19	43693.00	3.9	1	540	1	1,700	1
692-07	29-May-19	43614.00	3.1	1	560	1	1,690	1
692-07	7-Mar-19	43531.00	3.5	1	580	1	1,680	1
692-07	4-Dec-18	43438.00	3.5	1	560	1	1,640	1
692-07	23-Aug-18	43335.00	3.3	1	500	1	1,650	1
692-07	30-May-18	43250.00	3.3	1	590	1	1,600	1
692-07	23-Feb-18	43154.00	2.9	1	610	1	1,630	1
692-07	30-Nov-17	43069.00	3.38	1	576	1	1,450	1
692-07	23-Aug-17	42970.00	3.38	1	576	1	1,590	1
692-07	5-Jun-17	42891.00	3.18	1	570	1	1,520	1
692-07	3-Mar-17	42797.00	3.14	1	564	1	1,550	1
692-07	29-Nov-16	42703.00	3.88	1	570	1	1,660	1
692-07	2-Sep-16	42615.00	3.04	1	591	1	1,520	1
692-07	31-May-16	42521.00	2.19	1	526	1	1,660	1
692-07	24-Feb-16	42424.00	3.42	1	618	1	1,590	1
692-07	2-Dec-15	42340.00	3.13	1	582	1	1,490	1
692-08	29-Feb-24	45351.00	2.1	1	390	1	1,330	1
692-08	4-Dec-23	45264.00	3.1	1	400	1	1,380	1
692-08	29-Aug-23	45167.00	2.3	1	370	1	1,280	1
692-08	24-May-23	45070.00	5.2	1	360	1	1,290	1
692-08	1-Mar-23	44986.00	3.0	1	430	1	1,330	1
692-08	1-Dec-22	44896.00	1.6	1	420	1	1,370	1
692-08	24-Aug-22	44797.00	1.9	1	360	1	1,370	1
692-08	23-May-22	44704.00	6.2	1	400	1	1,380	1
692-08	2-Mar-22	44622.00	5.0	1	390	1	1,370	1
692-08	22-Nov-21	44522.00	6.8	1	380	1	1,400	1
692-08	24-Aug-21	44432.00	2.1	1	410	1	1,390	1
692-08	21-May-21	44337.00	1.7	1	410	1	1,390	1
692-08	11-Mar-21	44266.00	2.3	1	400	1	1,350	1
692-08	24-Nov-20	44159.00	2.1	1	390	1	1,360	1
692-08	27-Aug-20	44070.00	1.9	1	430	1	1,400	1
692-08	27-May-20	43978.00	1.4	1	400	1	1,400	1
692-08	18-Feb-20	43879.00	3.9	1	430	1	1,380	1
692-08	25-Nov-19	43794.00	1.8	1	360	1	1,350	1
692-08	16-Aug-19	43693.00	1.2	1	390	1	1,340	1
692-08	29-May-19	43614.00	2.8	1	410	1	1,380	1
692-08	7-Mar-19	43531.00	2.6	1	420	1	1,400	1
692-08	4-Dec-18	43438.00	2.4	1	420	1	1,370	1
692-08	23-Aug-18	43335.00	2.1	1	370	1	1,380	1
692-08	30-May-18	43250.00	2.5	1	420	1	1,340	1
692-08	23-Feb-18	43154.00	3.0	1	410	1	1,360	1
692-08	30-Nov-17	43069.00	4.74	1	420	1	1,280	1
692-08	22-Aug-17	42969.00	2.29	1	416	1	1,370	1
692-08	5-Jun-17	42891.00	2.12	1	413	1	1,300	1
692-08	3-Mar-17	42797.00	2.84	1	412	1	1,270	1
692-08	30-Nov-16	42704.00	2.26	1	422	1	1,340	1

692-08	2-Sep-16	42615.00	0.791	1	473	1	1,320	1
692-08	31-May-16	42521.00	1.58	1	437	1	1,340	1
692-08	24-Feb-16	42424.00	3.22	1	448	1	1,300	1
692-08	2-Dec-15	42340.00	1.91	1	434	1	1,330	1
692-09	28-Feb-24	45350.00	4.4	1	400	1	1,380	1
692-09	4-Dec-23	45264.00	3.4	1	400	1	1,410	1
692-09	28-Aug-23	45166.00	4.2	1	400	1	1,390	1
692-09	23-May-23	45069.00	7.0	1	380	1	1,380	1
692-09	28-Feb-23	44985.00	8.2	1	400	1	1,400	1
692-09	30-Nov-22	44895.00	8.4	1	370	1	1,430	1
692-09	23-Aug-22	44796.00	5.4	1	410	1	1,420	1
692-09	20-May-22	44701.00	7.4	1	370	1	1,410	1
692-09	1-Mar-22	44621.00	8.5	1	360	1	1,460	1
692-09	19-Nov-21	44519.00	5.3	1	410	1	1,420	1
692-09	23-Aug-21	44431.00	3.6	1	410	1	1,370	1
692-09	20-May-21	44336.00	3.2	1	400	1	1,420	1
692-09	9-Mar-21	44264.00	8.2	1	390	1	1,380	1
692-09	23-Nov-20	44158.00	3.4	1	380	1	1,370	1
692-09	26-Aug-20	44069.00	4.7	1	400	1	1,410	1
692-09	27-May-20	43978.00	3.9	1	380	1	1,400	1
692-09	2-Dec-19	43801.00	6.4	1	350	1	1,420	1
692-09	16-Aug-19	43693.00	5.4	1	380	1	1,410	1
692-09	29-May-19	43614.00	3.9	1	390	1	1,390	1
692-09	7-Mar-19	43531.00	3.0	1	390	1	1,400	1
692-09	4-Dec-18	43438.00	3.2	1	400	1	1,410	1
692-09	23-Aug-18	43335.00	3.1	1	350	1	1,410	1
692-09	30-May-18	43250.00	4.2	1	410	1	1,420	1
692-09	23-Feb-18	43154.00	<1.0	0	410	1	1,380	1
692-09	30-Nov-17	43069.00	0.746	1	405	1	970	1
692-09	22-Aug-17	42969.00	3.93	1	411	1	1,360	1
692-09	5-Jun-17	42891.00	2.76	1	408	1	1,340	1
692-09	3-Mar-17	42797.00	4.22	1	399	1	1,320	1
692-09	30-Nov-16	42704.00	4.39	1	420	1	1,380	1
692-09	2-Sep-16	42615.00	0.794	1	426	1	1,340	1
692-09	31-May-16	42521.00	2.96	1	438	1	1,400	1
692-09	24-Feb-16	42424.00	3.38	1	445	1	1,280	1
692-09	2-Dec-15	42340.00	2.88	1	435	1	1,320	1
692-10	29-Feb-24	45351.00	1.2	1	630	1	1,750	1
692-10	1-Dec-23	45261.00	<1.0	0	660	1	1,610	1
692-10	29-Aug-23	45167.00	<1.0	0	630	1	1,640	1
692-10	24-May-23	45070.00	<1.0	0	630	1	1,520	1
692-10	1-Mar-23	44986.00	<1.0	0	640	1	1,540	1
692-10	30-Nov-22	44895.00	<1.0	0	610	1	1,830	1

Mann-Kendall Trend Test Analysis - Nitrate

User Selected Options	
Date/Time of Computation	ProUCL 5.2 5/1/2024 12:46:06 PM
From File	DAD_2024_AP+DP_SF.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Nitrate as N (mg/l)-126-12

General Statistics	
Number of Events Reported (m)	35
Number of Missing Events	0
Number or Reported Events Used	35
Number Values Reported (n)	35
Minimum	2.8
Maximum	19.4
Mean	8.635
Geometric Mean	7.308
Median	7.4
Standard Deviation	4.995
Coefficient of Variation	0.578

Mann-Kendall Test	
M-K Test Value (S)	-327
Critical Value (0.05)	-1.645
Standard Deviation of S	70.32
Standardized Value of S	-4.636
Approximate p-value	1.77E-06

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-126-13

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	14
Maximum	42
Mean	24.39
Geometric Mean	22.8
Median	23.3

Standard Deviation	8.998
Coefficient of Variation	0.369

Mann-Kendall Test	
M-K Test Value (S)	-305
Critical Value (0.05)	-1.645
Standard Deviation of S	67.1
Standardized Value of S	-4.53
Approximate p-value	2.95E-06

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-257-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	30
Maximum	51.9
Mean	39.51
Geometric Mean	38.87
Median	37.5
Standard Deviation	7.236
Coefficient of Variation	0.183

Mann-Kendall Test	
M-K Test Value (S)	-383
Critical Value (0.05)	-1.645
Standard Deviation of S	67.31
Standardized Value of S	-5.675
Approximate p-value	6.93E-09

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-257-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	3.8

Maximum	39
Mean	10.59
Geometric Mean	9.402
Median	10
Standard Deviation	6.238
Coefficient of Variation	0.589

Mann-Kendall Test	
M-K Test Value (S)	-112
Critical Value (0.05)	-1.645
Standard Deviation of S	67.35
Standardized Value of S	-1.648
Approximate p-value	0.0497

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-257-03

General Statistics	
Number of Events Reported (m)	21
Number of Missing Events	0
Number or Reported Events Used	21
Number Values Reported (n)	21
Minimum	4.4
Maximum	30
Mean	12.44
Geometric Mean	11.31
Median	12
Standard Deviation	5.63
Coefficient of Variation	0.453

Mann-Kendall Test	
M-K Test Value (S)	12
Tabulated p-value	0.371
Standard Deviation of S	33.05
Standardized Value of S	0.333
Approximate p-value	0.37

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-340-01

General Statistics	
Number of Events Reported (m)	34

Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	29.8
Maximum	67
Mean	46.97
Geometric Mean	46.09
Median	46
Standard Deviation	9.354
Coefficient of Variation	0.199

Mann-Kendall Test

M-K Test Value (S)	337
Critical Value (0.05)	1.645
Standard Deviation of S	67.33
Standardized Value of S	4.991
Approximate p-value	3.01E-07

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-42-02

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	6.1
Maximum	14.8
Mean	8.96
Geometric Mean	8.779
Median	8.795
Standard Deviation	1.918
Coefficient of Variation	0.214

Mann-Kendall Test

M-K Test Value (S)	-147
Critical Value (0.05)	-1.645
Standard Deviation of S	67.35
Standardized Value of S	-2.168
Approximate p-value	0.0151

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-42-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	26
Maximum	97.9
Mean	41.94
Geometric Mean	39.03
Median	34
Standard Deviation	18.92
Coefficient of Variation	0.451

Mann-Kendall Test	
M-K Test Value (S)	-224
Critical Value (0.05)	-1.645
Standard Deviation of S	67.33
Standardized Value of S	-3.312
Approximate p-value	4.63E-04

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-42-06

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	47
Maximum	230
Mean	128.9
Geometric Mean	118.8
Median	129.5
Standard Deviation	50.34
Coefficient of Variation	0.39

Mann-Kendall Test	
M-K Test Value (S)	95
Critical Value (0.05)	1.645
Standard Deviation of S	67.35
Standardized Value of S	1.396

Approximate p-value	0.0814

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-42-08

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	0
Number or Reported Events Used	31
Number Values Reported (n)	31
Minimum	7.3
Maximum	60
Mean	31.54
Geometric Mean	28.95
Median	32.3
Standard Deviation	11.88
Coefficient of Variation	0.377

Mann-Kendall Test	
M-K Test Value (S)	-137
Critical Value (0.05)	-1.645
Standard Deviation of S	58.76
Standardized Value of S	-2.314
Approximate p-value	0.0103

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-42-10

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	9
Number or Reported Events Used	24
Number Values Reported (n)	33
Number Values Missing	9
Number Values Used	24
Minimum	0.165
Maximum	7.9
Mean	3.19
Geometric Mean	1.776
Median	1.775
Standard Deviation	2.831
Coefficient of Variation	0.888

Mann-Kendall Test	
M-K Test Value (S)	222
Critical Value (0.05)	1.645
Standard Deviation of S	40.32
Standardized Value of S	5.482
Approximate p-value	2.11E-08

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-42-11

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	14
Number or Reported Events Used	20
Number Values Reported (n)	34
Number Values Missing	14
Number Values Used	20
Minimum	1.1
Maximum	6.2
Mean	1.654
Geometric Mean	1.499
Median	1.36
Standard Deviation	1.106
Coefficient of Variation	0.669

Mann-Kendall Test	
M-K Test Value (S)	-8
Tabulated p-value	0.411
Standard Deviation of S	30.51
Standardized Value of S	-0.229
Approximate p-value	0.409

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-42-12

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	9
Number or Reported Events Used	24
Number Values Reported (n)	33
Number Values Missing	9

Number Values Used	24
Minimum	0.684
Maximum	1.9
Mean	1.225
Geometric Mean	1.162
Median	1.085
Standard Deviation	0.406
Coefficient of Variation	0.332

Mann-Kendall Test	
M-K Test Value (S)	144
Critical Value (0.05)	1.645
Standard Deviation of S	40.21
Standardized Value of S	3.557
Approximate p-value	1.88E-04

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-42-13

General Statistics	
Number of Events Reported (m)	25
Number of Missing Events	0
Number or Reported Events Used	25
Number Values Reported (n)	25
Minimum	11
Maximum	69
Mean	35.36
Geometric Mean	31.32
Median	38
Standard Deviation	16.34
Coefficient of Variation	0.462

Mann-Kendall Test	
M-K Test Value (S)	-152
Critical Value (0.05)	-1.645
Standard Deviation of S	42.69
Standardized Value of S	-3.537
Approximate p-value	2.02E-04

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-624-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	3.1
Maximum	20.6
Mean	11.34
Geometric Mean	10.3
Median	12
Standard Deviation	4.513
Coefficient of Variation	0.398

Mann-Kendall Test	
M-K Test Value (S)	-5
Critical Value (0.05)	-1.645
Standard Deviation of S	67.31
Standardized Value of S	-0.0594
Approximate p-value	0.476

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-624-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	3.6
Maximum	18.5
Mean	8.918
Geometric Mean	8.271
Median	8.8
Standard Deviation	3.511
Coefficient of Variation	0.394

Mann-Kendall Test	
M-K Test Value (S)	-124
Critical Value (0.05)	-1.645
Standard Deviation of S	67.43
Standardized Value of S	-1.824
Approximate p-value	0.0341

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-624-09

General Statistics	
Number of Events Reported (m)	17
Number of Missing Events	7
Number or Reported Events Used	10
Number Values Reported (n)	17
Number Values Missing	7
Number Values Used	10
Minimum	1.3
Maximum	13
Mean	3.95
Geometric Mean	3.072
Median	2.7
Standard Deviation	3.543
Coefficient of Variation	0.897

Mann-Kendall Test	
M-K Test Value (S)	-7
Tabulated p-value	0.3
Standard Deviation of S	11.18
Standardized Value of S	-0.537
Approximate p-value	0.296

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-624-10

General Statistics	
Number of Events Reported (m)	17
Number of Missing Events	6
Number or Reported Events Used	11
Number Values Reported (n)	17
Number Values Missing	6
Number Values Used	11
Minimum	1
Maximum	19
Mean	7.555
Geometric Mean	5.263
Median	5.7
Standard Deviation	6.334
Coefficient of Variation	0.838

Mann-Kendall Test	
M-K Test Value (S)	8
Tabulated p-value	0.271
Standard Deviation of S	12.81
Standardized Value of S	0.547
Approximate p-value	0.292

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-624-11

General Statistics	
Number of Events Reported (m)	17
Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	7.2
Maximum	14
Mean	9.882
Geometric Mean	9.75
Median	9.7
Standard Deviation	1.692
Coefficient of Variation	0.171

Mann-Kendall Test	
M-K Test Value (S)	-87
Tabulated p-value	0
Standard Deviation of S	24.08
Standardized Value of S	-3.572
Approximate p-value	1.77E-04

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-692-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	8
Number or Reported Events Used	26
Number Values Reported (n)	34
Number Values Missing	8
Number Values Used	26
Minimum	1.1

Maximum	140
Mean	45.91
Geometric Mean	22.91
Median	24.7
Standard Deviation	44.76
Coefficient of Variation	0.975

Mann-Kendall Test	
M-K Test Value (S)	-123
Critical Value (0.05)	-1.645
Standard Deviation of S	45.37
Standardized Value of S	-2.689
Approximate p-value	0.00358

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-692-05

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	0
Number or Reported Events Used	31
Number Values Reported (n)	31
Minimum	5.68
Maximum	19
Mean	12.99
Geometric Mean	12.36
Median	14
Standard Deviation	3.864
Coefficient of Variation	0.297

Mann-Kendall Test	
M-K Test Value (S)	354
Critical Value (0.05)	1.645
Standard Deviation of S	58.55
Standardized Value of S	6.029
Approximate p-value	8.27E-10

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-692-06

General Statistics	
Number of Events Reported (m)	34

Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2.27
Maximum	4.9
Mean	3.63
Geometric Mean	3.571
Median	3.55
Standard Deviation	0.666
Coefficient of Variation	0.183

Mann-Kendall Test

M-K Test Value (S)	346
Critical Value (0.05)	1.645
Standard Deviation of S	67.37
Standardized Value of S	5.121
Approximate p-value	1.52E-07

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-692-07

General Statistics

Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	2.19
Maximum	3.9
Mean	3.183
Geometric Mean	3.158
Median	3.18
Standard Deviation	0.395
Coefficient of Variation	0.124

Mann-Kendall Test

M-K Test Value (S)	-82
Critical Value (0.05)	-1.645
Standard Deviation of S	64.42
Standardized Value of S	-1.257
Approximate p-value	0.104

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-692-08

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	0.791
Maximum	6.8
Mean	2.728
Geometric Mean	2.454
Median	2.295
Standard Deviation	1.384
Coefficient of Variation	0.507

Mann-Kendall Test	
M-K Test Value (S)	64
Critical Value (0.05)	1.645
Standard Deviation of S	67.37
Standardized Value of S	0.935
Approximate p-value	0.175

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-692-09

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	1
Number or Reported Events Used	32
Number Values Reported (n)	33
Number Values Missing	1
Number Values Used	32
Minimum	0.746
Maximum	8.5
Mean	4.514
Geometric Mean	4.001
Median	4.065
Standard Deviation	2.035
Coefficient of Variation	0.451

Mann-Kendall Test	
M-K Test Value (S)	206
Critical Value (0.05)	1.645

Standard Deviation of S	61.62
Standardized Value of S	3.327
Approximate p-value	4.39E-04

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-692-10

General Statistics	
Number of Events Reported (m)	6
Number of Missing Events	5
Number or Reported Events Used	1
Number Values Reported (n)	6
Number Values Missing	5
Number Values Used	1
Minimum	1.2
Maximum	1.2
Mean	1.2
Geometric Mean	1.2
Median	1.2
Standard Deviation	N/A
Coefficient of Variation	N/A

Not enough reported values (n) to provide Mann-Kendall Statistics!

