

EXHIBIT "C1"
ARVIN-EDISON WATER STORAGE DISTRICT
WATER SUPPLY WATER QUALITY SUMMARY

	Date	Flow cfs	Import Source	Calcium		Magnesium		Sodium		Bicarbonate		Chloride		Nitrate		TDS	pH	EC umhos/cm	Hardness mg/l	SAR	Gypsum lbs/AF	Boron mg/l	Turbidity NTU	
				mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l									
Intake Canal	10/04/22	50	FKC(100%)	7.0	0.35	0.7	0.05	7.6	0.33	40	0.66	3.7	0.10	0.84	0.01	45	7.57	81.2	20	0.7	1.10	0.037	3.2	
	09/06/22	230	FKC(86%)/KD WELLS(14%)	9.2	0.46	1.1	0.09	8.3	0.36	44	0.72	4.7	0.13	1.40	0.02	53	7.87	101	28	0.7	0.75	0.064	2.3	
	08/11/22	180	FKC(82%)/KD WELLS(18%)	13.0	0.65	1.4	0.11	11.0	0.47	52	0.85	6.7	0.19	3.00	0.05	71	8.12	135	37	0.8	0.46	0.052	1.6	
	07/08/22	82	FKC(61%)/KD WELLS(39%)	23.0	1.15	2.3	0.19	19.0	0.82	90	1.48	12.0	0.34	4.80	0.08	120	8.44	223	67	1.0	0.98	0.096	1.9	
	06/07/22	30	FKC(81%)/KD WELLS & KD CENTRAL(19%)	30.0	1.50	4.5	0.37	26.0	1.12	110	1.80	17.0	0.48	8.70	0.14	170	8.4	313	93	1.2	0.37	0.15	2.1	
	05/09/22	30	KD WELLS & KD CENTRAL(100%)	20.0	1.00	3.5	0.29	24.0	1.03	98	1.61	9.3	0.26	2.50	0.04	130	8.2	254	64	1.3	1.40	0.16	6.4	
	04/07/22	30	KD WELLS & KD CENTRAL(100%)	33.0	1.65	5.3	0.43	25.0	1.08	120	1.97	16.0	0.45	7.70	0.12	180	8.2	320	110	1.0	ND	0.16	3.2	
	03/09/22	0	RESIDUAL FKC(100%)	6.0	0.30	0.8	0.06	5.5	0.24	29	0.48	3.3	0.09	0.34	ND	33	7.7	70	18	0.6	0.50	0.03	4.7	
	02/08/22	150	FKC(100%)	3.9	0.20	0.6	0.05	4.3	0.19	20	0.33	4.1	0.12	0.50	0.01	20	7.6	53	12	0.1	0.00	0.10	2.8	
	01/10/22	60	FKC(100%)	5.2	0.26	0.7	0.06	4.5	0.19	26	0.43	2.8	0.08	0.37	0.01	29	7.5	56	16	0.5	0.45	0.04	4.2	
	12/13/21	0	RESIDUAL FKC(100%)	17.0	0.85	1.0	0.08	25.0	1.08	58	0.95	17.0	0.48	6.60	0.11	120	8.1	221	46	1.6	0.12	0.04	1.7	
	11/09/21	80	FKC(100%)	16.0	0.80	1.2	0.10	21.0	0.91	67	1.10	13.0	0.37	3.50	0.06	100	8.0	197	46	1.3	0.78	0.09	2.6	
	10/07/21	40	CVC(100%)	7.5	0.38	0.7	0.06	8.0	0.34	33	0.54	3.8	0.11	1.10	0.02	43	7.6	79	22	0.8	0.47	0.03	1.8	
	09/09/21	60	CVC(100%)	8.0	0.40	0.7	0.06	7.8	0.34	36	0.59	4.3	0.12	1.10	0.02	45	7.8	90	23	0.7	0.54	0.02	2.3	
	Average			14.2	0.7	1.7	0.1	14.1	0.6	58.8	1.0	8.4	0.2	3.0	0.1	82.8	7.9	156.6	43.0	0.9	0.6	0.1	2.9	
North Canal	10/04/22	70	FKC(25%)/WELLS(75%)	21.0	1.05	3.9	0.32	40.0	1.72	120	1.97	21.0	0.59	7.30	0.12	180	8.1	322	69	2.1	2.60	0.27	2.8	
	09/06/22	120	FKC(66%)/KD WELLS(11%)/WELLS(23%)	26.0	1.30	4.8	0.39	30.0	1.29	99	1.62	18.0	0.51	9.80	0.16	180	8.2	334	84	1.4	ND	0.27	1.9	
	08/11/22	80	FKC(59%)/KD WELLS(13%)/WELLS(28%)	23.0	1.15	3.7	0.30	35.0	1.51	100	1.64	21.0	0.59	10.00	0.16	180	8.4	323	73	1.8	1.30	0.28	2.1	
	07/08/22	80	FKC(25%)/KD WELLS(16%)/WELLS(59%)	27.0	1.35	4.4	0.36	43.0	1.85	120	1.97	23.0	0.65	9.30	0.15	200	8.4	373	87	2.0	1.40	0.29	2.8	
	06/07/22	94	FKC(43%)/KD WELLS & KD CENTRAL(10%)/WELLS(47%)	21.0	1.05	3.7	0.30	55.0	2.37	120	1.97	27.0	0.76	11.00	0.18	220	8.4	380	68	2.9	3.20	0.41	2.8	