Nitrate as N (mg/l)-70/86/340-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	3.9
Maximum	69
Mean	21.42
Geometric Mean	19.48
Median	20.15
Standard Deviation	10.3
Coefficient of Variation	0.481

Mann-Kendall Test	
M-K Test Value (S)	96
Critical Value (0.05)	1.645
Standard Deviation of S	67.32
Standardized Value of S	1.411

Approximate p-value	0.0791

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-70-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	13
Maximum	39
Mean	23.91
Geometric Mean	22.93
Median	23.25
Standard Deviation	6.827
Coefficient of Variation	0.286

Mann-Kendall Test	
M-K Test Value (S)	-251
Critical Value (0.05)	-1.645
Standard Deviation of S	67.4
Standardized Value of S	-3.709
Approximate p-value	1.04E-04

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-70-02

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	24
Maximum	37.7
Mean	32.89
Geometric Mean	32.79
Median	33
Standard Deviation	2.561
Coefficient of Variation	0.0779

Mann-Kendall Test

M-K Test Value (S)	-108
Critical Value (0.05)	-1.645
Standard Deviation of S	63.96
Standardized Value of S	-1.673
Approximate p-value	0.0472

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-70-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	37
Maximum	53
Mean	44.3
Geometric Mean	44.03
Median	44.15
Standard Deviation	4.925
Coefficient of Variation	0.111

Mann-Kendall Test	
M-K Test Value (S)	-260
Critical Value (0.05)	-1.645
Standard Deviation of S	67.21
Standardized Value of S	-3.854
Approximate p-value	5.81E-05

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-70-04

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	12
Maximum	42
Mean	25.62
Geometric Mean	24.63
Median	26.3

Standard Deviation	7.033
Coefficient of Variation	0.275

Mann-Kendall Test

M-K Test Value (S)	-170
Critical Value (0.05)	-1.645
Standard Deviation of S	67.34
Standardized Value of S	-2.51
Approximate p-value	0.00604

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-74-01

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	5.9
Maximum	72
Mean	36.28
Geometric Mean	30.44
Median	33.5
Standard Deviation	19.05
Coefficient of Variation	0.525

Mann-Kendall Test

M-K Test Value (S)	-96
Critical Value (0.05)	-1.645
Standard Deviation of S	67.45
Standardized Value of S	-1.408
Approximate p-value	0.0795

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-74-02

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	9
Number or Reported Events Used	25
Number Values Reported (n)	34
Number Values Missing	9

Number Values Used	25
Minimum	1.3
Maximum	44
Mean	28.82
Geometric Mean	23.81
Median	31
Standard Deviation	11.96
Coefficient of Variation	0.415

Mann-Kendall Test	
M-K Test Value (S)	-1
Critical Value (0.05)	-1.645
Standard Deviation of S	42.78
Standardized Value of S	0
Approximate p-value	0.5

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-74-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	19
Number or Reported Events Used	15
Number Values Reported (n)	34
Number Values Missing	19
Number Values Used	15
Minimum	0.187
Maximum	3.36
Mean	1.234
Geometric Mean	0.974
Median	1.2
Standard Deviation	0.835
Coefficient of Variation	0.676

Mann-Kendall Test	
M-K Test Value (S)	7
Tabulated p-value	0.385
Standard Deviation of S	20.09
Standardized Value of S	0.299
Approximate p-value	0.383

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-74-04

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	2
Number or Reported Events Used	32
Number Values Reported (n)	34
Number Values Missing	2
Number Values Used	32
Minimum	8.1
Maximum	20
Mean	12.26
Geometric Mean	12.07
Median	12
Standard Deviation	2.38
Coefficient of Variation	0.194

Mann-Kendall Test	
M-K Test Value (S)	-71
Critical Value (0.05)	-1.645
Standard Deviation of S	60.49
Standardized Value of S	-1.157
Approximate p-value	0.124

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-74-05

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	1
Number or Reported Events Used	33
Number Values Reported (n)	34
Number Values Missing	1
Number Values Used	33
Minimum	6.3
Maximum	20
Mean	14.16
Geometric Mean	13.97
Median	14
Standard Deviation	2.134
Coefficient of Variation	0.151

Mann-Kendall Test

M-K Test Value (S)	121
Critical Value (0.05)	1.645
Standard Deviation of S	63.52
Standardized Value of S	1.889
Approximate p-value	0.0294

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-833-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	31
Maximum	100
Mean	64.13
Geometric Mean	61.32
Median	66.2
Standard Deviation	18.13
Coefficient of Variation	0.283

Mann-Kendall Test	
M-K Test Value (S)	-167
Critical Value (0.05)	-1.645
Standard Deviation of S	67.43
Standardized Value of S	-2.462
Approximate p-value	0.00691

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-833-04

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	11.8
Maximum	42
Mean	29.14
Geometric Mean	27.77
Median	31

Standard Deviation	8.446
Coefficient of Variation	0.29

Mann-Kendall Test

M-K Test Value (S)	20
Critical Value (0.05)	1.645
Standard Deviation of S	67.35
Standardized Value of S	0.282
Approximate p-value	0.389

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-833-05

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	19
Maximum	51.7
Mean	33.27
Geometric Mean	31.74
Median	32
Standard Deviation	10.15
Coefficient of Variation	0.305

Mann-Kendall Test

M-K Test Value (S)	-5
Critical Value (0.05)	-1.645
Standard Deviation of S	67.33
Standardized Value of S	-0.0594
Approximate p-value	0.476

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-833-06

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	11

Maximum	70
Mean	33.81
Geometric Mean	29.84
Median	38.95
Standard Deviation	15.78
Coefficient of Variation	0.467

Mann-Kendall Test	
M-K Test Value (S)	-8
Critical Value (0.05)	-1.645
Standard Deviation of S	67.36
Standardized Value of S	-0.104
Approximate p-value	0.459

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-833-07

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	62
Maximum	100
Mean	76.44
Geometric Mean	75.62
Median	74
Standard Deviation	11.68
Coefficient of Variation	0.153

Mann-Kendall Test	
M-K Test Value (S)	-113
Critical Value (0.05)	-1.645
Standard Deviation of S	67.31
Standardized Value of S	-1.664
Approximate p-value	0.0481

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-833-08

General Statistics	
Number of Events Reported (m)	34

Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	11
Maximum	70.3
Mean	45.73
Geometric Mean	43.23
Median	46.75
Standard Deviation	13.56
Coefficient of Variation	0.297

Mann-Kendall Test

M-K Test Value (S)	-124
Critical Value (0.05)	-1.645
Standard Deviation of S	67.38
Standardized Value of S	-1.825
Approximate p-value	0.034

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-833-09

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	19
Maximum	190
Mean	71.04
Geometric Mean	58.28
Median	61.25
Standard Deviation	46.1
Coefficient of Variation	0.649

Mann-Kendall Test

M-K Test Value (S)	-28
Critical Value (0.05)	-1.645
Standard Deviation of S	67.42
Standardized Value of S	-0.4
Approximate p-value	0.344

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-833-10

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	6
Number or Reported Events Used	28
Number Values Reported (n)	34
Number Values Missing	6
Number Values Used	28
Minimum	1
Maximum	6.75
Mean	2.87
Geometric Mean	2.55
Median	2.645
Standard Deviation	1.429
Coefficient of Variation	0.498

Mann-Kendall Test	
M-K Test Value (S)	-154
Critical Value (0.05)	-1.645
Standard Deviation of S	50.57
Standardized Value of S	-3.026
Approximate p-value	0.00124

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-86/340-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2.3
Maximum	13.4
Mean	6.512
Geometric Mean	5.47
Median	5.05
Standard Deviation	3.848
Coefficient of Variation	0.591

Mann-Kendall Test	
M-K Test Value (S)	-452
Critical Value (0.05)	-1.645

Standard Deviation of S	67.38
Standardized Value of S	-6.693
Approximate p-value	1.09E-11

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2.7
Maximum	20
Mean	12.41
Geometric Mean	11.25
Median	12.5
Standard Deviation	4.661
Coefficient of Variation	0.376

Mann-Kendall Test	
M-K Test Value (S)	237
Critical Value (0.05)	1.645
Standard Deviation of S	67.19
Standardized Value of S	3.512
Approximate p-value	2.22E-04

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	6.4
Maximum	11.7
Mean	9.204
Geometric Mean	9.107
Median	9.05
Standard Deviation	1.339
Coefficient of Variation	0.145

Mann-Kendall Test	
M-K Test Value (S)	-251
Critical Value (0.05)	-1.645
Standard Deviation of S	67.41
Standardized Value of S	-3.709
Approximate p-value	1.04E-04

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	29
Number or Reported Events Used	5
Number Values Reported (n)	34
Number Values Missing	29
Number Values Used	5
Minimum	0.0823
Maximum	0.874
Mean	0.316
Geometric Mean	0.227
Median	0.222
Standard Deviation	0.319
Coefficient of Variation	1.009

Mann-Kendall Test	
M-K Test Value (S)	-6
Tabulated p-value	0.117
Standard Deviation of S	4.082
Standardized Value of S	-1.225
Approximate p-value	0.11

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-04

General Statistics	
Number of Events Reported (m)	32
Number of Missing Events	18
Number or Reported Events Used	14
Number Values Reported (n)	32
Number Values Missing	18

Number Values Used	14
Minimum	0.0853
Maximum	7.5
Mean	1.914
Geometric Mean	0.856
Median	1.25
Standard Deviation	2.235
Coefficient of Variation	1.168

Mann-Kendall Test	
M-K Test Value (S)	39
Tabulated p-value	0.018
Standard Deviation of S	18.27
Standardized Value of S	2.08
Approximate p-value	0.0187

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-05

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	21
Number or Reported Events Used	13
Number Values Reported (n)	34
Number Values Missing	21
Number Values Used	13
Minimum	1.56
Maximum	14
Mean	5.008
Geometric Mean	3.789
Median	2.7
Standard Deviation	3.965
Coefficient of Variation	0.792

Mann-Kendall Test	
M-K Test Value (S)	-28
Tabulated p-value	0.05
Standard Deviation of S	16.39
Standardized Value of S	-1.647
Approximate p-value	0.0498

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-06r

General Statistics	
Number of Events Reported (m)	6
Number of Missing Events	0
Number or Reported Events Used	6
Number Values Reported (n)	6
Minimum	3.9
Maximum	9.6
Mean	6.517
Geometric Mean	6.205
Median	6.35
Standard Deviation	2.192
Coefficient of Variation	0.336

Mann-Kendall Test	
M-K Test Value (S)	11
Tabulated p-value	0.028
Standard Deviation of S	5.323
Standardized Value of S	1.879
Approximate p-value	0.0301

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-07

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	4.87
Maximum	50
Mean	15.81
Geometric Mean	13.53
Median	13.5
Standard Deviation	9.88
Coefficient of Variation	0.625

Mann-Kendall Test	
M-K Test Value (S)	484
Critical Value (0.05)	1.645
Standard Deviation of S	67.2
Standardized Value of S	7.188

Approximate p-value	3.29E-13

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-08

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	32.8
Maximum	66.1
Mean	44.59
Geometric Mean	44.24
Median	44.6
Standard Deviation	5.797
Coefficient of Variation	0.13

Mann-Kendall Test	
M-K Test Value (S)	-22
Critical Value (0.05)	-1.645
Standard Deviation of S	67.17
Standardized Value of S	-0.313
Approximate p-value	0.377

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-09

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	4.95
Maximum	120
Mean	47.66
Geometric Mean	40.9
Median	38
Standard Deviation	26.67
Coefficient of Variation	0.56

Mann-Kendall Test

M-K Test Value (S)	-64
Critical Value (0.05)	-1.645
Standard Deviation of S	67.38
Standardized Value of S	-0.935
Approximate p-value	0.175

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-10

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	3
Number or Reported Events Used	31
Number Values Reported (n)	34
Number Values Missing	3
Number Values Used	31
Minimum	0.723
Maximum	16.9
Mean	4.744
Geometric Mean	2.685
Median	1.5
Standard Deviation	5.402
Coefficient of Variation	1.139

Mann-Kendall Test	
M-K Test Value (S)	-296
Critical Value (0.05)	-1.645
Standard Deviation of S	58.71
Standardized Value of S	-5.025
Approximate p-value	2.52E-07

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-11

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	3.8
Maximum	39
Mean	14.22

Geometric Mean	13.23
Median	13
Standard Deviation	6.297
Coefficient of Variation	0.443

Mann-Kendall Test	
M-K Test Value (S)	-3
Critical Value (0.05)	-1.645
Standard Deviation of S	63.77
Standardized Value of S	-0.0314
Approximate p-value	0.487

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-12

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	9.6
Maximum	25.7
Mean	15.91
Geometric Mean	15.27
Median	15
Standard Deviation	4.617
Coefficient of Variation	0.29

Mann-Kendall Test	
M-K Test Value (S)	-431
Critical Value (0.05)	-1.645
Standard Deviation of S	67.16
Standardized Value of S	-6.402
Approximate p-value	7.66E-11

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-13

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34

Number Values Reported (n)	34
Minimum	6.6
Maximum	27
Mean	13.12
Geometric Mean	12.45
Median	12
Standard Deviation	4.638
Coefficient of Variation	0.353

Mann-Kendall Test	
M-K Test Value (S)	3
Critical Value (0.05)	1.645
Standard Deviation of S	67.11
Standardized Value of S	0.0298
Approximate p-value	0.488

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-14

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	15
Maximum	84
Mean	31.3
Geometric Mean	27.62
Median	22
Standard Deviation	17.94
Coefficient of Variation	0.573

Mann-Kendall Test	
M-K Test Value (S)	-112
Critical Value (0.05)	-1.645
Standard Deviation of S	67.29
Standardized Value of S	-1.65
Approximate p-value	0.0495

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-15

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	4.21
Maximum	22
Mean	12.04
Geometric Mean	10.45
Median	11
Standard Deviation	6.088
Coefficient of Variation	0.506

Mann-Kendall Test	
M-K Test Value (S)	444
Critical Value (0.05)	1.645
Standard Deviation of S	67.35
Standardized Value of S	6.577
Approximate p-value	2.40E-11

Statistically significant evidence of an increasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-16

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	23
Number or Reported Events Used	11
Number Values Reported (n)	34
Number Values Missing	23
Number Values Used	11
Minimum	0.246
Maximum	1.76
Mean	0.964
Geometric Mean	0.826
Median	1.02
Standard Deviation	0.486
Coefficient of Variation	0.504

Mann-Kendall Test	
M-K Test Value (S)	-11
Tabulated p-value	0.223
Standard Deviation of S	12.85
Standardized Value of S	-0.778

Approximate p-value	0.218

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-17

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	13
Number or Reported Events Used	21
Number Values Reported (n)	34
Number Values Missing	13
Number Values Used	21
Minimum	0.509
Maximum	10.3
Mean	2.291
Geometric Mean	1.748
Median	1.7
Standard Deviation	2.145
Coefficient of Variation	0.936

Mann-Kendall Test	
M-K Test Value (S)	48
Tabulated p-value	0.079
Standard Deviation of S	33.09
Standardized Value of S	1.421
Approximate p-value	0.0777

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-18

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	6.3
Maximum	15
Mean	8.929
Geometric Mean	8.743
Median	8.345
Standard Deviation	1.971
Coefficient of Variation	0.221

Mann-Kendall Test	
M-K Test Value (S)	-187
Critical Value (0.05)	-1.645
Standard Deviation of S	67.39
Standardized Value of S	-2.76
Approximate p-value	0.00289

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-19

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	20.7
Maximum	46
Mean	32.03
Geometric Mean	31.55
Median	32.5
Standard Deviation	5.564
Coefficient of Variation	0.174

Mann-Kendall Test	
M-K Test Value (S)	47
Critical Value (0.05)	1.645
Standard Deviation of S	67.31
Standardized Value of S	0.683
Approximate p-value	0.247

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-20

General Statistics	
Number of Events Reported (m)	32
Number of Missing Events	0
Number or Reported Events Used	32
Number Values Reported (n)	32
Minimum	21
Maximum	40
Mean	29.28

Geometric Mean	28.77
Median	29.5
Standard Deviation	5.533
Coefficient of Variation	0.189

Mann-Kendall Test	
M-K Test Value (S)	-14
Critical Value (0.05)	-1.645
Standard Deviation of S	61.58
Standardized Value of S	-0.211
Approximate p-value	0.416

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-21

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	6.28
Maximum	120
Mean	66.98
Geometric Mean	56.66
Median	66.6
Standard Deviation	33.19
Coefficient of Variation	0.496

Mann-Kendall Test	
M-K Test Value (S)	-36
Critical Value (0.05)	-1.645
Standard Deviation of S	67.35
Standardized Value of S	-0.52
Approximate p-value	0.302

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-22

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34

Number Values Reported (n)	34
Minimum	6.52
Maximum	29
Mean	16.62
Geometric Mean	15.74
Median	16
Standard Deviation	5.445
Coefficient of Variation	0.328

Mann-Kendall Test	
M-K Test Value (S)	-129
Critical Value (0.05)	-1.645
Standard Deviation of S	67.24
Standardized Value of S	-1.904
Approximate p-value	0.0285

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-23

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	1
Number or Reported Events Used	33
Number Values Reported (n)	34
Number Values Missing	1
Number Values Used	33
Minimum	1.1
Maximum	22
Mean	15.95
Geometric Mean	14.06
Median	18
Standard Deviation	5.165
Coefficient of Variation	0.324

Mann-Kendall Test	
M-K Test Value (S)	104
Critical Value (0.05)	1.645
Standard Deviation of S	64.1
Standardized Value of S	1.607
Approximate p-value	0.054

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-24

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	1.84
Maximum	6.94
Mean	5.562
Geometric Mean	5.367
Median	5.9
Standard Deviation	1.198
Coefficient of Variation	0.215

Mann-Kendall Test	
M-K Test Value (S)	3
Critical Value (0.05)	1.645
Standard Deviation of S	64.31
Standardized Value of S	0.0311
Approximate p-value	0.488

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-dad-25

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2.8
Maximum	57.9
Mean	12.44
Geometric Mean	8.929
Median	7.6
Standard Deviation	13.2
Coefficient of Variation	1.061

Mann-Kendall Test	
M-K Test Value (S)	-130
Critical Value (0.05)	-1.645
Standard Deviation of S	67.42
Standardized Value of S	-1.913

Approximate p-value	0.0278

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-26

General Statistics	
Number of Events Reported (m)	35
Number of Missing Events	1
Number or Reported Events Used	34
Number Values Reported (n)	35
Number Values Missing	1
Number Values Used	34
Minimum	1.8
Maximum	110
Mean	38.78
Geometric Mean	29.34
Median	36.5
Standard Deviation	24.53
Coefficient of Variation	0.633

Mann-Kendall Test	
M-K Test Value (S)	-333
Critical Value (0.05)	-1.645
Standard Deviation of S	67.43
Standardized Value of S	-4.924
Approximate p-value	4.24E-07

Statistically significant evidence of a decreasing trend at the specified level of significance.

Nitrate as N (mg/l)-dad-27

General Statistics	
Number of Events Reported (m)	6
Number of Missing Events	0
Number or Reported Events Used	6
Number Values Reported (n)	6
Minimum	5.9
Maximum	7
Mean	6.533
Geometric Mean	6.519
Median	6.6
Standard Deviation	0.472
Coefficient of Variation	0.0722

Mann-Kendall Test	
M-K Test Value (S)	6
Tabulated p-value	0.136
Standard Deviation of S	5.228
Standardized Value of S	0.956
Approximate p-value	0.169

Insufficient evidence to identify a significant trend at the specified level of significance.

Nitrate as N (mg/l)-mw-4

General Statistics	
Number of Events Reported (m)	19
Number of Missing Events	4
Number or Reported Events Used	15
Number Values Reported (n)	19
Number Values Missing	4
Number Values Used	15
Minimum	0.39
Maximum	4.6
Mean	1.606
Geometric Mean	1.399
Median	1.3
Standard Deviation	0.985
Coefficient of Variation	0.614

Mann-Kendall Test	
M-K Test Value (S)	-26
Tabulated p-value	0.101
Standard Deviation of S	19.92
Standardized Value of S	-1.255
Approximate p-value	0.105

Insufficient evidence to identify a significant trend at the specified level of significance.

Mann-Kendall Trend Test Analysis - Chloride

User Selected Options	
Date/Time of Computation	ProUCL 5.2 5/1/2024 1:09:54 PM
From File	DAD_2024_AP+DP_SF.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

Chloride (mg/l)-126-12

General Statistics	
Number of Events Reported (m)	35
Number of Missing Events	0
Number or Reported Events Used	35
Number Values Reported (n)	35
Minimum	24.5
Maximum	520
Mean	393.9
Geometric Mean	371.7
Median	416
Standard Deviation	76.41
Coefficient of Variation	0.194

Mann-Kendall Test	
M-K Test Value (S)	45
Critical Value (0.05)	1.645
Standard Deviation of S	69.88
Standardized Value of S	0.63
Approximate p-value	0.264

Insufficient evidence to identify a significant
trend at the specified level of significance.

Chloride (mg/l)-126-13

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	594
Maximum	990
Mean	799
Geometric Mean	794.1
Median	782

Standard Deviation	90.25
Coefficient of Variation	0.113

Mann-Kendall Test	
M-K Test Value (S)	-172
Critical Value (0.05)	-1.645
Standard Deviation of S	67.36
Standardized Value of S	-2.538
Approximate p-value	0.00557

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-257-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	681
Maximum	1100
Mean	878
Geometric Mean	875.5
Median	890
Standard Deviation	66.18
Coefficient of Variation	0.0754

Mann-Kendall Test	
M-K Test Value (S)	194
Critical Value (0.05)	1.645
Standard Deviation of S	67.06
Standardized Value of S	2.878
Approximate p-value	0.002

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-257-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	455

Maximum	1000
Mean	696.3
Geometric Mean	689.1
Median	690
Standard Deviation	102.1
Coefficient of Variation	0.147

Mann-Kendall Test	
M-K Test Value (S)	97
Critical Value (0.05)	1.645
Standard Deviation of S	67.35
Standardized Value of S	1.425
Approximate p-value	0.077

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-257-03

General Statistics	
Number of Events Reported (m)	21
Number of Missing Events	0
Number or Reported Events Used	21
Number Values Reported (n)	21
Minimum	333
Maximum	780
Mean	558.7
Geometric Mean	540.3
Median	570
Standard Deviation	140.7
Coefficient of Variation	0.252

Mann-Kendall Test	
M-K Test Value (S)	95
Tabulated p-value	0.002
Standard Deviation of S	33.06
Standardized Value of S	2.843
Approximate p-value	0.00223

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-340-01

General Statistics	
Number of Events Reported (m)	34

Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	417
Maximum	680
Mean	588.8
Geometric Mean	587.1
Median	590
Standard Deviation	43.43
Coefficient of Variation	0.0738

Mann-Kendall Test

M-K Test Value (S)	100
Critical Value (0.05)	1.645
Standard Deviation of S	67.07
Standardized Value of S	1.476
Approximate p-value	0.07

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-42-02

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	410
Maximum	610
Mean	513.4
Geometric Mean	510.8
Median	512
Standard Deviation	52.6
Coefficient of Variation	0.102

Mann-Kendall Test

M-K Test Value (S)	13
Critical Value (0.05)	1.645
Standard Deviation of S	67.33
Standardized Value of S	0.178
Approximate p-value	0.429

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-42-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	933
Maximum	1350
Mean	1089
Geometric Mean	1084
Median	1100
Standard Deviation	100.9
Coefficient of Variation	0.0927

Mann-Kendall Test	
M-K Test Value (S)	-136
Critical Value (0.05)	-1.645
Standard Deviation of S	66.42
Standardized Value of S	-2.033
Approximate p-value	0.021

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-42-06

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	275
Maximum	720
Mean	445.4
Geometric Mean	428.2
Median	422
Standard Deviation	127.4
Coefficient of Variation	0.286

Mann-Kendall Test	
M-K Test Value (S)	90
Critical Value (0.05)	1.645
Standard Deviation of S	67.4
Standardized Value of S	1.32

Approximate p-value	0.0933

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-42-08

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	0
Number or Reported Events Used	31
Number Values Reported (n)	31
Minimum	41.4
Maximum	530
Mean	220
Geometric Mean	178.8
Median	230
Standard Deviation	125.3
Coefficient of Variation	0.57

Mann-Kendall Test	
M-K Test Value (S)	296
Critical Value (0.05)	1.645
Standard Deviation of S	58.79
Standardized Value of S	5.018
Approximate p-value	2.62E-07

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-42-10

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	370
Maximum	540
Mean	405.3
Geometric Mean	404.2
Median	400
Standard Deviation	32.43
Coefficient of Variation	0.08

Mann-Kendall Test

M-K Test Value (S)	15
Critical Value (0.05)	1.645
Standard Deviation of S	64.06
Standardized Value of S	0.219
Approximate p-value	0.414

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-42-11

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	260
Maximum	550
Mean	327.4
Geometric Mean	323.5
Median	310
Standard Deviation	55.27
Coefficient of Variation	0.169

Mann-Kendall Test	
M-K Test Value (S)	239
Critical Value (0.05)	1.645
Standard Deviation of S	67.28
Standardized Value of S	3.538
Approximate p-value	2.02E-04

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-42-12

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	250
Maximum	370
Mean	308.1
Geometric Mean	306.2
Median	320

Standard Deviation	34.05
Coefficient of Variation	0.11

Mann-Kendall Test	
M-K Test Value (S)	-359
Critical Value (0.05)	-1.645
Standard Deviation of S	64.04
Standardized Value of S	-5.59
Approximate p-value	1.13E-08

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-42-13

General Statistics	
Number of Events Reported (m)	25
Number of Missing Events	0
Number or Reported Events Used	25
Number Values Reported (n)	25
Minimum	838
Maximum	1100
Mean	981.9
Geometric Mean	979.8
Median	1000
Standard Deviation	64.63
Coefficient of Variation	0.0658

Mann-Kendall Test	
M-K Test Value (S)	16
Critical Value (0.05)	1.645
Standard Deviation of S	40.81
Standardized Value of S	0.368
Approximate p-value	0.357

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-624-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	500

Maximum	1060
Mean	795.8
Geometric Mean	774.3
Median	845
Standard Deviation	181.7
Coefficient of Variation	0.228

Mann-Kendall Test	
M-K Test Value (S)	-77
Critical Value (0.05)	-1.645
Standard Deviation of S	67.43
Standardized Value of S	-1.127
Approximate p-value	0.13

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-624-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	480
Maximum	1050
Mean	725.6
Geometric Mean	713.1
Median	730
Standard Deviation	133.7
Coefficient of Variation	0.184

Mann-Kendall Test	
M-K Test Value (S)	-144
Critical Value (0.05)	-1.645
Standard Deviation of S	67.41
Standardized Value of S	-2.121
Approximate p-value	0.017

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-624-09

General Statistics	
Number of Events Reported (m)	17

Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	140
Maximum	600
Mean	310.6
Geometric Mean	291
Median	320
Standard Deviation	112.8
Coefficient of Variation	0.363

Mann-Kendall Test

M-K Test Value (S)	-37
Tabulated p-value	0.076
Standard Deviation of S	24.21
Standardized Value of S	-1.487
Approximate p-value	0.0685

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-624-10

General Statistics

Number of Events Reported (m)	17
Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	350
Maximum	690
Mean	502.4
Geometric Mean	494.9
Median	500
Standard Deviation	89.34
Coefficient of Variation	0.178

Mann-Kendall Test

M-K Test Value (S)	54
Tabulated p-value	0.014
Standard Deviation of S	24.28
Standardized Value of S	2.183
Approximate p-value	0.0145

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-624-11

General Statistics	
Number of Events Reported (m)	17
Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	910
Maximum	1700
Mean	1206
Geometric Mean	1186
Median	1100
Standard Deviation	240.2
Coefficient of Variation	0.199

Mann-Kendall Test	
M-K Test Value (S)	64
Tabulated p-value	0.004
Standard Deviation of S	23.65
Standardized Value of S	2.664
Approximate p-value	0.00386

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-692-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	250
Maximum	990
Mean	500.2
Geometric Mean	452.1
Median	430.5
Standard Deviation	232.9
Coefficient of Variation	0.466

Mann-Kendall Test	
M-K Test Value (S)	-200
Critical Value (0.05)	-1.645
Standard Deviation of S	67.38
Standardized Value of S	-2.953

Approximate p-value	0.00157

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-692-05

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	0
Number or Reported Events Used	31
Number Values Reported (n)	31
Minimum	380
Maximum	463
Mean	420.6
Geometric Mean	420.1
Median	420
Standard Deviation	21.64
Coefficient of Variation	0.0514

Mann-Kendall Test	
M-K Test Value (S)	-178
Critical Value (0.05)	-1.645
Standard Deviation of S	58.2
Standardized Value of S	-3.041
Approximate p-value	0.00118

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-692-06

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	370
Maximum	471
Mean	418.5
Geometric Mean	417.8
Median	420
Standard Deviation	24.32
Coefficient of Variation	0.0581

Mann-Kendall Test

M-K Test Value (S)	-126
Critical Value (0.05)	-1.645
Standard Deviation of S	66.37
Standardized Value of S	-1.883
Approximate p-value	0.0298

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-692-07

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	480
Maximum	618
Mean	557.4
Geometric Mean	556.4
Median	570
Standard Deviation	32.91
Coefficient of Variation	0.0591

Mann-Kendall Test	
M-K Test Value (S)	-192
Critical Value (0.05)	-1.645
Standard Deviation of S	64.12
Standardized Value of S	-2.979
Approximate p-value	0.00145

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-692-08

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	360
Maximum	473
Mean	407.2
Geometric Mean	406.4
Median	410

Standard Deviation	25.79
Coefficient of Variation	0.0633

Mann-Kendall Test	
M-K Test Value (S)	-238
Critical Value (0.05)	-1.645
Standard Deviation of S	67.08
Standardized Value of S	-3.533
Approximate p-value	2.05E-04

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-692-09

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	350
Maximum	445
Mean	397.8
Geometric Mean	397.1
Median	400
Standard Deviation	22.79
Coefficient of Variation	0.0573

Mann-Kendall Test	
M-K Test Value (S)	-186
Critical Value (0.05)	-1.645
Standard Deviation of S	63.95
Standardized Value of S	-2.893
Approximate p-value	0.00191

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-692-10

General Statistics	
Number of Events Reported (m)	6
Number of Missing Events	0
Number or Reported Events Used	6
Number Values Reported (n)	6
Minimum	610

Maximum	660
Mean	633.3
Geometric Mean	633.2
Median	630
Standard Deviation	16.33
Coefficient of Variation	0.0258

Mann-Kendall Test	
M-K Test Value (S)	4
Tabulated p-value	0.235
Standard Deviation of S	4.967
Standardized Value of S	0.604
Approximate p-value	0.273 Not enough data for nitrate analysis

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-70/86/340-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	817
Maximum	3450
Mean	1723
Geometric Mean	1679
Median	1700
Standard Deviation	415.3
Coefficient of Variation	0.241

Mann-Kendall Test	
M-K Test Value (S)	137
Critical Value (0.05)	1.645
Standard Deviation of S	66.96
Standardized Value of S	2.031
Approximate p-value	0.0211

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-70-01

General Statistics	
Number of Events Reported (m)	34

Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	532
Maximum	900
Mean	732.4
Geometric Mean	728
Median	720
Standard Deviation	81.46
Coefficient of Variation	0.111

Mann-Kendall Test

M-K Test Value (S)	18
Critical Value (0.05)	1.645
Standard Deviation of S	67.28
Standardized Value of S	0.253
Approximate p-value	0.4

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-70-02

General Statistics

Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	580
Maximum	920
Mean	801.9
Geometric Mean	799.8
Median	808
Standard Deviation	55.27
Coefficient of Variation	0.0689

Mann-Kendall Test

M-K Test Value (S)	-131
Critical Value (0.05)	-1.645
Standard Deviation of S	64.42
Standardized Value of S	-2.018
Approximate p-value	0.0218

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-70-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1500
Maximum	6010
Mean	2550
Geometric Mean	2406
Median	2300
Standard Deviation	937.4
Coefficient of Variation	0.368

Mann-Kendall Test	
M-K Test Value (S)	-400
Critical Value (0.05)	-1.645
Standard Deviation of S	67.26
Standardized Value of S	-5.932
Approximate p-value	1.50E-09

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-70-04

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	423
Maximum	780
Mean	638.4
Geometric Mean	634.6
Median	635
Standard Deviation	67.9
Coefficient of Variation	0.106

Mann-Kendall Test	
M-K Test Value (S)	-81
Critical Value (0.05)	-1.645
Standard Deviation of S	67.36
Standardized Value of S	-1.188

Approximate p-value	0.117

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-74-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	702
Maximum	1200
Mean	896.6
Geometric Mean	886.1
Median	850
Standard Deviation	143.6
Coefficient of Variation	0.16

Mann-Kendall Test	
M-K Test Value (S)	23
Critical Value (0.05)	1.645
Standard Deviation of S	67.27
Standardized Value of S	0.327
Approximate p-value	0.372

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-74-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	490
Maximum	890
Mean	616.6
Geometric Mean	612
Median	601.5
Standard Deviation	81.19
Coefficient of Variation	0.132

Mann-Kendall Test

M-K Test Value (S)	282
Critical Value (0.05)	1.645
Standard Deviation of S	67.25
Standardized Value of S	4.178
Approximate p-value	1.47E-05

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-74-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	200
Maximum	1000
Mean	381.8
Geometric Mean	337.7
Median	260
Standard Deviation	212.4
Coefficient of Variation	0.556

Mann-Kendall Test	
M-K Test Value (S)	-417
Critical Value (0.05)	-1.645
Standard Deviation of S	67.14
Standardized Value of S	-6.196
Approximate p-value	2.89E-10

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-74-04

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	460
Maximum	740
Mean	591.9
Geometric Mean	588.2
Median	590

Standard Deviation	67.11
Coefficient of Variation	0.113

Mann-Kendall Test	
M-K Test Value (S)	196
Critical Value (0.05)	1.645
Standard Deviation of S	67.36
Standardized Value of S	2.895
Approximate p-value	0.0019

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-74-05

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	1
Number or Reported Events Used	33
Number Values Reported (n)	34
Number Values Missing	1
Number Values Used	33
Minimum	455
Maximum	790
Mean	603.5
Geometric Mean	600.4
Median	590
Standard Deviation	63.18
Coefficient of Variation	0.105

Mann-Kendall Test	
M-K Test Value (S)	292
Critical Value (0.05)	1.645
Standard Deviation of S	64.38
Standardized Value of S	4.52
Approximate p-value	3.10E-06

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-833-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34

Number Values Reported (n)	34
Minimum	796
Maximum	1400
Mean	1234
Geometric Mean	1219
Median	1300
Standard Deviation	178.2
Coefficient of Variation	0.144

Mann-Kendall Test

M-K Test Value (S)	21
Critical Value (0.05)	1.645
Standard Deviation of S	65.68
Standardized Value of S	0.304
Approximate p-value	0.38

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-833-04

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	586
Maximum	980
Mean	818.7
Geometric Mean	811.2
Median	830
Standard Deviation	110.4
Coefficient of Variation	0.135

Mann-Kendall Test

M-K Test Value (S)	35
Critical Value (0.05)	1.645
Standard Deviation of S	67.43
Standardized Value of S	0.504
Approximate p-value	0.307

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-833-05

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	931
Maximum	1330
Mean	1191
Geometric Mean	1185
Median	1200
Standard Deviation	114.5
Coefficient of Variation	0.0961

Mann-Kendall Test	
M-K Test Value (S)	-21
Critical Value (0.05)	-1.645
Standard Deviation of S	65.94
Standardized Value of S	-0.303
Approximate p-value	0.381

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-833-06

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	660
Maximum	1000
Mean	811.4
Geometric Mean	808.4
Median	809.5
Standard Deviation	71.15
Coefficient of Variation	0.0877

Mann-Kendall Test	
M-K Test Value (S)	213
Critical Value (0.05)	1.645
Standard Deviation of S	67.3
Standardized Value of S	3.15
Approximate p-value	8.17E-04

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-833-07

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	808
Maximum	1400
Mean	1124
Geometric Mean	1117
Median	1100
Standard Deviation	123.5
Coefficient of Variation	0.11

Mann-Kendall Test	
M-K Test Value (S)	53
Critical Value (0.05)	1.645
Standard Deviation of S	65.96
Standardized Value of S	0.788
Approximate p-value	0.215

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-833-08

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	533
Maximum	1600
Mean	995.7
Geometric Mean	974.8
Median	987
Standard Deviation	206.2
Coefficient of Variation	0.207

Mann-Kendall Test	
M-K Test Value (S)	120
Critical Value (0.05)	1.645

Standard Deviation of S	67.28
Standardized Value of S	1.769
Approximate p-value	0.0385

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-833-09

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	690
Maximum	1190
Mean	828.1
Geometric Mean	822
Median	796
Standard Deviation	107.8
Coefficient of Variation	0.13

Mann-Kendall Test	
M-K Test Value (S)	114
Critical Value (0.05)	1.645
Standard Deviation of S	67.33
Standardized Value of S	1.678
Approximate p-value	0.0467

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-833-10

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	534
Maximum	890
Mean	676.7
Geometric Mean	673.7
Median	680
Standard Deviation	65.29
Coefficient of Variation	0.0965

Mann-Kendall Test	
M-K Test Value (S)	272
Critical Value (0.05)	1.645
Standard Deviation of S	67.3
Standardized Value of S	4.027
Approximate p-value	2.82E-05

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-86/340-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	200
Maximum	445
Mean	282
Geometric Mean	274.2
Median	255
Standard Deviation	72.72
Coefficient of Variation	0.258

Mann-Kendall Test	
M-K Test Value (S)	-202
Critical Value (0.05)	-1.645
Standard Deviation of S	66.89
Standardized Value of S	-3.005
Approximate p-value	0.00133

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-dad-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	250
Maximum	512
Mean	384.2

Geometric Mean	378.6
Median	375
Standard Deviation	65.96
Coefficient of Variation	0.172

Mann-Kendall Test	
M-K Test Value (S)	-47
Critical Value (0.05)	-1.645
Standard Deviation of S	67.32
Standardized Value of S	-0.683
Approximate p-value	0.247

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	230
Maximum	700
Mean	394.2
Geometric Mean	373
Median	385
Standard Deviation	133.5
Coefficient of Variation	0.339

Mann-Kendall Test	
M-K Test Value (S)	-96
Critical Value (0.05)	-1.645
Standard Deviation of S	67.37
Standardized Value of S	-1.41
Approximate p-value	0.0793

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34

Number Values Reported (n)	34
Minimum	270
Maximum	647
Mean	374.3
Geometric Mean	363.1
Median	330
Standard Deviation	101.8
Coefficient of Variation	0.272

Mann-Kendall Test	
M-K Test Value (S)	-266
Critical Value (0.05)	-1.645
Standard Deviation of S	67.25
Standardized Value of S	-3.94
Approximate p-value	4.07E-05

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-dad-04

General Statistics	
Number of Events Reported (m)	32
Number of Missing Events	0
Number or Reported Events Used	32
Number Values Reported (n)	32
Minimum	32.3
Maximum	547
Mean	346.3
Geometric Mean	314.9
Median	341.5
Standard Deviation	110.4
Coefficient of Variation	0.319

Mann-Kendall Test	
M-K Test Value (S)	15
Critical Value (0.05)	1.645
Standard Deviation of S	61.58
Standardized Value of S	0.227
Approximate p-value	0.41

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-05

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	82
Maximum	722
Mean	404.1
Geometric Mean	344.8
Median	395
Standard Deviation	199.2
Coefficient of Variation	0.493

Mann-Kendall Test	
M-K Test Value (S)	-335
Critical Value (0.05)	-1.645
Standard Deviation of S	67.41
Standardized Value of S	-4.955
Approximate p-value	3.62E-07

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-dad-06r

General Statistics	
Number of Events Reported (m)	6
Number of Missing Events	0
Number or Reported Events Used	6
Number Values Reported (n)	6
Minimum	84
Maximum	110
Mean	96.67
Geometric Mean	96.29
Median	99
Standard Deviation	9.352
Coefficient of Variation	0.0967

Mann-Kendall Test	
M-K Test Value (S)	2
Tabulated p-value	0.36
Standard Deviation of S	5.228
Standardized Value of S	0.191
Approximate p-value	0.424

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-07

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	370
Maximum	950
Mean	567.9
Geometric Mean	557.9
Median	550
Standard Deviation	112.9
Coefficient of Variation	0.199

Mann-Kendall Test	
M-K Test Value (S)	-22
Critical Value (0.05)	-1.645
Standard Deviation of S	67.37
Standardized Value of S	-0.312
Approximate p-value	0.378

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-08

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1400
Maximum	2070
Mean	1762
Geometric Mean	1753
Median	1800
Standard Deviation	178.9
Coefficient of Variation	0.102

Mann-Kendall Test	
M-K Test Value (S)	-261
Critical Value (0.05)	-1.645

Standard Deviation of S	66.38
Standardized Value of S	-3.917
Approximate p-value	4.49E-05

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-dad-09

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	93
Maximum	950
Mean	590.6
Geometric Mean	550.6
Median	566.5
Standard Deviation	193
Coefficient of Variation	0.327

Mann-Kendall Test	
M-K Test Value (S)	-193
Critical Value (0.05)	-1.645
Standard Deviation of S	67.41
Standardized Value of S	-2.848
Approximate p-value	0.0022

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-dad-10

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	100
Maximum	460
Mean	390.3
Geometric Mean	378.1
Median	400
Standard Deviation	73.85
Coefficient of Variation	0.189

Mann-Kendall Test	
M-K Test Value (S)	-70
Critical Value (0.05)	-1.645
Standard Deviation of S	66.93
Standardized Value of S	-1.031
Approximate p-value	0.151

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-11

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	447
Maximum	1320
Mean	757
Geometric Mean	734.1
Median	690
Standard Deviation	203.2
Coefficient of Variation	0.268

Mann-Kendall Test	
M-K Test Value (S)	-62
Critical Value (0.05)	-1.645
Standard Deviation of S	64.4
Standardized Value of S	-0.947
Approximate p-value	0.172

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-12

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	480
Maximum	1200
Mean	992.7

Geometric Mean	973.2
Median	1085
Standard Deviation	187.6
Coefficient of Variation	0.189

Mann-Kendall Test	
M-K Test Value (S)	-121
Critical Value (0.05)	-1.645
Standard Deviation of S	66.47
Standardized Value of S	-1.805
Approximate p-value	0.0355

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-dad-13

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	360
Maximum	1100
Mean	612.2
Geometric Mean	599.1
Median	595
Standard Deviation	134.6
Coefficient of Variation	0.22

Mann-Kendall Test	
M-K Test Value (S)	30
Critical Value (0.05)	1.645
Standard Deviation of S	67.41
Standardized Value of S	0.43
Approximate p-value	0.334

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-14

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34

Number Values Reported (n)	34
Minimum	590
Maximum	1400
Mean	931.2
Geometric Mean	899.3
Median	875
Standard Deviation	249.5
Coefficient of Variation	0.268

Mann-Kendall Test	
M-K Test Value (S)	-198
Critical Value (0.05)	-1.645
Standard Deviation of S	67.4
Standardized Value of S	-2.923
Approximate p-value	0.00174

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-dad-15

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	466
Maximum	780
Mean	603.5
Geometric Mean	597.7
Median	595
Standard Deviation	86.81
Coefficient of Variation	0.144

Mann-Kendall Test	
M-K Test Value (S)	384
Critical Value (0.05)	1.645
Standard Deviation of S	67.38
Standardized Value of S	5.684
Approximate p-value	6.59E-09

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-dad-16

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	250
Maximum	821
Mean	490.2
Geometric Mean	472.7
Median	495
Standard Deviation	130.6
Coefficient of Variation	0.266

Mann-Kendall Test	
M-K Test Value (S)	-247
Critical Value (0.05)	-1.645
Standard Deviation of S	67.41
Standardized Value of S	-3.649
Approximate p-value	1.31E-04

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-dad-17

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	54
Maximum	454
Mean	135.3
Geometric Mean	116.2
Median	101.5
Standard Deviation	87.19
Coefficient of Variation	0.645

Mann-Kendall Test	
M-K Test Value (S)	43
Critical Value (0.05)	1.645
Standard Deviation of S	67.4
Standardized Value of S	0.623
Approximate p-value	0.267

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-18

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	560
Maximum	923
Mean	675.1
Geometric Mean	671.5
Median	670.5
Standard Deviation	74.19
Coefficient of Variation	0.11

Mann-Kendall Test	
M-K Test Value (S)	-91
Critical Value (0.05)	-1.645
Standard Deviation of S	67.25
Standardized Value of S	-1.338
Approximate p-value	0.0904

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-19

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	418
Maximum	1830
Mean	981.6
Geometric Mean	965.8
Median	970
Standard Deviation	182
Coefficient of Variation	0.185

Mann-Kendall Test	
M-K Test Value (S)	19
Critical Value (0.05)	1.645

Standard Deviation of S	66.72
Standardized Value of S	0.27
Approximate p-value	0.394

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-20

General Statistics	
Number of Events Reported (m)	32
Number of Missing Events	0
Number or Reported Events Used	32
Number Values Reported (n)	32
Minimum	630
Maximum	1000
Mean	830.3
Geometric Mean	826.4
Median	850
Standard Deviation	79.88
Coefficient of Variation	0.0962

Mann-Kendall Test	
M-K Test Value (S)	46
Critical Value (0.05)	1.645
Standard Deviation of S	61.61
Standardized Value of S	0.73
Approximate p-value	0.233

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-21

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	640
Maximum	1350
Mean	865.3
Geometric Mean	852.5
Median	865
Standard Deviation	154.7
Coefficient of Variation	0.179

Mann-Kendall Test	
M-K Test Value (S)	-126
Critical Value (0.05)	-1.645
Standard Deviation of S	67.41
Standardized Value of S	-1.854
Approximate p-value	0.0319

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-dad-22

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	4.03
Maximum	964
Mean	802.4
Geometric Mean	704.6
Median	840
Standard Deviation	155.3
Coefficient of Variation	0.194

Mann-Kendall Test	
M-K Test Value (S)	31
Critical Value (0.05)	1.645
Standard Deviation of S	67.29
Standardized Value of S	0.446
Approximate p-value	0.328

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-23

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	260
Maximum	763
Mean	492.1

Geometric Mean	474.9
Median	510
Standard Deviation	126.5
Coefficient of Variation	0.257

Mann-Kendall Test	
M-K Test Value (S)	-160
Critical Value (0.05)	-1.645
Standard Deviation of S	67.38
Standardized Value of S	-2.36
Approximate p-value	0.00915

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-dad-24

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	425
Maximum	1100
Mean	915.3
Geometric Mean	898.3
Median	950
Standard Deviation	151.8
Coefficient of Variation	0.166

Mann-Kendall Test	
M-K Test Value (S)	242
Critical Value (0.05)	1.645
Standard Deviation of S	64.37
Standardized Value of S	3.744
Approximate p-value	9.05E-05

Statistically significant evidence of an increasing trend at the specified level of significance.

Chloride (mg/l)-dad-25

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34

Number Values Reported (n)	34
Minimum	120
Maximum	1580
Mean	737.1
Geometric Mean	640.7
Median	689
Standard Deviation	357.7
Coefficient of Variation	0.485

Mann-Kendall Test	
M-K Test Value (S)	-38
Critical Value (0.05)	-1.645
Standard Deviation of S	67.41
Standardized Value of S	-0.549
Approximate p-value	0.292

Insufficient evidence to identify a significant trend at the specified level of significance.

Chloride (mg/l)-dad-26

General Statistics	
Number of Events Reported (m)	35
Number of Missing Events	1
Number or Reported Events Used	34
Number Values Reported (n)	35
Number Values Missing	1
Number Values Used	34
Minimum	300
Maximum	1160
Mean	772.2
Geometric Mean	737.7
Median	774.5
Standard Deviation	224.5
Coefficient of Variation	0.291

Mann-Kendall Test	
M-K Test Value (S)	-200
Critical Value (0.05)	-1.645
Standard Deviation of S	67.39
Standardized Value of S	-2.953
Approximate p-value	0.00157

Statistically significant evidence of a decreasing trend at the specified level of significance.

Chloride (mg/l)-dad-27

General Statistics	
Number of Events Reported (m)	6
Number of Missing Events	0
Number or Reported Events Used	6
Number Values Reported (n)	6
Minimum	450
Maximum	490
Mean	465
Geometric Mean	464.8
Median	465
Standard Deviation	15.17
Coefficient of Variation	0.0326

Mann-Kendall Test	
M-K Test Value (S)	-3
Tabulated p-value	0.36
Standard Deviation of S	5.132
Standardized Value of S	-0.39
Approximate p-value	0.348

Insufficient evidence to identify a significant
trend at the specified level of significance.

Chloride (mg/l)-EMPTY

General Statistics	
Number or Reported Events Used	0
Number Values Reported (n)	1
Number Values Missing	1
Number Values Used	0
Minimum	N/A
Maximum	N/A
Mean	N/A
Geometric Mean	N/A
Median	N/A
Standard Deviation	N/A
Coefficient of Variation	N/A

Not enough reported values (n) to provide Mann-Kendall Statistics!

Chloride (mg/l)-mw-4

General Statistics	
Number of Events Reported (m)	19

Number of Missing Events	0
Number or Reported Events Used	19
Number Values Reported (n)	19
Minimum	1200
Maximum	1800
Mean	1411
Geometric Mean	1403
Median	1400
Standard Deviation	156
Coefficient of Variation	0.111

Mann-Kendall Test	
M-K Test Value (S)	-15
Tabulated p-value	0.314
Standard Deviation of S	27.9
Standardized Value of S	-0.502
Approximate p-value	0.308

Insufficient evidence to identify a significant trend at the specified level of significance.

Mann-Kendall Trend Test Analysis - TDS

User Selected Options	
Date/Time of Computation	ProUCL 5.2 5/1/2024 1:11:54 PM
From File	DAD_2024_AP+DP_SF.xls
Full Precision	OFF
Confidence Coefficient	0.95
Level of Significance	0.05

TDS (mg/l)-126-12

General Statistics	
Number of Events Reported (m)	35
Number of Missing Events	0
Number or Reported Events Used	35
Number Values Reported (n)	35
Minimum	1120
Maximum	2780
Mean	2271
Geometric Mean	2252
Median	2240
Standard Deviation	257.7
Coefficient of Variation	0.114

Mann-Kendall Test	
M-K Test Value (S)	-368
Critical Value (0.05)	-1.645
Standard Deviation of S	70.37
Standardized Value of S	-5.216
Approximate p-value	9.16E-08

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-126-13

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	645
Maximum	3920
Mean	3214
Geometric Mean	3108
Median	3325

Standard Deviation	608.8
Coefficient of Variation	0.189

Mann-Kendall Test

M-K Test Value (S)	-14
Critical Value (0.05)	-1.645
Standard Deviation of S	67.42
Standardized Value of S	-0.193
Approximate p-value	0.424

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-257-01

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	3400
Maximum	4110
Mean	3674
Geometric Mean	3671
Median	3640
Standard Deviation	159.1
Coefficient of Variation	0.0433

Mann-Kendall Test

M-K Test Value (S)	-242
Critical Value (0.05)	-1.645
Standard Deviation of S	67.33
Standardized Value of S	-3.579
Approximate p-value	1.72E-04

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-257-02

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1370

Maximum	3600
Mean	2657
Geometric Mean	2629
Median	2680
Standard Deviation	360.5
Coefficient of Variation	0.136

Mann-Kendall Test	
M-K Test Value (S)	11
Critical Value (0.05)	1.645
Standard Deviation of S	67.38
Standardized Value of S	0.148
Approximate p-value	0.441

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-257-03

General Statistics	
Number of Events Reported (m)	21
Number of Missing Events	0
Number or Reported Events Used	21
Number Values Reported (n)	21
Minimum	1860
Maximum	2900
Mean	2498
Geometric Mean	2473
Median	2620
Standard Deviation	347.3
Coefficient of Variation	0.139

Mann-Kendall Test	
M-K Test Value (S)	92
Tabulated p-value	0.002
Standard Deviation of S	33.09
Standardized Value of S	2.75
Approximate p-value	0.00298

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-340-01

General Statistics	
Number of Events Reported (m)	34

Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2700
Maximum	3140
Mean	2912
Geometric Mean	2910
Median	2920
Standard Deviation	91.93
Coefficient of Variation	0.0316

Mann-Kendall Test

M-K Test Value (S)	63
Critical Value (0.05)	1.645
Standard Deviation of S	67.3
Standardized Value of S	0.921
Approximate p-value	0.178

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-42-02

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2400
Maximum	3090
Mean	2689
Geometric Mean	2684
Median	2690
Standard Deviation	162.5
Coefficient of Variation	0.0604

Mann-Kendall Test

M-K Test Value (S)	47
Critical Value (0.05)	1.645
Standard Deviation of S	67.41
Standardized Value of S	0.682
Approximate p-value	0.248

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-42-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	3160
Maximum	3740
Mean	3386
Geometric Mean	3381
Median	3360
Standard Deviation	177.4
Coefficient of Variation	0.0524

Mann-Kendall Test	
M-K Test Value (S)	-416
Critical Value (0.05)	-1.645
Standard Deviation of S	67.36
Standardized Value of S	-6.161
Approximate p-value	3.62E-10

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-42-06

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1970
Maximum	3800
Mean	2725
Geometric Mean	2674
Median	2615
Standard Deviation	544.3
Coefficient of Variation	0.2

Mann-Kendall Test	
M-K Test Value (S)	140
Critical Value (0.05)	1.645
Standard Deviation of S	67.43
Standardized Value of S	2.061

Approximate p-value	0.0196

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-42-08

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	0
Number or Reported Events Used	31
Number Values Reported (n)	31
Minimum	1030
Maximum	2600
Mean	1696
Geometric Mean	1648
Median	1700
Standard Deviation	410.2
Coefficient of Variation	0.242

Mann-Kendall Test	
M-K Test Value (S)	288
Critical Value (0.05)	1.645
Standard Deviation of S	58.79
Standardized Value of S	4.881
Approximate p-value	5.26E-07

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-42-10

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	1270
Maximum	2680
Mean	1498
Geometric Mean	1485
Median	1470
Standard Deviation	234.4
Coefficient of Variation	0.156

Mann-Kendall Test

M-K Test Value (S)	333
Critical Value (0.05)	1.645
Standard Deviation of S	64.39
Standardized Value of S	5.156
Approximate p-value	1.26E-07

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-42-11

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1040
Maximum	2790
Mean	1286
Geometric Mean	1265
Median	1200
Standard Deviation	287.4
Coefficient of Variation	0.224

Mann-Kendall Test	
M-K Test Value (S)	331
Critical Value (0.05)	1.645
Standard Deviation of S	67.24
Standardized Value of S	4.908
Approximate p-value	4.61E-07

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-42-12

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	1010
Maximum	1250
Mean	1136
Geometric Mean	1135
Median	1140

Standard Deviation	61.94
Coefficient of Variation	0.0545

Mann-Kendall Test	
M-K Test Value (S)	-343
Critical Value (0.05)	-1.645
Standard Deviation of S	64.31
Standardized Value of S	-5.318
Approximate p-value	5.24E-08

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-42-13

General Statistics	
Number of Events Reported (m)	25
Number of Missing Events	0
Number or Reported Events Used	25
Number Values Reported (n)	25
Minimum	3060
Maximum	3710
Mean	3383
Geometric Mean	3379
Median	3340
Standard Deviation	164.9
Coefficient of Variation	0.0487

Mann-Kendall Test	
M-K Test Value (S)	-155
Critical Value (0.05)	-1.645
Standard Deviation of S	42.78
Standardized Value of S	-3.6
Approximate p-value	1.59E-04

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-624-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1910

Maximum	3700
Mean	2631
Geometric Mean	2592
Median	2715
Standard Deviation	457.2
Coefficient of Variation	0.174

Mann-Kendall Test

M-K Test Value (S)	-92
Critical Value (0.05)	-1.645
Standard Deviation of S	67.45
Standardized Value of S	-1.349
Approximate p-value	0.0886

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-624-02

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2160
Maximum	3590
Mean	2807
Geometric Mean	2781
Median	2820
Standard Deviation	381.8
Coefficient of Variation	0.136

Mann-Kendall Test

M-K Test Value (S)	-114
Critical Value (0.05)	-1.645
Standard Deviation of S	67.4
Standardized Value of S	-1.676
Approximate p-value	0.0468

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-624-09

General Statistics

Number of Events Reported (m)	17

Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	1020
Maximum	2820
Mean	1746
Geometric Mean	1683
Median	1750
Standard Deviation	484.7
Coefficient of Variation	0.278

Mann-Kendall Test

M-K Test Value (S)	-46
Tabulated p-value	0.032
Standard Deviation of S	24.28
Standardized Value of S	-1.854
Approximate p-value	0.0319

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-624-10

General Statistics

Number of Events Reported (m)	17
Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	2190
Maximum	3240
Mean	2677
Geometric Mean	2660
Median	2700
Standard Deviation	309.2
Coefficient of Variation	0.115

Mann-Kendall Test

M-K Test Value (S)	53
Tabulated p-value	0.017
Standard Deviation of S	24.26
Standardized Value of S	2.144
Approximate p-value	0.016

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-624-11

General Statistics	
Number of Events Reported (m)	17
Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	3200
Maximum	4320
Mean	3532
Geometric Mean	3518
Median	3440
Standard Deviation	343
Coefficient of Variation	0.0971

Mann-Kendall Test	
M-K Test Value (S)	50
Tabulated p-value	0.021
Standard Deviation of S	24.23
Standardized Value of S	2.022
Approximate p-value	0.0216

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-692-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	868
Maximum	3520
Mean	1836
Geometric Mean	1621
Median	1615
Standard Deviation	925.3
Coefficient of Variation	0.504

Mann-Kendall Test	
M-K Test Value (S)	-183
Critical Value (0.05)	-1.645
Standard Deviation of S	67.46
Standardized Value of S	-2.698

Approximate p-value	0.00349

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-692-05

General Statistics	
Number of Events Reported (m)	31
Number of Missing Events	0
Number or Reported Events Used	31
Number Values Reported (n)	31
Minimum	1300
Maximum	1780
Mean	1536
Geometric Mean	1533
Median	1550
Standard Deviation	92.19
Coefficient of Variation	0.06

Mann-Kendall Test	
M-K Test Value (S)	200
Critical Value (0.05)	1.645
Standard Deviation of S	58.64
Standardized Value of S	3.394
Approximate p-value	3.45E-04

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-692-06

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1290
Maximum	1580
Mean	1446
Geometric Mean	1445
Median	1445
Standard Deviation	49.43
Coefficient of Variation	0.0342

Mann-Kendall Test

M-K Test Value (S)	65
Critical Value (0.05)	1.645
Standard Deviation of S	66.95
Standardized Value of S	0.956
Approximate p-value	0.17

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-692-07

General Statistics

Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	1450
Maximum	1790
Mean	1621
Geometric Mean	1619
Median	1630
Standard Deviation	79.44
Coefficient of Variation	0.049

Mann-Kendall Test

M-K Test Value (S)	68
Critical Value (0.05)	1.645
Standard Deviation of S	64.42
Standardized Value of S	1.04
Approximate p-value	0.149

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-692-08

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1270
Maximum	1400
Mean	1351
Geometric Mean	1351
Median	1360

Standard Deviation	37.8
Coefficient of Variation	0.028

Mann-Kendall Test

M-K Test Value (S)	109
Critical Value (0.05)	1.645
Standard Deviation of S	67.01
Standardized Value of S	1.612
Approximate p-value	0.0535

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-692-09

General Statistics

Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	970
Maximum	1460
Mean	1376
Geometric Mean	1373
Median	1400
Standard Deviation	81.51
Coefficient of Variation	0.0592

Mann-Kendall Test

M-K Test Value (S)	181
Critical Value (0.05)	1.645
Standard Deviation of S	63.96
Standardized Value of S	2.814
Approximate p-value	0.00244

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-692-10

General Statistics

Number of Events Reported (m)	6
Number of Missing Events	0
Number or Reported Events Used	6
Number Values Reported (n)	6
Minimum	1520

Maximum	1830
Mean	1648
Geometric Mean	1645
Median	1625
Standard Deviation	120.9
Coefficient of Variation	0.0733

Mann-Kendall Test	
M-K Test Value (S)	1
Tabulated p-value	0.5
Standard Deviation of S	5.323
Standardized Value of S	0
Approximate p-value	0.5

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-70/86/340-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	3060
Maximum	7090
Mean	5010
Geometric Mean	4928
Median	4720
Standard Deviation	922.3
Coefficient of Variation	0.184

Mann-Kendall Test	
M-K Test Value (S)	77
Critical Value (0.05)	1.645
Standard Deviation of S	67.43
Standardized Value of S	1.127
Approximate p-value	0.13

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-70-01

General Statistics	
Number of Events Reported (m)	34

Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2530
Maximum	3530
Mean	3074
Geometric Mean	3060
Median	3145
Standard Deviation	289.6
Coefficient of Variation	0.0942

Mann-Kendall Test

M-K Test Value (S)	179
Critical Value (0.05)	1.645
Standard Deviation of S	67.38
Standardized Value of S	2.642
Approximate p-value	0.00412

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-70-02

General Statistics

Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	2680
Maximum	3270
Mean	3012
Geometric Mean	3009
Median	2990
Standard Deviation	133.5
Coefficient of Variation	0.0443

Mann-Kendall Test

M-K Test Value (S)	-276
Critical Value (0.05)	-1.645
Standard Deviation of S	64.38
Standardized Value of S	-4.272
Approximate p-value	9.70E-06

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-70-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	4140
Maximum	9340
Mean	6336
Geometric Mean	6116
Median	6215
Standard Deviation	1691
Coefficient of Variation	0.267

Mann-Kendall Test	
M-K Test Value (S)	-445
Critical Value (0.05)	-1.645
Standard Deviation of S	67.44
Standardized Value of S	-6.583
Approximate p-value	2.30E-11

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-70-04

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2670
Maximum	3220
Mean	2955
Geometric Mean	2952
Median	2995
Standard Deviation	138.6
Coefficient of Variation	0.0469

Mann-Kendall Test	
M-K Test Value (S)	265
Critical Value (0.05)	1.645
Standard Deviation of S	67.2
Standardized Value of S	3.928

Approximate p-value	4.28E-05

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-74-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2630
Maximum	9800
Mean	3403
Geometric Mean	3295
Median	3080
Standard Deviation	1191
Coefficient of Variation	0.35

Mann-Kendall Test	
M-K Test Value (S)	-58
Critical Value (0.05)	-1.645
Standard Deviation of S	67.42
Standardized Value of S	-0.845
Approximate p-value	0.199

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-74-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2100
Maximum	18900
Mean	3150
Geometric Mean	2705
Median	2440
Standard Deviation	3042
Coefficient of Variation	0.966

Mann-Kendall Test

M-K Test Value (S)	215
Critical Value (0.05)	1.645
Standard Deviation of S	67.39
Standardized Value of S	3.175
Approximate p-value	7.48E-04

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-74-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1240
Maximum	3480
Mean	1860
Geometric Mean	1791
Median	1610
Standard Deviation	552.2
Coefficient of Variation	0.297

Mann-Kendall Test	
M-K Test Value (S)	-333
Critical Value (0.05)	-1.645
Standard Deviation of S	67.42
Standardized Value of S	-4.924
Approximate p-value	4.23E-07

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-74-04

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1670
Maximum	3840
Mean	2138
Geometric Mean	2118
Median	2130

Standard Deviation	335
Coefficient of Variation	0.157

Mann-Kendall Test

M-K Test Value (S)	224
Critical Value (0.05)	1.645
Standard Deviation of S	67.35
Standardized Value of S	3.311
Approximate p-value	4.65E-04

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-74-05

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1860
Maximum	3320
Mean	2188
Geometric Mean	2176
Median	2160
Standard Deviation	257.5
Coefficient of Variation	0.118

Mann-Kendall Test

M-K Test Value (S)	329
Critical Value (0.05)	1.645
Standard Deviation of S	67.36
Standardized Value of S	4.869
Approximate p-value	5.60E-07

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-833-02

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2400

Maximum	4440
Mean	3880
Geometric Mean	3848
Median	4010
Standard Deviation	468.9
Coefficient of Variation	0.121

Mann-Kendall Test	
M-K Test Value (S)	-171
Critical Value (0.05)	-1.645
Standard Deviation of S	67.38
Standardized Value of S	-2.523
Approximate p-value	0.00582

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-833-04

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2130
Maximum	3300
Mean	2770
Geometric Mean	2751
Median	2845
Standard Deviation	321.8
Coefficient of Variation	0.116

Mann-Kendall Test	
M-K Test Value (S)	-5
Critical Value (0.05)	-1.645
Standard Deviation of S	67.43
Standardized Value of S	-0.0593
Approximate p-value	0.476

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-833-05

General Statistics	
Number of Events Reported (m)	34

Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2720
Maximum	3620
Mean	3372
Geometric Mean	3365
Median	3460
Standard Deviation	215
Coefficient of Variation	0.0638

Mann-Kendall Test

M-K Test Value (S)	-58
Critical Value (0.05)	-1.645
Standard Deviation of S	67.34
Standardized Value of S	-0.846
Approximate p-value	0.199

Insufficient evidence to identify a significant
trend at the specified level of significance.

TDS (mg/l)-833-06

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2260
Maximum	2860
Mean	2622
Geometric Mean	2616
Median	2670
Standard Deviation	179
Coefficient of Variation	0.0683

Mann-Kendall Test

M-K Test Value (S)	170
Critical Value (0.05)	1.645
Standard Deviation of S	67.35
Standardized Value of S	2.509
Approximate p-value	0.00605

Statistically significant evidence of an increasing
trend at the specified level of significance.

TDS (mg/l)-833-07

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	3430
Maximum	5970
Mean	3961
Geometric Mean	3936
Median	3775
Standard Deviation	485.9
Coefficient of Variation	0.123

Mann-Kendall Test	
M-K Test Value (S)	-6
Critical Value (0.05)	-1.645
Standard Deviation of S	67.38
Standardized Value of S	-0.0742
Approximate p-value	0.47

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-833-08

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2010
Maximum	4200
Mean	3185
Geometric Mean	3156
Median	3135
Standard Deviation	427.8
Coefficient of Variation	0.134

Mann-Kendall Test	
M-K Test Value (S)	106
Critical Value (0.05)	1.645
Standard Deviation of S	67.45
Standardized Value of S	1.557

Approximate p-value	0.0598

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-833-09

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2740
Maximum	5040
Mean	3476
Geometric Mean	3431
Median	3410
Standard Deviation	587.3
Coefficient of Variation	0.169

Mann-Kendall Test	
M-K Test Value (S)	18
Critical Value (0.05)	1.645
Standard Deviation of S	67.4
Standardized Value of S	0.252
Approximate p-value	0.4

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-833-10

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2060
Maximum	2870
Mean	2644
Geometric Mean	2639
Median	2655
Standard Deviation	155.8
Coefficient of Variation	0.0589

Mann-Kendall Test

M-K Test Value (S)	293
Critical Value (0.05)	1.645
Standard Deviation of S	67.35
Standardized Value of S	4.335
Approximate p-value	7.27E-06

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-86/340-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1670
Maximum	2410
Mean	2096
Geometric Mean	2089
Median	2155
Standard Deviation	161.5
Coefficient of Variation	0.0771

Mann-Kendall Test	
M-K Test Value (S)	90
Critical Value (0.05)	1.645
Standard Deviation of S	67.33
Standardized Value of S	1.322
Approximate p-value	0.0931

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-01

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	819
Maximum	1770
Mean	1527
Geometric Mean	1515
Median	1520

Standard Deviation	177.3
Coefficient of Variation	0.116

Mann-Kendall Test	
M-K Test Value (S)	-128
Critical Value (0.05)	-1.645
Standard Deviation of S	67.2
Standardized Value of S	-1.89
Approximate p-value	0.0294

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-dad-02

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1070
Maximum	2290
Mean	1443
Geometric Mean	1414
Median	1465
Standard Deviation	306.6
Coefficient of Variation	0.213

Mann-Kendall Test	
M-K Test Value (S)	-54
Critical Value (0.05)	-1.645
Standard Deviation of S	67.4
Standardized Value of S	-0.786
Approximate p-value	0.216

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-03

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1530

Maximum	2820
Mean	2038
Geometric Mean	2011
Median	2070
Standard Deviation	337.6
Coefficient of Variation	0.166

Mann-Kendall Test	
M-K Test Value (S)	-273
Critical Value (0.05)	-1.645
Standard Deviation of S	67.41
Standardized Value of S	-4.035
Approximate p-value	2.73E-05

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-dad-04

General Statistics	
Number of Events Reported (m)	32
Number of Missing Events	0
Number or Reported Events Used	32
Number Values Reported (n)	32
Minimum	826
Maximum	2510
Mean	1881
Geometric Mean	1836
Median	1930
Standard Deviation	370
Coefficient of Variation	0.197

Mann-Kendall Test	
M-K Test Value (S)	184
Critical Value (0.05)	1.645
Standard Deviation of S	61.65
Standardized Value of S	2.968
Approximate p-value	0.0015

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-dad-05

General Statistics	
Number of Events Reported (m)	34

Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	785
Maximum	2850
Mean	1936
Geometric Mean	1805
Median	1960
Standard Deviation	664
Coefficient of Variation	0.343

Mann-Kendall Test

M-K Test Value (S)	-334
Critical Value (0.05)	-1.645
Standard Deviation of S	67.43
Standardized Value of S	-4.938
Approximate p-value	3.94E-07

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-dad-06r

General Statistics

Number of Events Reported (m)	6
Number of Missing Events	0
Number or Reported Events Used	6
Number Values Reported (n)	6
Minimum	347
Maximum	726
Mean	608.2
Geometric Mean	591.4
Median	650
Standard Deviation	139.5
Coefficient of Variation	0.229

Mann-Kendall Test

M-K Test Value (S)	-3
Tabulated p-value	0.36
Standard Deviation of S	5.323
Standardized Value of S	-0.376
Approximate p-value	0.354

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-07

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1800
Maximum	3900
Mean	2247
Geometric Mean	2217
Median	2150
Standard Deviation	411.4
Coefficient of Variation	0.183

Mann-Kendall Test	
M-K Test Value (S)	252
Critical Value (0.05)	1.645
Standard Deviation of S	67.4
Standardized Value of S	3.724
Approximate p-value	9.81E-05

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-dad-08

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	3960
Maximum	6480
Mean	4994
Geometric Mean	4956
Median	4900
Standard Deviation	632.5
Coefficient of Variation	0.127

Mann-Kendall Test	
M-K Test Value (S)	-369
Critical Value (0.05)	-1.645
Standard Deviation of S	67.46
Standardized Value of S	-5.455

Approximate p-value	2.44E-08

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-dad-09

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	785
Maximum	3410
Mean	2198
Geometric Mean	2114
Median	2005
Standard Deviation	606.1
Coefficient of Variation	0.276

Mann-Kendall Test	
M-K Test Value (S)	-179
Critical Value (0.05)	-1.645
Standard Deviation of S	67.43
Standardized Value of S	-2.64
Approximate p-value	0.00415

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-dad-10

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	790
Maximum	1790
Mean	1465
Geometric Mean	1451
Median	1455
Standard Deviation	188.6
Coefficient of Variation	0.129

Mann-Kendall Test

M-K Test Value (S)	-163
Critical Value (0.05)	-1.645
Standard Deviation of S	67.36
Standardized Value of S	-2.405
Approximate p-value	0.00809

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-dad-11

General Statistics	
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	1660
Maximum	4040
Mean	2960
Geometric Mean	2920
Median	2840
Standard Deviation	491
Coefficient of Variation	0.166

Mann-Kendall Test	
M-K Test Value (S)	41
Critical Value (0.05)	1.645
Standard Deviation of S	64.52
Standardized Value of S	0.62
Approximate p-value	0.268

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-12

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1960
Maximum	3820
Mean	3354
Geometric Mean	3330
Median	3470

Standard Deviation	378.8
Coefficient of Variation	0.113

Mann-Kendall Test	
M-K Test Value (S)	-151
Critical Value (0.05)	-1.645
Standard Deviation of S	67.43
Standardized Value of S	-2.225
Approximate p-value	0.0131

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-dad-13

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1740
Maximum	3640
Mean	2240
Geometric Mean	2219
Median	2220
Standard Deviation	335.3
Coefficient of Variation	0.15

Mann-Kendall Test	
M-K Test Value (S)	96
Critical Value (0.05)	1.645
Standard Deviation of S	67.42
Standardized Value of S	1.409
Approximate p-value	0.0794

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-14

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2310

Maximum	4100
Mean	3246
Geometric Mean	3214
Median	3225
Standard Deviation	461.5
Coefficient of Variation	0.142

Mann-Kendall Test	
M-K Test Value (S)	-157
Critical Value (0.05)	-1.645
Standard Deviation of S	67.44
Standardized Value of S	-2.313
Approximate p-value	0.0104

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-dad-15

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1660
Maximum	5060
Mean	2206
Geometric Mean	2151
Median	2120
Standard Deviation	593.6
Coefficient of Variation	0.269

Mann-Kendall Test	
M-K Test Value (S)	452
Critical Value (0.05)	1.645
Standard Deviation of S	67.42
Standardized Value of S	6.69
Approximate p-value	1.12E-11

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-dad-16

General Statistics	
Number of Events Reported (m)	34

Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1640
Maximum	3000
Mean	2145
Geometric Mean	2125
Median	2120
Standard Deviation	306.5
Coefficient of Variation	0.143

Mann-Kendall Test

M-K Test Value (S)	-248
Critical Value (0.05)	-1.645
Standard Deviation of S	67.42
Standardized Value of S	-3.664
Approximate p-value	1.24E-04

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-dad-17

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	554
Maximum	1740
Mean	847.6
Geometric Mean	807.9
Median	752.5
Standard Deviation	291.4
Coefficient of Variation	0.344

Mann-Kendall Test

M-K Test Value (S)	-54
Critical Value (0.05)	-1.645
Standard Deviation of S	67.45
Standardized Value of S	-0.786
Approximate p-value	0.216

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-18

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2400
Maximum	2860
Mean	2662
Geometric Mean	2661
Median	2660
Standard Deviation	96.74
Coefficient of Variation	0.0363

Mann-Kendall Test	
M-K Test Value (S)	-207
Critical Value (0.05)	-1.645
Standard Deviation of S	67.34
Standardized Value of S	-3.059
Approximate p-value	0.00111

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-dad-19

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2750
Maximum	3420
Mean	3004
Geometric Mean	3001
Median	2995
Standard Deviation	138.6
Coefficient of Variation	0.0461

Mann-Kendall Test	
M-K Test Value (S)	83
Critical Value (0.05)	1.645
Standard Deviation of S	67.31
Standardized Value of S	1.218

Approximate p-value	0.112

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-20

General Statistics	
Number of Events Reported (m)	32
Number of Missing Events	0
Number or Reported Events Used	32
Number Values Reported (n)	32
Minimum	2050
Maximum	2840
Mean	2462
Geometric Mean	2457
Median	2465
Standard Deviation	162.7
Coefficient of Variation	0.0661

Mann-Kendall Test	
M-K Test Value (S)	68
Critical Value (0.05)	1.645
Standard Deviation of S	61.6
Standardized Value of S	1.088
Approximate p-value	0.138

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-21

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2090
Maximum	3610
Mean	2928
Geometric Mean	2902
Median	2950
Standard Deviation	389.8
Coefficient of Variation	0.133

Mann-Kendall Test

M-K Test Value (S)	-74
Critical Value (0.05)	-1.645
Standard Deviation of S	67.42
Standardized Value of S	-1.083
Approximate p-value	0.139

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-22

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	2120
Maximum	2500
Mean	2374
Geometric Mean	2373
Median	2380
Standard Deviation	77.31
Coefficient of Variation	0.0326

Mann-Kendall Test	
M-K Test Value (S)	-24
Critical Value (0.05)	-1.645
Standard Deviation of S	67.24
Standardized Value of S	-0.342
Approximate p-value	0.366

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-23

General Statistics	
Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	1400
Maximum	2670
Mean	2022
Geometric Mean	1990
Median	2040

Standard Deviation	356.3
Coefficient of Variation	0.176

Mann-Kendall Test

M-K Test Value (S)	-51
Critical Value (0.05)	-1.645
Standard Deviation of S	67.43
Standardized Value of S	-0.742
Approximate p-value	0.229

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-24

General Statistics

Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	1620
Maximum	2900
Mean	2532
Geometric Mean	2508
Median	2600
Standard Deviation	317.5
Coefficient of Variation	0.125

Mann-Kendall Test

M-K Test Value (S)	333
Critical Value (0.05)	1.645
Standard Deviation of S	64.43
Standardized Value of S	5.153
Approximate p-value	1.28E-07

Statistically significant evidence of an increasing trend at the specified level of significance.

TDS (mg/l)-dad-25

General Statistics

Number of Events Reported (m)	34
Number of Missing Events	0
Number or Reported Events Used	34
Number Values Reported (n)	34
Minimum	840

Maximum	4640
Mean	2162
Geometric Mean	2010
Median	1940
Standard Deviation	883.4
Coefficient of Variation	0.409

Mann-Kendall Test	
M-K Test Value (S)	-68
Critical Value (0.05)	-1.645
Standard Deviation of S	67.43
Standardized Value of S	-0.994
Approximate p-value	0.16

Insufficient evidence to identify a significant trend at the specified level of significance.

TDS (mg/l)-dad-26

General Statistics	
Number of Events Reported (m)	35
Number of Missing Events	1
Number or Reported Events Used	34
Number Values Reported (n)	35
Number Values Missing	1
Number Values Used	34
Minimum	1060
Maximum	3420
Mean	2487
Geometric Mean	2407
Median	2500
Standard Deviation	605.9
Coefficient of Variation	0.244

Mann-Kendall Test	
M-K Test Value (S)	-229
Critical Value (0.05)	-1.645
Standard Deviation of S	67.44
Standardized Value of S	-3.381
Approximate p-value	3.61E-04

Statistically significant evidence of a decreasing trend at the specified level of significance.

TDS (mg/l)-dad-27

General Statistics	
Number of Events Reported (m)	6
Number of Missing Events	0
Number or Reported Events Used	6
Number Values Reported (n)	6
Minimum	1490
Maximum	2100
Mean	1893
Geometric Mean	1882
Median	1950
Standard Deviation	213.9
Coefficient of Variation	0.113

Mann-Kendall Test	
M-K Test Value (S)	6
Tabulated p-value	0.136
Standard Deviation of S	5.228
Standardized Value of S	0.956
Approximate p-value	0.169

Insufficient evidence to identify a significant
trend at the specified level of significance.
TDS (mg/l)-EMPTY

General Statistics	
Number or Reported Events Used	0
Number Values Reported (n)	1
Number Values Missing	1
Number Values Used	0
Minimum	N/A
Maximum	N/A
Mean	N/A
Geometric Mean	N/A
Median	N/A
Standard Deviation	N/A
Coefficient of Variation	N/A

Not enough reported values (n) to provide Mann-Kendall Statistics!

TDS (mg/l)-mw-4

General Statistics	
Number of Events Reported (m)	19
Number of Missing Events	0
Number or Reported Events Used	19

Number Values Reported (n)	19
Minimum	980
Maximum	5140
Mean	4228
Geometric Mean	4062
Median	4310
Standard Deviation	858.8
Coefficient of Variation	0.203

Mann-Kendall Test	
M-K Test Value (S)	-16
Tabulated p-value	0.29
Standard Deviation of S	28.57
Standardized Value of S	-0.525
Approximate p-value	0.3

Insufficient evidence to identify a significant trend at the specified level of significance.

APPENDIX I

DECAY RATE CALCULATIONS

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

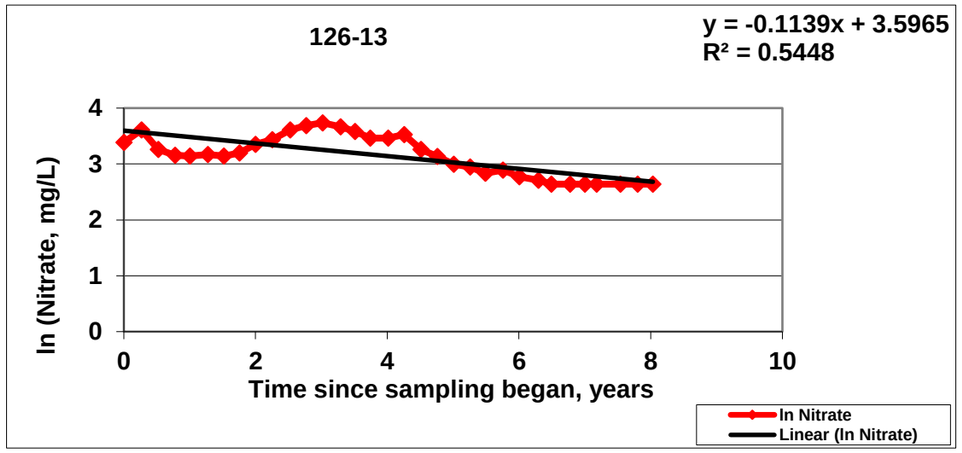
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 126-13

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/09/15 years
9-Nov-15		29.6	**29600**	**3.388**	**0.00**
15-Feb-16		36.9	**36900**	**3.608**	**0.27**
18-May-16		26.1	**26100**	**3.262**	**0.52**
18-Aug-16		23.4	**23400**	**3.153**	**0.78**
9-Nov-16		23.2	**23200**	**3.144**	**1.00**
17-Feb-17		23.8	**23800**	**3.170**	**1.28**
17-May-17		23.2	**23200**	**3.144**	**1.52**
10-Aug-17		24.4	**24400**	**3.195**	**1.75**
8-Nov-17		28.6	**28600**	**3.353**	**2.00**
9-Feb-18		31	**31000**	**3.434**	**2.25**
18-May-18		37	**37000**	**3.611**	**2.52**
15-Aug-18		40	**40000**	**3.689**	**2.77**
14-Nov-18		42	**42000**	**3.738**	**3.02**
22-Feb-19		39	**39000**	**3.664**	**3.29**
14-May-19		36	**36000**	**3.584**	**3.51**
5-Aug-19		32	**32000**	**3.466**	**3.74**
12-Nov-19		32	**32000**	**3.466**	**4.01**
10-Feb-20		34	**34000**	**3.526**	**4.26**
13-May-20		26	**26000**	**3.258**	**4.51**
12-Aug-20		23	**23000**	**3.135**	**4.76**
10-Nov-20		20	**20000**	**2.996**	**5.01**
9-Feb-21		19	**19000**	**2.944**	**5.26**
4-May-21		17	**17000**	**2.833**	**5.49**
11-Aug-21		18	**18000**	**2.890**	**5.76**
9-Nov-21		16	**16000**	**2.773**	**6.01**
24-Feb-22		15	**15000**	**2.708**	**6.30**
5-May-22		14	**14000**	**2.639**	**6.49**
17-Aug-22		14	**14000**	**2.639**	**6.78**
8-Nov-22		14	**14000**	**2.639**	**7.00**
11-Jan-23		14	**14000**	**2.639**	**7.18**
24-May-23		14	**14000**	**2.639**	**7.54**
27-Aug-23		14	**14000**	**2.639**	**7.80**
19-Nov-23		14	**14000**	**2.639**	**8.03**
10-Jan-24		15	**15000**	**2.708**	**8.18**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}
= slope of the line, y

Solutions

126-13, Nitrate			
Enter C_{CL}	⇨	**10**	
Enter C_o	⇨	**29.6**	
Enter k_{point}	⇨	**0.114**	
Time to reach cleanup level		**9.5**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

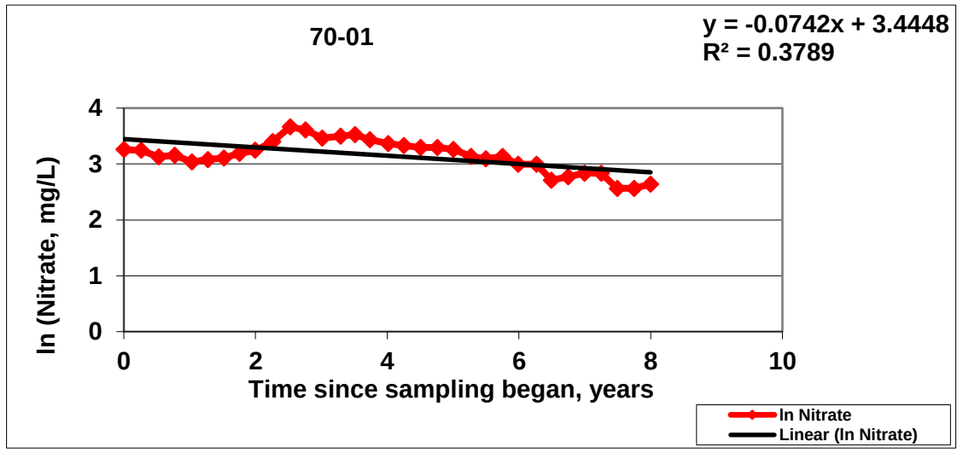
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 70-01

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/12/15 years
12-Nov-15		26.0	**26000**	**3.258**	**0.00**
16-Feb-16		25.6	**25600**	**3.243**	**0.26**
24-May-16		22.8	**22800**	**3.127**	**0.53**
19-Aug-16		23.5	**23500**	**3.157**	**0.77**
22-Nov-16		20.8	**20800**	**3.035**	**1.03**
20-Feb-17		21.8	**21800**	**3.082**	**1.28**
19-May-17		22.4	**22400**	**3.109**	**1.52**
14-Aug-17		24.3	**24300**	**3.190**	**1.76**
9-Nov-17		25.6	**25600**	**3.243**	**1.99**
13-Feb-18		30	**30000**	**3.401**	**2.26**
21-May-18		39	**39000**	**3.664**	**2.52**
15-Aug-18		37	**37000**	**3.611**	**2.76**
15-Nov-18		32	**32000**	**3.466**	**3.01**
26-Feb-19		33	**33000**	**3.497**	**3.29**
16-May-19		34	**34000**	**3.526**	**3.51**
7-Aug-19		31	**31000**	**3.434**	**3.74**
15-Nov-19		29	**29000**	**3.367**	**4.01**
10-Feb-20		28	**28000**	**3.332**	**4.25**
13-May-20		27	**27000**	**3.296**	**4.50**
14-Aug-20		27	**27000**	**3.296**	**4.76**
12-Nov-20		26	**26000**	**3.258**	**5.01**
16-Feb-21		23	**23000**	**3.135**	**5.27**
10-May-21		22	**22000**	**3.091**	**5.50**
10-Aug-21		23	**23000**	**3.135**	**5.75**
5-Nov-21		20	**20000**	**2.996**	**5.99**
15-Feb-22		20	**20000**	**2.996**	**6.27**
9-May-22		15	**15000**	**2.708**	**6.49**
9-Aug-22		16	**16000**	**2.773**	**6.75**
8-Nov-22		17	**17000**	**2.833**	**6.99**
9-Feb-23		17	**17000**	**2.833**	**7.25**
8-May-23		13	**13000**	**2.565**	**7.49**
9-Aug-23		13	**13000**	**2.565**	**7.75**
9-Nov-23		14	**14000**	**2.639**	**8.00**
12-Feb-24		14	**14000**	**2.639**	**8.26**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}
= slope of the line, y

Solutions

70-01, Nitrate			
Enter C_{CL}	⇨	**10**	
Enter C_o	⇨	**26**	
Enter k_{point}	⇨	**0.0742**	
Time to reach cleanup level		**12.9**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

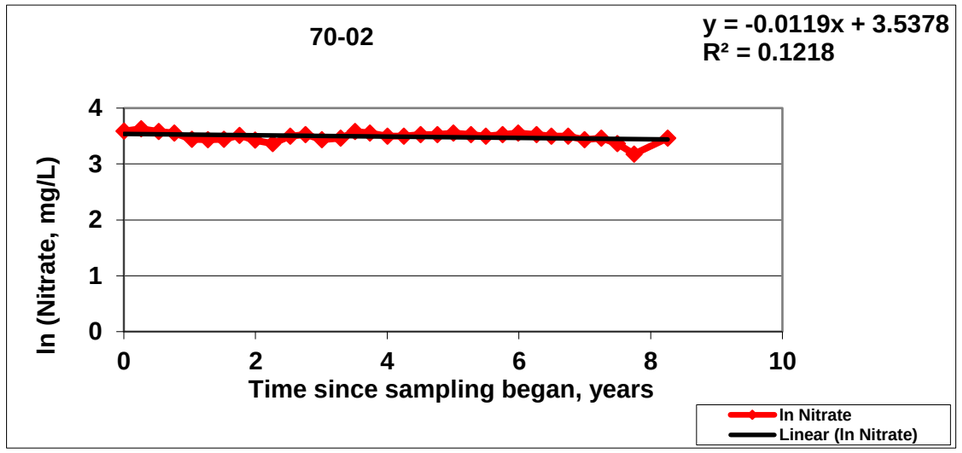
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 70-02

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/12/15 years
12-Nov-15		36.1	**36100**	**3.586**	**0.00**
16-Feb-16		37.7	**37700**	**3.630**	**0.26**
23-May-16		35.9	**35900**	**3.581**	**0.53**
18-Aug-16		35.0	**35000**	**3.555**	**0.77**
22-Nov-16		31.3	**31300**	**3.444**	**1.03**
20-Feb-17		31.0	**31000**	**3.434**	**1.28**
19-May-17		31.3	**31300**	**3.444**	**1.52**
14-Aug-17		33.4	**33400**	**3.509**	**1.76**
9-Nov-17		30.7	**30700**	**3.424**	**1.99**
13-Feb-18		29	**29000**	**3.367**	**2.26**
21-May-18		33	**33000**	**3.497**	**2.52**
15-Aug-18		34	**34000**	**3.526**	**2.76**
14-Nov-18		31	**31000**	**3.434**	**3.01**
26-Feb-19		32	**32000**	**3.466**	**3.29**
16-May-19		36	**36000**	**3.584**	**3.51**
6-Aug-19		35	**35000**	**3.555**	**3.73**
12-Nov-19		33	**33000**	**3.497**	**4.00**
10-Feb-20		33	**33000**	**3.497**	**4.25**
13-May-20		34	**34000**	**3.526**	**4.50**
14-Aug-20		34	**34000**	**3.526**	**4.76**
12-Nov-20		35	**35000**	**3.555**	**5.01**
16-Feb-21		34	**34000**	**3.526**	**5.27**
10-May-21		33	**33000**	**3.497**	**5.50**
10-Aug-21		34	**34000**	**3.526**	**5.75**
5-Nov-21		35	**35000**	**3.555**	**5.99**
15-Feb-22		34	**34000**	**3.526**	**6.27**
9-May-22		33	**33000**	**3.497**	**6.49**
9-Aug-22		33	**33000**	**3.497**	**6.75**
8-Nov-22		31	**31000**	**3.434**	**6.99**
9-Feb-23		32	**32000**	**3.466**	**7.25**
8-May-23		29	**29000**	**3.367**	**7.49**
9-Aug-23		24	**24000**	**3.178**	**7.75**
12-Feb-24		32	**32000**	**3.466**	**8.26**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, $years^{-1}$
= slope of the line, y

Solutions

70-02, Nitrate			
Enter C_{CL}	⇨	**10**	
Enter C_o	⇨	**36.1**	
Enter k_{point}	⇨	**0.0119**	
Time to reach cleanup level		**107.9**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

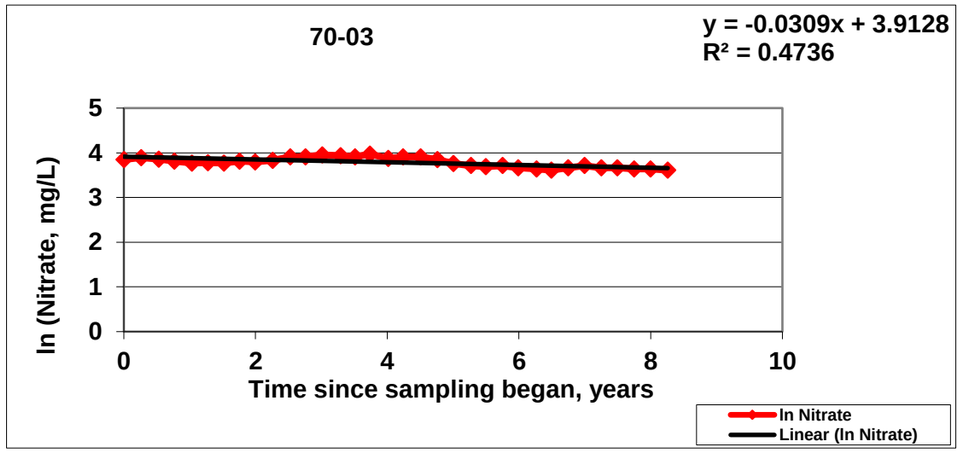
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 70-03

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/12/15 years
12-Nov-15		46.9	**46900**	**3.848**	**0.00**
16-Feb-16		49.1	**49100**	**3.894**	**0.26**
24-May-16		47.4	**47400**	**3.859**	**0.53**
18-Aug-16		45.2	**45200**	**3.811**	**0.77**
22-Nov-16		43.4	**43400**	**3.770**	**1.03**
20-Feb-17		43.6	**43600**	**3.775**	**1.28**
19-May-17		43.5	**43500**	**3.773**	**1.52**
14-Aug-17		45.4	**45400**	**3.816**	**1.76**
9-Nov-17		44.7	**44700**	**3.800**	**1.99**
13-Feb-18		46	**46000**	**3.829**	**2.26**
21-May-18		50	**50000**	**3.912**	**2.52**
15-Aug-18		50	**50000**	**3.912**	**2.76**
15-Nov-18		52	**52000**	**3.951**	**3.01**
26-Feb-19		51	**51000**	**3.932**	**3.29**
16-May-19		50	**50000**	**3.912**	**3.51**
6-Aug-19		53	**53000**	**3.970**	**3.73**
15-Nov-19		48	**48000**	**3.871**	**4.01**
7-Feb-20		50	**50000**	**3.912**	**4.24**
13-May-20		50	**50000**	**3.912**	**4.50**
14-Aug-20		47	**47000**	**3.850**	**4.76**
11-Nov-20		43	**43000**	**3.761**	**5.00**
16-Feb-21		41	**41000**	**3.714**	**5.27**
10-May-21		40	**40000**	**3.689**	**5.50**
10-Aug-21		41	**41000**	**3.714**	**5.75**
5-Nov-21		39	**39000**	**3.664**	**5.99**
15-Feb-22		38	**38000**	**3.638**	**6.27**
9-May-22		37	**37000**	**3.611**	**6.49**
9-Aug-22		39	**39000**	**3.664**	**6.75**
8-Nov-22		41	**41000**	**3.714**	**6.99**
9-Feb-23		39	**39000**	**3.664**	**7.25**
8-May-23		39	**39000**	**3.664**	**7.49**
9-Aug-23		38	**38000**	**3.638**	**7.75**
9-Nov-23		38	**38000**	**3.638**	**8.00**
12-Feb-24		37	**37000**	**3.611**	**8.26**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

70-03, Nitrate			
Enter C_{CL}	⇨	**10**	
Enter C_o	⇨	**46.9**	
Enter k_{point}	⇨	**0.0309**	
Time to reach cleanup level		**50.0**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

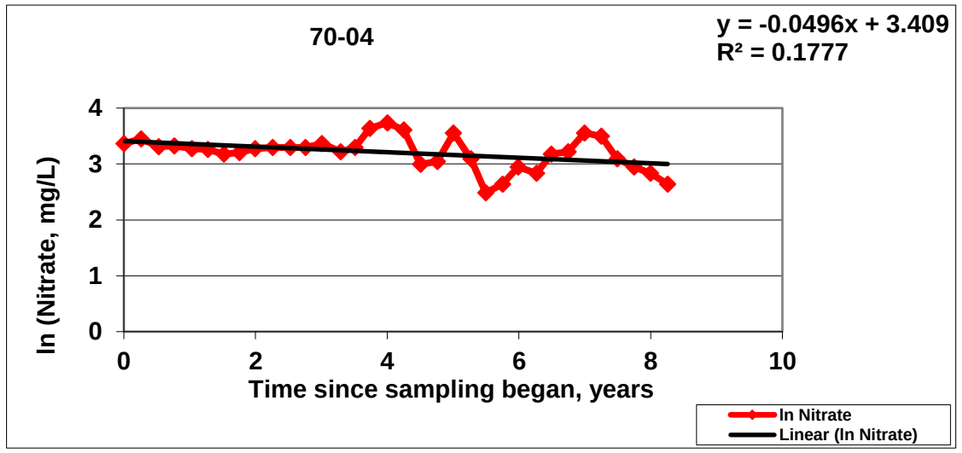
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 70-04

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/12/15 years
12-Nov-15		28.9	**28900**	**3.364**	**0.00**
16-Feb-16		31.4	**31400**	**3.447**	**0.26**
23-May-16		27.3	**27300**	**3.307**	**0.53**
18-Aug-16		27.8	**27800**	**3.325**	**0.77**
22-Nov-16		26.5	**26500**	**3.277**	**1.03**
20-Feb-17		26.1	**26100**	**3.262**	**1.28**
19-May-17		23.9	**23900**	**3.174**	**1.52**
14-Aug-17		24.6	**24600**	**3.203**	**1.76**
9-Nov-17		26.5	**26500**	**3.277**	**1.99**
13-Feb-18		27	**27000**	**3.296**	**2.26**
21-May-18		27	**27000**	**3.296**	**2.52**
15-Aug-18		27	**27000**	**3.296**	**2.76**
14-Nov-18		29	**29000**	**3.367**	**3.01**
26-Feb-19		25	**25000**	**3.219**	**3.29**
16-May-19		27	**27000**	**3.296**	**3.51**
6-Aug-19		38	**38000**	**3.638**	**3.73**
12-Nov-19		42	**42000**	**3.738**	**4.00**
10-Feb-20		37	**37000**	**3.611**	**4.25**
13-May-20		20	**20000**	**2.996**	**4.50**
14-Aug-20		21	**21000**	**3.045**	**4.76**
12-Nov-20		35	**35000**	**3.555**	**5.01**
16-Feb-21		22	**22000**	**3.091**	**5.27**
10-May-21		12	**12000**	**2.485**	**5.50**
10-Aug-21		14	**14000**	**2.639**	**5.75**
5-Nov-21		19	**19000**	**2.944**	**5.99**
15-Feb-22		17	**17000**	**2.833**	**6.27**
9-May-22		24	**24000**	**3.178**	**6.49**
9-Aug-22		25	**25000**	**3.219**	**6.75**
8-Nov-22		35	**35000**	**3.555**	**6.99**
9-Feb-23		33	**33000**	**3.497**	**7.25**
8-May-23		22	**22000**	**3.091**	**7.49**
9-Aug-23		19	**19000**	**2.944**	**7.75**
9-Nov-23		17	**17000**	**2.833**	**8.00**
12-Feb-24		14	**14000**	**2.639**	**8.26**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

70-04, Nitrate			
Enter C_{CL}	⇨	**10**	
Enter C_o	⇨	**28.9**	
Enter k_{point}	⇨	**0.0496**	
Time to reach cleanup level		**21.4**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

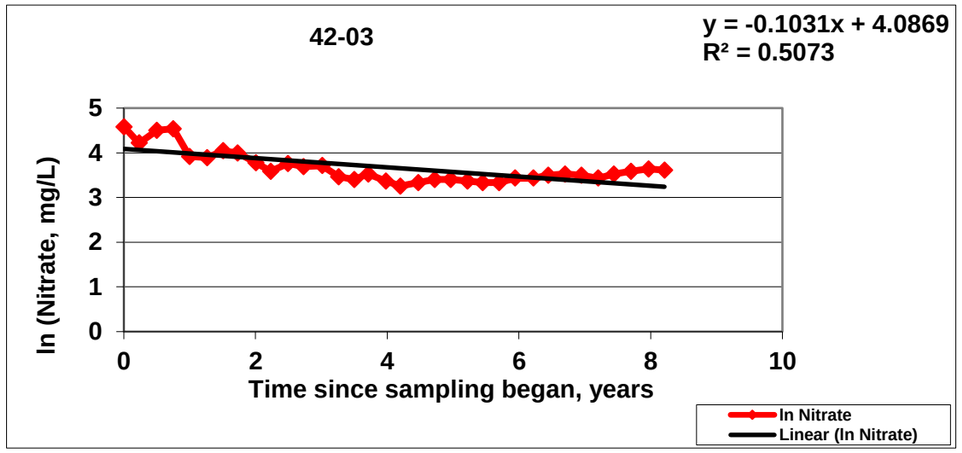
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 42-03

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 12/1/15 years
1-Dec-15		97.9	**97900**	**4.584**	**0.00**
23-Feb-16		68.0	**68000**	**4.220**	**0.23**
1-Jun-16		90.0	**90000**	**4.500**	**0.50**
31-Aug-16		93.5	**93500**	**4.538**	**0.75**
28-Nov-16		50.2	**50200**	**3.916**	**0.99**
6-Mar-17		49.2	**49200**	**3.896**	**1.26**
2-Jun-17		57.1	**57100**	**4.045**	**1.50**
23-Aug-17		54.5	**54500**	**3.998**	**1.73**
1-Dec-17		43.6	**43600**	**3.775**	**2.00**
21-Feb-18		36	**36000**	**3.584**	**2.23**
29-May-18		43	**43000**	**3.761**	**2.49**
22-Aug-18		40	**40000**	**3.689**	**2.73**
4-Dec-18		41	**41000**	**3.714**	**3.01**
6-Mar-19		32	**32000**	**3.466**	**3.26**
30-May-19		30	**30000**	**3.401**	**3.50**
16-Aug-19		34	**34000**	**3.526**	**3.71**
22-Nov-19		29	**29000**	**3.367**	**3.98**
11-Feb-20		26	**26000**	**3.258**	**4.20**
20-May-20		28	**28000**	**3.332**	**4.47**
18-Aug-20		30	**30000**	**3.401**	**4.72**
16-Nov-20		30	**30000**	**3.401**	**4.96**
17-Feb-21		29	**29000**	**3.367**	**5.22**
11-May-21		28	**28000**	**3.332**	**5.45**
10-Aug-21		28	**28000**	**3.332**	**5.70**
8-Nov-21		31	**31000**	**3.434**	**5.94**
16-Feb-22		31	**31000**	**3.434**	**6.22**
10-May-22		33	**33000**	**3.497**	**6.44**
10-Aug-22		34	**34000**	**3.526**	**6.70**
9-Nov-22		33	**33000**	**3.497**	**6.95**
10-Feb-23		31	**31000**	**3.434**	**7.20**
9-May-23		34	**34000**	**3.526**	**7.44**
11-Aug-23		36	**36000**	**3.584**	**7.70**
16-Nov-23		38	**38000**	**3.638**	**7.96**
13-Feb-24		37	**37000**	**3.611**	**8.21**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

42-03, Nitrate			
Enter C_{CL}	⇨	**10**	
Enter C_o	⇨	**97.9**	
Enter k_{point}	⇨	**0.1031**	
Time to reach cleanup level		**22.1**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

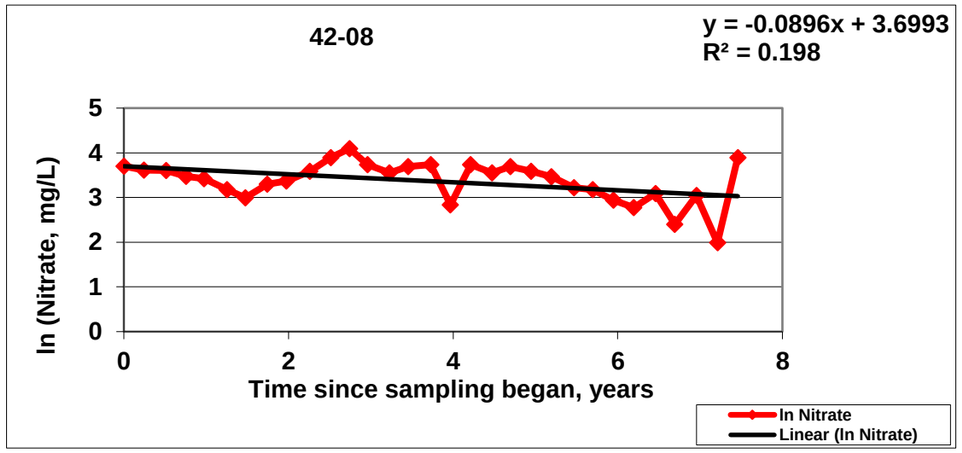
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 42-08

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 8/31/16 years
31-Aug-16		40.6	**40600**	**3.704**	**0.00**
28-Nov-16		37.0	**37000**	**3.611**	**0.24**
6-Mar-17		36.8	**36800**	**3.605**	**0.51**
2-Jun-17		32.3	**32300**	**3.475**	**0.75**
22-Aug-17		30.6	**30600**	**3.421**	**0.98**
2-Dec-17		24.0	**24000**	**3.178**	**1.25**
21-Feb-18		20	**20000**	**2.996**	**1.48**
29-May-18		27	**27000**	**3.296**	**1.74**
22-Aug-18		29	**29000**	**3.367**	**1.98**
4-Dec-18		36	**36000**	**3.584**	**2.26**
6-Mar-19		49	**49000**	**3.892**	**2.51**
29-May-19		60	**60000**	**4.094**	**2.74**
16-Aug-19		42	**42000**	**3.738**	**2.96**
22-Nov-19		35	**35000**	**3.555**	**3.23**
12-Feb-20		40	**40000**	**3.689**	**3.45**
22-May-20		42	**42000**	**3.738**	**3.73**
18-Aug-20		17	**17000**	**2.833**	**3.97**
16-Nov-20		42	**42000**	**3.738**	**4.21**
18-Feb-21		35	**35000**	**3.555**	**4.47**
11-May-21		40	**40000**	**3.689**	**4.70**
11-Aug-21		36	**36000**	**3.584**	**4.95**
9-Nov-21		32	**32000**	**3.466**	**5.19**
17-Feb-22		25	**25000**	**3.219**	**5.47**
11-May-22		24	**24000**	**3.178**	**5.70**
10-Aug-22		19	**19000**	**2.944**	**5.95**
9-Nov-22		16	**16000**	**2.773**	**6.19**
13-Feb-23		22	**22000**	**3.091**	**6.46**
10-May-23		11	**11000**	**2.398**	**6.69**
14-Aug-23		21	**21000**	**3.045**	**6.96**
16-Nov-23		7.3	**7300**	**1.988**	**7.21**
13-Feb-24		49	**49000**	**3.892**	**7.46**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

42-08, Nitrate				
Enter C_{CL}	⇨	**10**		
Enter C_o	⇨	**40.6**		
Enter k_{point}	⇨	**0.0896**		
Time to reach cleanup level			**15.6**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

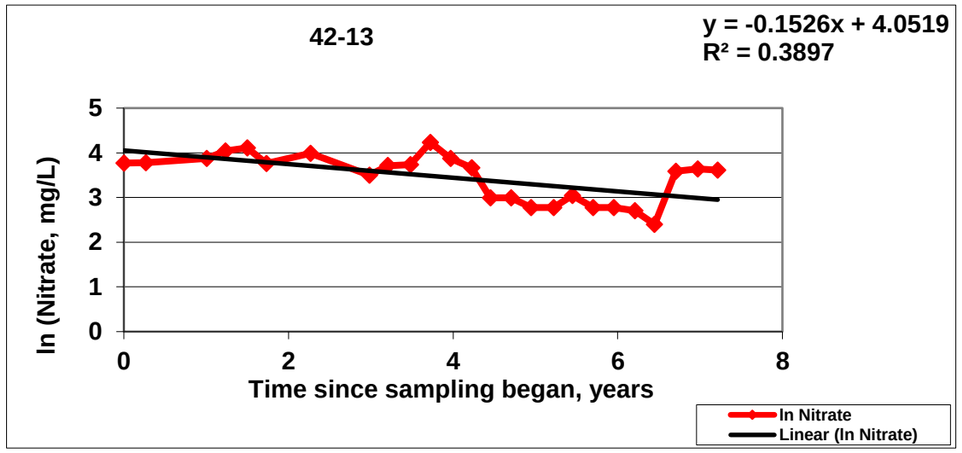
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 42-13

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/28/16 years
28-Nov-16		43.5	**43500**	**3.773**	**0.00**
6-Mar-17		43.6	**43600**	**3.775**	**0.27**
1-Dec-17		48.0	**48000**	**3.871**	**1.01**
21-Feb-18		57	**57000**	**4.043**	**1.23**
29-May-18		61	**61000**	**4.111**	**1.50**
22-Aug-18		43	**43000**	**3.761**	**1.73**
6-Mar-19		54	**54000**	**3.989**	**2.27**
22-Nov-19		33	**33000**	**3.497**	**2.98**
11-Feb-20		41	**41000**	**3.714**	**3.21**
22-May-20		42	**42000**	**3.738**	**3.48**
18-Aug-20		69	**69000**	**4.234**	**3.72**
16-Nov-20		48	**48000**	**3.871**	**3.97**
17-Feb-21		39	**39000**	**3.664**	**4.22**
11-May-21		20	**20000**	**2.996**	**4.45**
11-Aug-21		20	**20000**	**2.996**	**4.70**
8-Nov-21		16	**16000**	**2.773**	**4.95**
16-Feb-22		16	**16000**	**2.773**	**5.22**
10-May-22		21	**21000**	**3.045**	**5.45**
10-Aug-22		16	**16000**	**2.773**	**5.70**
9-Nov-22		16	**16000**	**2.773**	**5.95**
10-Feb-23		15	**15000**	**2.708**	**6.21**
9-May-23		11	**11000**	**2.398**	**6.45**
11-Aug-23		36	**36000**	**3.584**	**6.70**
16-Nov-23		38	**38000**	**3.638**	**6.97**
13-Feb-24		37	**37000**	**3.611**	**7.21**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

42-13, Nitrate				
Enter C_{CL}	⇨	**10**		
Enter C_o	⇨	**43.5**		
Enter k_{point}	⇨	**0.1526**		
Time to reach cleanup level			**9.6**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

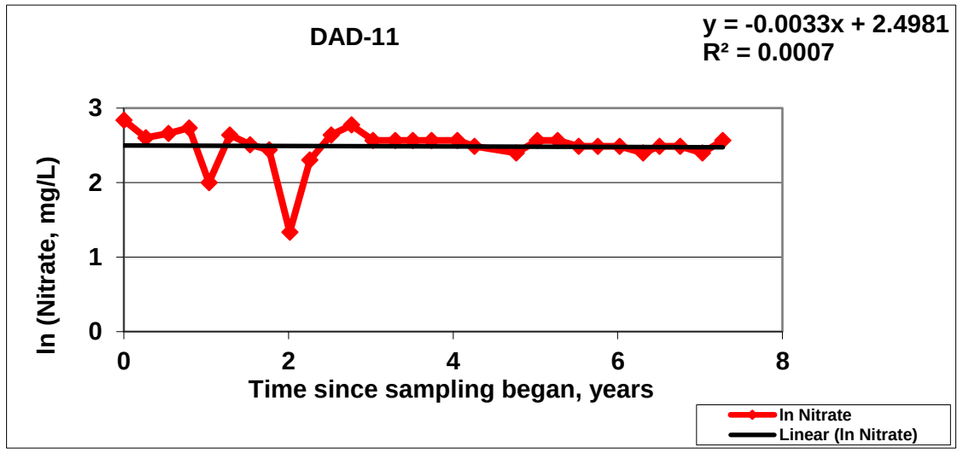
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well DAD-11

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/24/15 years
24-Nov-15		17.1	**17100**	**2.839**	**0.00**
29-Feb-16		13.5	**13500**	**2.603**	**0.27**
8-Jun-16		14.3	**14300**	**2.660**	**0.54**
8-Sep-16		15.4	**15400**	**2.734**	**0.79**
5-Dec-16		7.40	**7400**	**2.001**	**1.03**
8-Mar-17		14.0	**14000**	**2.639**	**1.29**
6-Jun-17		12.3	**12300**	**2.510**	**1.53**
29-Aug-17		11.5	**11500**	**2.442**	**1.76**
29-Nov-17		3.80	**3800**	**1.335**	**2.02**
26-Feb-18		10	**10000**	**2.303**	**2.26**
31-May-18		14	**14000**	**2.639**	**2.52**
29-Aug-18		16	**16000**	**2.773**	**2.76**
3-Dec-18		13	**13000**	**2.565**	**3.03**
11-Mar-19		13	**13000**	**2.565**	**3.30**
28-May-19		13	**13000**	**2.565**	**3.51**
20-Aug-19		13	**13000**	**2.565**	**3.74**
12-Dec-19		13	**13000**	**2.565**	**4.05**
26-Feb-20		12	**12000**	**2.485**	**4.26**
28-Aug-20		11	**11000**	**2.398**	**4.76**
1-Dec-20		13	**13000**	**2.565**	**5.02**
1-Mar-21		13	**13000**	**2.565**	**5.27**
1-Jun-21		12	**12000**	**2.485**	**5.52**
25-Aug-21		12	**12000**	**2.485**	**5.76**
30-Nov-21		12	**12000**	**2.485**	**6.02**
15-Mar-22		11	**11000**	**2.398**	**6.31**
25-May-22		12	**12000**	**2.485**	**6.50**
25-Aug-22		12	**12000**	**2.485**	**6.76**
2-Dec-22		11	**11000**	**2.398**	**7.03**
3-Mar-23		13	**13000**	**2.565**	**7.28**
25-May-23		17	**17000**	**2.833**	**7.50**
31-Aug-23		24	**24000**	**3.178**	**7.77**
6-Dec-23		31	**31000**	**3.434**	**8.04**
1-Mar-24		39	**39000**	**3.664**	**8.27**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

DAD-11, Nitrate				
Enter C_{CL}	⇨	**10**		
Enter C_o	⇨	**17.1**		
Enter k_{point}	⇨	**0.0033**		
Time to reach cleanup level			**162.6**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

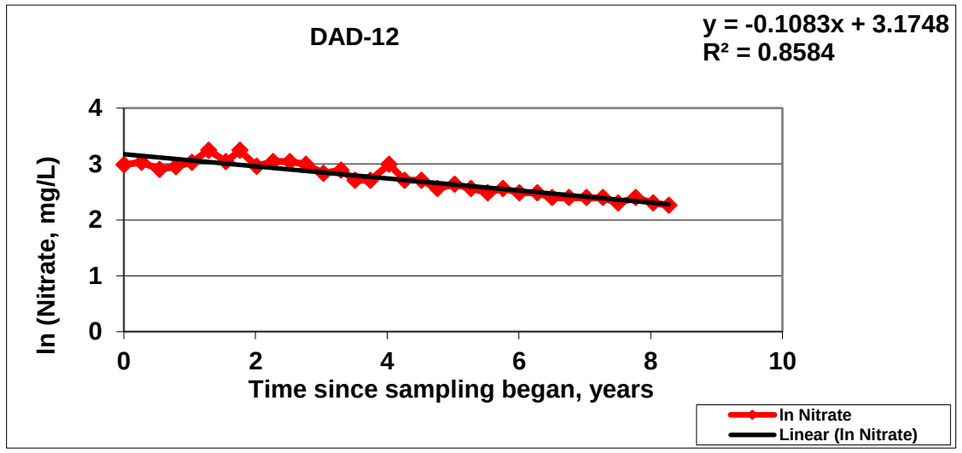
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well DAD-12

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/24/15 years
24-Nov-15		19.8	**19800**	**2.986**	**0.00**
29-Feb-16		20.7	**20700**	**3.030**	**0.27**
8-Jun-16		18.2	**18200**	**2.901**	**0.54**
8-Sep-16		19.2	**19200**	**2.955**	**0.79**
5-Dec-16		20.7	**20700**	**3.030**	**1.03**
8-Mar-17		25.7	**25700**	**3.246**	**1.29**
12-Jun-17		21.0	**21000**	**3.045**	**1.55**
28-Aug-17		25.6	**25600**	**3.243**	**1.76**
29-Nov-17		19.3	**19300**	**2.960**	**2.02**
27-Feb-18		21	**21000**	**3.045**	**2.26**
1-Jun-18		21	**21000**	**3.045**	**2.52**
28-Aug-18		20	**20000**	**2.996**	**2.76**
3-Dec-18		17	**17000**	**2.833**	**3.03**
11-Mar-19		18	**18000**	**2.890**	**3.30**
28-May-19		15	**15000**	**2.708**	**3.51**
20-Aug-19		15	**15000**	**2.708**	**3.74**
3-Dec-19		20	**20000**	**2.996**	**4.03**
26-Feb-20		15	**15000**	**2.708**	**4.26**
29-May-20		15	**15000**	**2.708**	**4.52**
27-Aug-20		13	**13000**	**2.565**	**4.76**
30-Nov-20		14	**14000**	**2.639**	**5.02**
1-Mar-21		13	**13000**	**2.565**	**5.27**
1-Jun-21		12	**12000**	**2.485**	**5.52**
25-Aug-21		13	**13000**	**2.565**	**5.76**
23-Nov-21		12	**12000**	**2.485**	**6.00**
3-Mar-22		12	**12000**	**2.485**	**6.28**
24-May-22		11	**11000**	**2.398**	**6.50**
25-Aug-22		11	**11000**	**2.398**	**6.76**
1-Dec-22		11	**11000**	**2.398**	**7.02**
2-Mar-23		11	**11000**	**2.398**	**7.27**
25-May-23		10	**10000**	**2.303**	**7.50**
30-Aug-23		11	**11000**	**2.398**	**7.77**
5-Dec-23		10	**10000**	**2.303**	**8.04**
1-Mar-24		9.6	**9600**	**2.262**	**8.27**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

DAD-12, Nitrate				
Enter C_{CL}	⇨	**10**		
Enter C_o	⇨	**19.8**		
Enter k_{point}	⇨	**0.1083**		
Time to reach cleanup level			**6.3**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

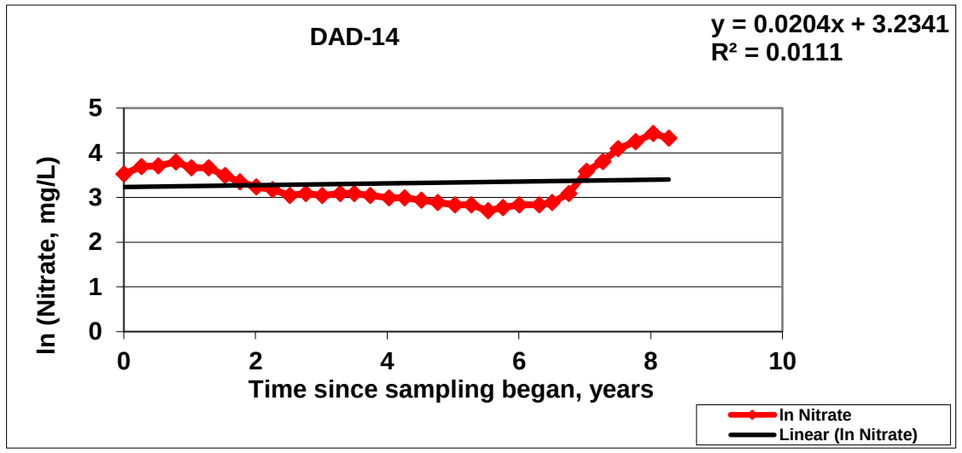
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well DAD-14

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/24/15 years
24-Nov-15		33.9	**33900**	**3.523**	**0.00**
29-Feb-16		40.2	**40200**	**3.694**	**0.27**
2-Jun-16		40.9	**40900**	**3.711**	**0.52**
8-Sep-16		44.5	**44500**	**3.795**	**0.79**
2-Dec-16		39.0	**39000**	**3.664**	**1.02**
8-Mar-17		39.1	**39100**	**3.666**	**1.29**
6-Jun-17		32.7	**32700**	**3.487**	**1.53**
28-Aug-17		28.5	**28500**	**3.350**	**1.76**
27-Nov-17		25.5	**25500**	**3.239**	**2.01**
26-Feb-18		24	**24000**	**3.178**	**2.26**
31-May-18		21	**21000**	**3.045**	**2.52**
29-Aug-18		22	**22000**	**3.091**	**2.76**
28-Nov-18		21	**21000**	**3.045**	**3.01**
8-Mar-19		22	**22000**	**3.091**	**3.29**
24-May-19		22	**22000**	**3.091**	**3.50**
20-Aug-19		21	**21000**	**3.045**	**3.74**
3-Dec-19		20	**20000**	**2.996**	**4.03**
26-Feb-20		20	**20000**	**2.996**	**4.26**
29-May-20		19	**19000**	**2.944**	**4.52**
28-Aug-20		18	**18000**	**2.890**	**4.76**
1-Dec-20		17	**17000**	**2.833**	**5.02**
2-Mar-21		17	**17000**	**2.833**	**5.27**
3-Jun-21		15	**15000**	**2.708**	**5.53**
26-Aug-21		16	**16000**	**2.773**	**5.76**
23-Nov-21		17	**17000**	**2.833**	**6.00**
15-Mar-22		17	**17000**	**2.833**	**6.31**
24-May-22		18	**18000**	**2.890**	**6.50**
26-Aug-22		22	**22000**	**3.091**	**6.76**
2-Dec-22		36	**36000**	**3.584**	**7.03**
2-Mar-23		45	**45000**	**3.807**	**7.27**
26-May-23		60	**60000**	**4.094**	**7.51**
31-Aug-23		70	**70000**	**4.248**	**7.77**
5-Dec-23		84	**84000**	**4.431**	**8.04**
1-Mar-24		76	**76000**	**4.331**	**8.27**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

DAD-14, Nitrate				
Enter C_{CL}	⇨	**10**		
Enter C_o	⇨	**33.9**		
Enter k_{point}	⇨	**0.0204**		
Time to reach cleanup level			**59.8**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

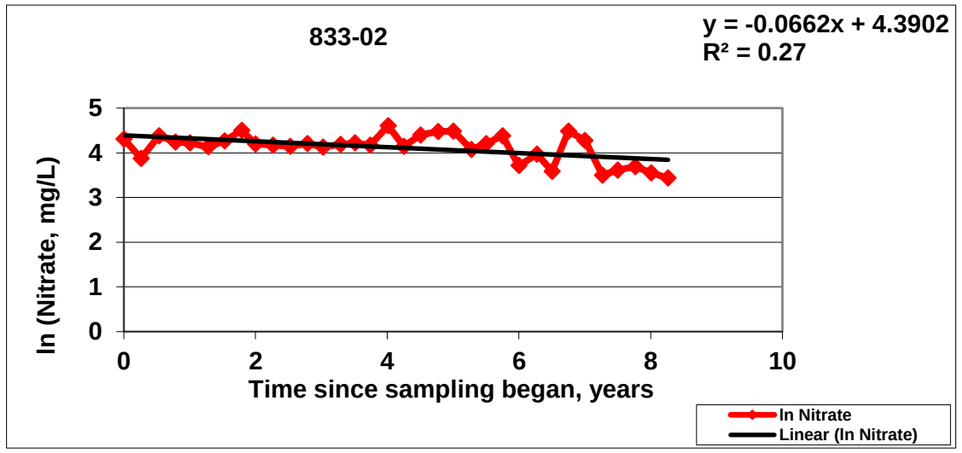
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 833-02

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/18/15 years
18-Nov-15		74.5	**74500**	**4.311**	**0.00**
22-Feb-16		48.0	**48000**	**3.871**	**0.26**
31-May-16		80	**79900**	**4.381**	**0.53**
29-Aug-16		69.5	**69500**	**4.241**	**0.78**
18-Nov-16		68.5	**68500**	**4.227**	**1.00**
28-Feb-17		62.3	**62300**	**4.132**	**1.28**
30-May-17		71.2	**71200**	**4.265**	**1.53**
1-Sep-17		90.2	**90200**	**4.502**	**1.79**
16-Nov-17		66.4	**66400**	**4.196**	**2.00**
21-Feb-18		65	**65000**	**4.174**	**2.26**
29-May-18		63	**63000**	**4.143**	**2.53**
31-Aug-18		67	**67000**	**4.205**	**2.79**
26-Nov-18		62	**62000**	**4.127**	**3.02**
4-Mar-19		66	**66000**	**4.190**	**3.29**
22-May-19		68	**68000**	**4.220**	**3.51**
14-Aug-19		65	**65000**	**4.174**	**3.74**
21-Nov-19		100	**100000**	**4.605**	**4.01**
17-Feb-20		63	**63000**	**4.143**	**4.25**
20-May-20		81	**81000**	**4.394**	**4.51**
24-Aug-20		88	**88000**	**4.477**	**4.77**
18-Nov-20		89	**89000**	**4.489**	**5.01**
24-Feb-21		59	**59000**	**4.078**	**5.27**
18-May-21		67	**67000**	**4.205**	**5.50**
17-Aug-21		80	**80000**	**4.382**	**5.75**
16-Nov-21		41	**41000**	**3.714**	**6.00**
24-Feb-22		53	**53000**	**3.970**	**6.27**
18-May-22		36	**36000**	**3.584**	**6.50**
17-Aug-22		89	**89000**	**4.489**	**6.75**
17-Nov-22		72	**72000**	**4.277**	**7.00**
22-Feb-23		33	**33000**	**3.497**	**7.27**
16-May-23		37	**37000**	**3.611**	**7.50**
22-Aug-23		40	**40000**	**3.689**	**7.76**
20-Nov-23		35	**35000**	**3.555**	**8.01**
20-Feb-24		31	**31000**	**3.434**	**8.26**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

833-02, Nitrate				
Enter C_{CL}	⇨	**10**		
Enter C_o	⇨	**74.5**		
Enter k_{point}	⇨	**0.0662**		
Time to reach cleanup level			**30.3**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

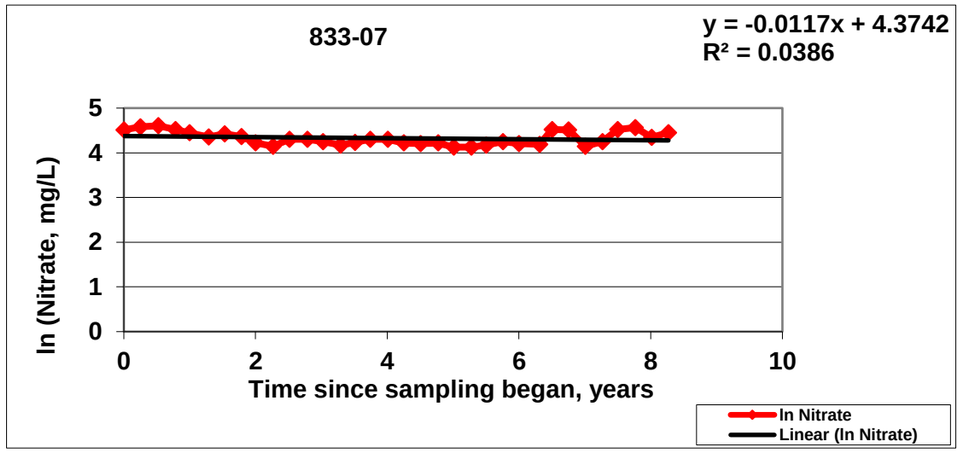
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 833-07

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/18/15 years
18-Nov-15		91.0	**91000**	**4.511**	**0.00**
18-Feb-16		97.4	**97400**	**4.579**	**0.25**
27-May-16		100	**100000**	**4.605**	**0.52**
29-Aug-16		92.2	**92200**	**4.524**	**0.78**
17-Nov-16		85.3	**85300**	**4.446**	**1.00**
1-Mar-17		78.0	**78000**	**4.357**	**1.28**
30-May-17		83.3	**83300**	**4.422**	**1.53**
31-Aug-17		78.7	**78700**	**4.366**	**1.79**
17-Nov-17		68.2	**68200**	**4.222**	**2.00**
22-Feb-18		63	**63000**	**4.143**	**2.27**
24-May-18		74	**74000**	**4.304**	**2.52**
31-Aug-18		74	**74000**	**4.304**	**2.79**
26-Nov-18		70	**70000**	**4.248**	**3.02**
4-Mar-19		65	**65000**	**4.174**	**3.29**
22-May-19		69	**69000**	**4.234**	**3.51**
15-Aug-19		74	**74000**	**4.304**	**3.74**
20-Nov-19		74	**74000**	**4.304**	**4.01**
17-Feb-20		68	**68000**	**4.220**	**4.25**
19-May-20		67	**67000**	**4.205**	**4.50**
25-Aug-20		68	**68000**	**4.220**	**4.77**
19-Nov-20		62	**62000**	**4.127**	**5.01**
24-Feb-21		62	**62000**	**4.127**	**5.27**
18-May-21		65	**65000**	**4.174**	**5.50**
18-Aug-21		70	**70000**	**4.248**	**5.75**
16-Nov-21		67	**67000**	**4.205**	**6.00**
10-Mar-22		66	**66000**	**4.190**	**6.31**
18-May-22		92	**92000**	**4.522**	**6.50**
18-Aug-22		91	**91000**	**4.511**	**6.75**
18-Nov-22		63	**63000**	**4.143**	**7.01**
22-Feb-23		70	**70000**	**4.248**	**7.27**
16-May-23		92	**92000**	**4.522**	**7.50**
23-Aug-23		96	**96000**	**4.564**	**7.77**
21-Nov-23		77	**77000**	**4.344**	**8.01**
22-Feb-24		86	**86000**	**4.454**	**8.27**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

833-07, Nitrate			
Enter C_{CL}	⇨	**10**	
Enter C_o	⇨	**91**	
Enter k_{point}	⇨	**0.0117**	
Time to reach cleanup level		**188.7**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

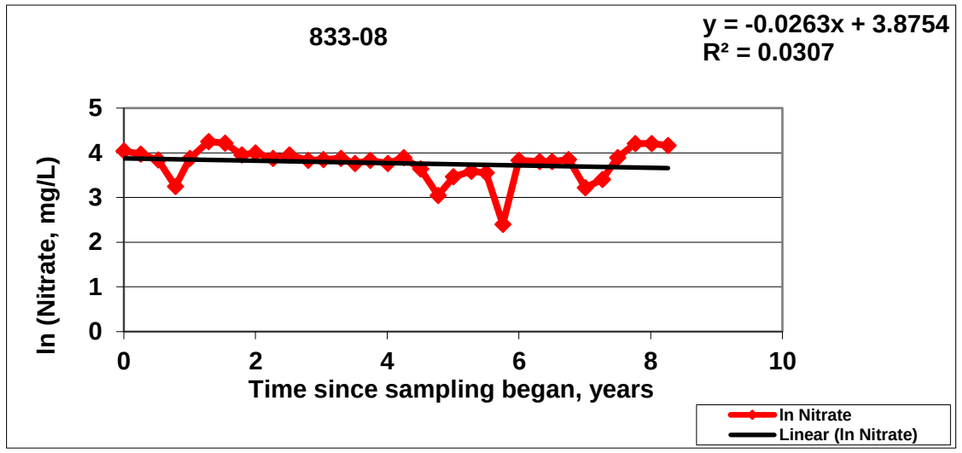
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 833-08

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/18/15 years
18-Nov-15		56.9	**56900**	**4.041**	**0.00**
19-Feb-16		52.9	**52900**	**3.968**	**0.25**
27-May-16		46.5	**46500**	**3.839**	**0.52**
29-Aug-16		25.6	**25600**	**3.243**	**0.78**
18-Nov-16		48.3	**48300**	**3.877**	**1.00**
1-Mar-17		70.3	**70300**	**4.253**	**1.28**
31-May-17		67.6	**67600**	**4.214**	**1.53**
1-Sep-17		52.3	**52300**	**3.957**	**1.79**
17-Nov-17		54.3	**54300**	**3.995**	**2.00**
22-Feb-18		48	**48000**	**3.871**	**2.27**
24-May-18		52	**52000**	**3.951**	**2.52**
4-Sep-18		46	**46000**	**3.829**	**2.80**
27-Nov-18		47	**47000**	**3.850**	**3.03**
5-Mar-19		48	**48000**	**3.871**	**3.30**
23-May-19		43	**43000**	**3.761**	**3.51**
14-Aug-19		46	**46000**	**3.829**	**3.74**
20-Nov-19		43	**43000**	**3.761**	**4.01**
17-Feb-20		49	**49000**	**3.892**	**4.25**
19-May-20		38	**38000**	**3.638**	**4.50**
24-Aug-20		21	**21000**	**3.045**	**4.77**
18-Nov-20		32	**32000**	**3.466**	**5.01**
24-Feb-21		36	**36000**	**3.584**	**5.27**
18-May-21		35	**35000**	**3.555**	**5.50**
18-Aug-21		11	**11000**	**2.398**	**5.75**
16-Nov-21		46	**46000**	**3.829**	**6.00**
10-Mar-22		45	**45000**	**3.807**	**6.31**
18-May-22		45	**45000**	**3.807**	**6.50**
18-Aug-22		47	**47000**	**3.850**	**6.75**
18-Nov-22		25	**25000**	**3.219**	**7.01**
22-Feb-23		30	**30000**	**3.401**	**7.27**
16-May-23		49	**49000**	**3.892**	**7.50**
22-Aug-23		67	**67000**	**4.205**	**7.76**
21-Nov-23		67	**67000**	**4.205**	**8.01**
20-Feb-24		64	**64000**	**4.159**	**8.26**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

833-08, Nitrate			
Enter C_{CL}	⇨	**10**	
Enter C_o	⇨	**56.9**	
Enter k_{point}	⇨	**0.0263**	
Time to reach cleanup level		**66.1**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

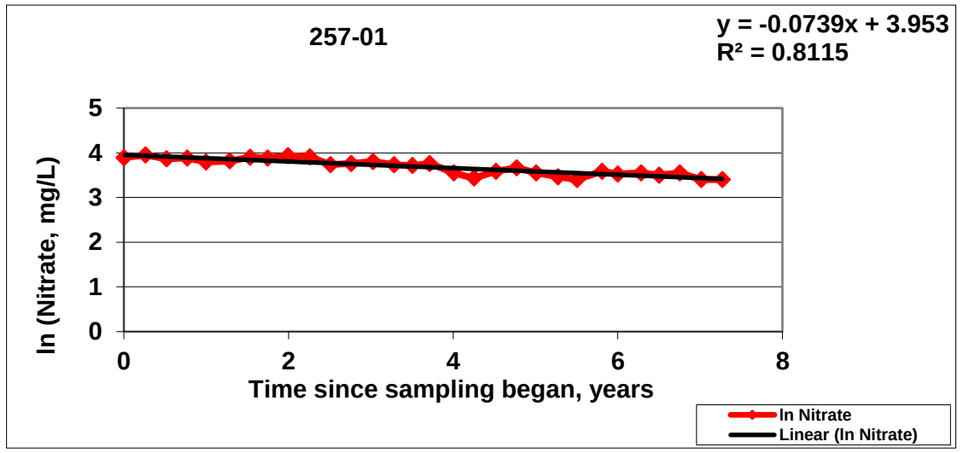
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 257-01

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 11/19/15 years
19-Nov-15		49.1	**49100**	**3.894**	**0.00**
22-Feb-16		51.9	**51900**	**3.949**	**0.26**
26-May-16		47.7	**47700**	**3.865**	**0.52**
25-Aug-16		48.7	**48700**	**3.886**	**0.77**
16-Nov-16		44.4	**44400**	**3.793**	**0.99**
2-Mar-17		45.5	**45500**	**3.818**	**1.28**
31-May-17		49.3	**49300**	**3.898**	**1.53**
18-Aug-17		48.5	**48500**	**3.882**	**1.75**
16-Nov-17		51.1	**51100**	**3.934**	**1.99**
20-Feb-18		50	**50000**	**3.912**	**2.26**
23-May-18		42	**42000**	**3.738**	**2.51**
23-Aug-18		43	**43000**	**3.761**	**2.76**
27-Nov-18		45	**45000**	**3.807**	**3.02**
1-Mar-19		42	**42000**	**3.738**	**3.28**
21-May-19		41	**41000**	**3.714**	**3.50**
6-Aug-19		43	**43000**	**3.761**	**3.72**
21-Nov-19		35	**35000**	**3.555**	**4.01**
18-Feb-20		31	**31000**	**3.434**	**4.25**
26-May-20		36	**36000**	**3.584**	**4.52**
25-Aug-20		39	**39000**	**3.664**	**4.77**
20-Nov-20		35	**35000**	**3.555**	**5.01**
25-Feb-21		32	**32000**	**3.466**	**5.27**
20-May-21		30	**30000**	**3.401**	**5.50**
8-Sep-21		36	**36000**	**3.584**	**5.81**
17-Nov-21		34	**34000**	**3.526**	**6.00**
28-Feb-22		35	**35000**	**3.555**	**6.28**
19-May-22		33	**33000**	**3.497**	**6.50**
19-Aug-22		35	**35000**	**3.555**	**6.75**
22-Nov-22		30	**30000**	**3.401**	**7.01**
24-Feb-23		30	**30000**	**3.401**	**7.27**
17-May-23		31	**31000**	**3.434**	**7.50**
24-Aug-23		34	**34000**	**3.526**	**7.77**
28-Nov-23		32	**32000**	**3.466**	**8.03**
23-Feb-24		33	**33000**	**3.497**	**8.27**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

257-01, Nitrate				
Enter C_{CL}	⇨	**10**		
Enter C_o	⇨	**49.1**		
Enter k_{point}	⇨	**0.0739**		
Time to reach cleanup level			**21.5**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

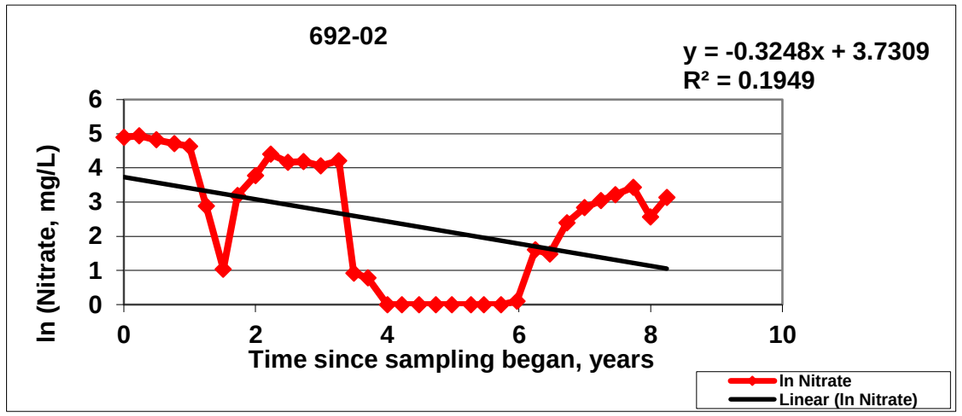
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well 692-02

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 12/2/15 years
2-Dec-15		134	**134000**	**4.898**	**0.00**
24-Feb-16		140	**140000**	**4.942**	**0.23**
31-May-16		124	**124000**	**4.820**	**0.50**
6-Sep-16		111	**111000**	**4.710**	**0.76**
30-Nov-16		103	**103000**	**4.635**	**1.00**
2-Mar-17		17.8	**17800**	**2.879**	**1.25**
5-Jun-17		2.82	**2820**	**1.037**	**1.51**
23-Aug-17		24.4	**24400**	**3.195**	**1.73**
30-Nov-17		43.4	**43400**	**3.770**	**2.00**
23-Feb-18		82	**82000**	**4.407**	**2.23**
30-May-18		64	**64000**	**4.159**	**2.49**
23-Aug-18		66	**66000**	**4.190**	**2.73**
27-Nov-18		58	**58000**	**4.060**	**2.99**
7-Mar-19		67	**67000**	**4.205**	**3.26**
29-May-19		2.5	**2500**	**0.916**	**3.49**
15-Aug-19		2.2	**2200**	**0.788**	**3.70**
2-Dec-19		1	**1000**	**0.000**	**4.00**
19-Feb-20		1	**1000**	**0.000**	**4.22**
26-May-20		1	**1000**	**0.000**	**4.48**
26-Aug-20		1	**1000**	**0.000**	**4.74**
23-Nov-20		1	**1000**	**0.000**	**4.98**
9-Mar-21		1	**1000**	**0.000**	**5.27**
20-May-21		1	**1000**	**0.000**	**5.47**
23-Aug-21		1	**1000**	**0.000**	**5.73**
19-Nov-21		1.1	**1100**	**0.095**	**5.97**
1-Mar-22		5.0	**5000**	**1.609**	**6.25**
20-May-22		4.4	**4400**	**1.482**	**6.47**
22-Aug-22		11	**11000**	**2.398**	**6.73**
28-Nov-22		17	**17000**	**2.833**	**6.99**
27-Feb-23		21	**21000**	**3.045**	**7.24**
18-May-23		25	**25000**	**3.219**	**7.46**
25-Aug-23		31	**31000**	**3.434**	**7.73**
29-Nov-23		13	**13000**	**2.565**	**8.00**
27-Feb-24		23	**23000**	**3.135**	**8.24**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

692-02, Nitrate				
Enter C_{CL}	⇨	**10**		
Enter C_o	⇨	**134**		
Enter k_{point}	⇨	**0.3248**		
Time to reach cleanup level			**8.0**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

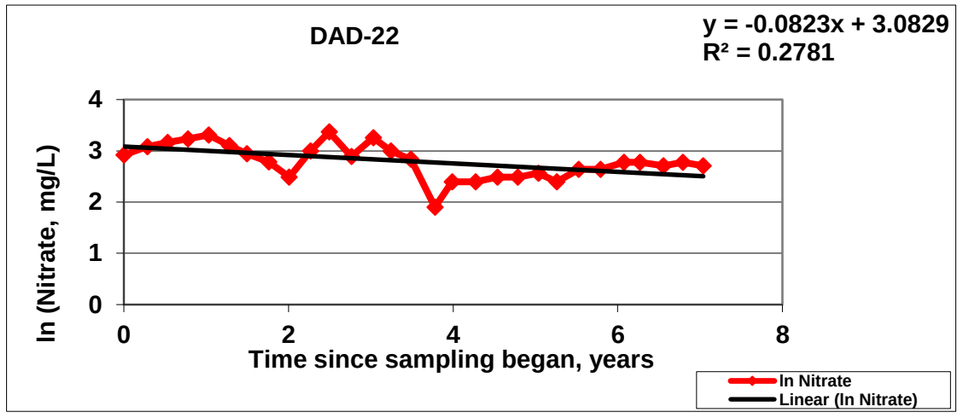
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well DAD-22

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 02/25/16 years
25-Feb-16		18.5	**18500**	**2.918**	**0.00**
8-Jun-16		21.8	**21800**	**3.082**	**0.28**
6-Sep-16		23.6	**23600**	**3.161**	**0.53**
5-Dec-16		25.4	**25400**	**3.235**	**0.78**
7-Mar-17		27.3	**27300**	**3.307**	**1.03**
7-Jun-17		22.2	**22200**	**3.100**	**1.28**
23-Aug-17		19.0	**19000**	**2.944**	**1.49**
28-Nov-17		16.2	**16200**	**2.785**	**1.76**
27-Feb-18		12	**12000**	**2.485**	**2.01**
1-Jun-18		20	**20000**	**2.996**	**2.27**
24-Aug-18		29	**29000**	**3.367**	**2.50**
30-Nov-18		18	**18000**	**2.890**	**2.76**
7-Mar-19		26	**26000**	**3.258**	**3.03**
24-May-19		20	**20000**	**2.996**	**3.24**
21-Aug-19		17	**17000**	**2.833**	**3.49**
6-Dec-19		6.7	**6700**	**1.902**	**3.78**
19-Feb-20		11	**11000**	**2.398**	**3.99**
3-Jun-20		11	**11000**	**2.398**	**4.27**
8-Sep-20		12	**12000**	**2.485**	**4.54**
7-Dec-20		12	**12000**	**2.485**	**4.79**
8-Mar-21		13	**13000**	**2.565**	**5.04**
28-May-21		11	**11000**	**2.398**	**5.26**
3-Sep-21		14	**14000**	**2.639**	**5.53**
8-Dec-21		14	**14000**	**2.639**	**5.79**
23-Mar-22		16	**16000**	**2.773**	**6.08**
2-Jun-22		16	**16000**	**2.773**	**6.27**
14-Sep-22		15	**15000**	**2.708**	**6.56**
9-Dec-22		16	**16000**	**2.773**	**6.79**
9-Mar-23		15	**15000**	**2.708**	**7.04**
6-Jun-23		15	**15000**	**2.708**	**7.28**
13-Sep-23		14	**14000**	**2.639**	**7.55**
14-Dec-23		15	**15000**	**2.708**	**7.81**
11-Mar-24		16	**16000**	**2.773**	**8.05**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

DAD-22, Nitrate				
Enter C_{CL}	⇨	**10**		
Enter C_o	⇨	**18.5**		
Enter k_{point}	⇨	**0.0823**		
Time to reach cleanup level			**7.5**	**years**

First-Order Decay Rate Calculation
for Monitored Natural Attenuation

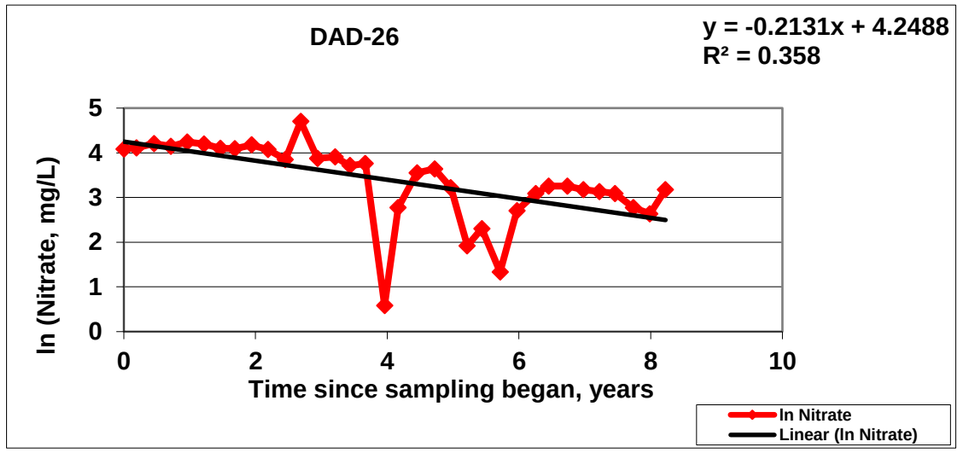
Facility Name: Dona Ana Dairies

Facility Location and Address: Dona Ana County, New Mexico

Well DAD-26

Location of well (source area, down-gradient, perimeter or cross-gradient, in ROI of cleanup system, other):

Sampling Date	Depth to Ground Water	Nitrate mg/L	Nitrate ug/L	ln Nitrate mg/L	Elapsed time since 12/22/15 years
22-Dec-15		59.6	**59600**	**4.088**	**0.00**
1-Mar-16		61.1	**61100**	**4.113**	**0.19**
6-Jun-16		67.0	**67000**	**4.205**	**0.46**
8-Sep-16		63.2	**63200**	**4.146**	**0.72**
6-Dec-16		69.6	**69600**	**4.243**	**0.96**
10-Mar-17		66.3	**66300**	**4.194**	**1.22**
9-Jun-17		60.5	**60500**	**4.103**	**1.47**
28-Aug-17		59.8	**59800**	**4.091**	**1.68**
28-Nov-17		65.1	**65100**	**4.176**	**1.94**
28-Feb-18		59	**59000**	**4.078**	**2.19**
4-Jun-18		47	**47000**	**3.850**	**2.45**
28-Aug-18		110	**110000**	**4.700**	**2.68**
30-Nov-18		48	**48000**	**3.871**	**2.94**
7-Mar-19		50	**50000**	**3.912**	**3.21**
28-May-19		41	**41000**	**3.714**	**3.43**
21-Aug-19		43	**43000**	**3.761**	**3.67**
6-Dec-19		1.8	**1800**	**0.588**	**3.96**
19-Feb-20		16	**16000**	**2.773**	**4.16**
3-Jun-20		35	**35000**	**3.555**	**4.45**
8-Sep-20		38	**38000**	**3.638**	**4.72**
7-Dec-20		25	**25000**	**3.219**	**4.96**
8-Mar-21		6.8	**6800**	**1.917**	**5.21**
28-May-21		10	**10000**	**2.303**	**5.44**
7-Sep-21		3.8	**3800**	**1.335**	**5.72**
8-Dec-21		15	**15000**	**2.708**	**5.97**
23-Mar-22		22	**22000**	**3.091**	**6.25**
2-Jun-22		26	**26000**	**3.258**	**6.45**
14-Sep-22		26	**26000**	**3.258**	**6.73**
12-Dec-22		24	**24000**	**3.178**	**6.98**
10-Mar-23		23	**23000**	**3.135**	**7.22**
6-Jun-23		22	**22000**	**3.091**	**7.46**
14-Sep-23		16	**16000**	**2.773**	**7.73**
15-Dec-23		14	**14000**	**2.639**	**7.99**
11-Mar-24		24	**24000**	**3.178**	**8.22**
NMWQCC		***10***	***1000***	***2.303***	



Formula

$t = -[\ln(C_{CL}/C_o)] / k_{point}$

where:

t = Time to achieve cleanup levels, years

C_{CL} = Cleanup level for contaminant of concern, mg/L

C_o = Initial concentration of contaminant of concern, mg/L

k_{point} = First-order decay rate constant at one monitoring point, years^{-1}

= slope of the line, y

Solutions

DAD-26, Nitrate				
Enter C_{CL}	⇨	**10**		
Enter C_o	⇨	**59.6**		
Enter k_{point}	⇨	**0.2131**		
Time to reach cleanup level			**8.4**	**years**