	05/09/22	48	KD WELLS & KD CENTRAL(18%)/WELLS(82%)	26.0	1.30	4.9	0.40	55.0	2.37	140	2.30	30.0	0.84	11.00	0.18	240	8.3	450	85	2.6	2.30	0.41	3.2	
	04/07/22	48	KD WELLS & KD CENTRAL(18%)/WELLS(82%)	19.0	0.95	3.8	0.31	27.0	1.16	100	1.64	13.0	0.37	5.80	0.09	130	8.1	241	64	1.5	1.70	0.09	3.6	
	03/09/22	38	WELLS(100%)	16.0	0.80	2.9	0.24	43.0	1.85	95	1.56	20.0	0.56	2.10	ND	160	8.6	322	52	2.6	2.80	0.37	4.4	
	02/08/22	134	FKC(100%)	5.0	0.25	0.6	0.05	4.4	0.19	23	0.37	5.1	0.14	0.50	0.01	22	8.0	59	15	0.1	0.00	0.10	4.7	
	01/10/22	80	FKC(100%)	7.2	0.36	0.8	0.06	4.7	0.20	40	0.66	2.9	0.08	0.36	0.01	39	7.5	69	21	0.5	1.00	0.05	5.1	
	12/13/21	0	RESIDUAL FKC(100%)	31.0	1.55	2.7	0.22	21.0	0.91	130	2.13	9.4	0.26	2.80	0.05	150	7.7	310	88	1.0	1.60	0.07	6.7	
	11/09/21	58	FKC(100%)	17.0	0.85	1.3	0.11	19.0	0.82	71	1.16	12.0	0.34	2.70	0.04	98	8.2	190	47	1.2	0.94	0.10	3.3	
	10/07/21	14	CVC(24%)/WELLS(76%)	20.0	1.00	3.5	0.29	54.0	2.33	130	2.13	23.0	0.65	8.90	0.14	200	8.3	346	63	3.0	3.50	0.40	2.0	
	09/09/21	70	CVC(31%)/WELLS(69%)	18.0	0.90	3.6	0.30	56.0	2.41	120	1.97	26.0	0.73	10.00	0.16	200	8.4	369	60	3.1	4.10	0.41	3.0	
	Average			19.8	1.0	3.2	0.3	34.8	1.5	100.6	1.6	18.0	0.5	6.5	0.1	157.1	8.2	292.0	62.6	1.8	2.0	0.3	3.5	
South Canal	10/04/22	60	FKC(18%)/WELLS(82%)	31.0	1.55	9.3	0.76	42.0	1.81	140	2.30	41.0	1.15	10.00	0.16	230	8.1	433	120	1.7	ND	0.23	1.6	
	09/06/22	70	FKC(60%)/KD WELLS(10%)/WELLS(30%)	31.0	1.55	7.0	0.57	43.0	1.85	130	2.13	37.0	1.04	12.00	0.19	240	8.3	433	110	1.8	ND	0.31	1.6	
	08/11/22	70	FKC(53%)/KD WELLS(11%)/WELLS(36%)	31.0	1.55	6.7	0.55	39.0	1.68	120	1.97	34.0	0.96	13.00	0.21	220	8.3	399	110	1.7	ND	0.22	1.5	
	07/08/22	90	FKC(20%)/KD WELLS(13%)/WELLS(67%)	33.0	1.65	7.8	0.64	41.0	1.77	140	2.30	33.0	0.93	12.00	0.19	230	8.3	422	110	1.7	ND	0.21	2.4	
	06/07/22	150	FKC(34%)/KD WELLS & KD CENTRAL(8%)/WELLS(58%)	29.0	1.45	7.6	0.62	50.0	2.16	140	2.30	41.0	1.15	11.00	0.18	240	8.2	437	100	2.1	1.20	0.27	1.3	
	05/09/22	30	KD WELLS & KD CENTRAL(12%)/WELLS(88%)	23.0	1.15	5.1	0.42	51.0	2.20	120	1.97	29.0	0.81	16.00	0.26	230	8.5	424	79	2.5	2.60	0.40	3.0	
	04/07/22	80	KD WELLS & KD CENTRAL(12%)/WELLS(88%)	33.0	1.65	9.8	0.80	37.0	1.59	140	2.30	37.0	1.04	9.20	0.15	220	8.2	419	120	1.4	ND	0.11	1.2	
	03/09/22	20	WELLS(100%)	16.0	0.80	2.9	0.24	42.0	1.81	110	1.80	19.0	0.53	1.60	ND	160	8.6	311	51	2.6	3.80	0.37	5.0	
	02/08/22	70	FKC(100%)	5.2	0.26	0.6	0.05	4.4	0.19	24	0.40	3.9	0.11	0.50	0.01	26	7.8	60	16	0.1	0.00	0.10	3.6	
	01/10/22	40	FKC(100%)	8.0	0.40	0.8	0.06	4.8	0.21	36	0.59	2.8	0.08	0.35	0.01	37	7.8	73	23	0.5	0.51	0.05	3.8	
	12/13/21	N/A	DOWN FOR WINTER MAINTENANCE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/09/21	160	FKC(100%)	18.0	0.90	1.4	0.11	20.0	0.86	74	1.21	12.0	0.34	2.70	0.04	100	8.1	199	51	1.2	0.86	0.10	3.1	
	10/07/21	120	CVC(17%)/WELLS(83%)	32.0	1.60	8.6	0.70	49.0	2.11	140	2.30	40.0	1.12	11.00	0.18	240	8.1	428	120	2.0	0.05	0.21	2.0	
	09/09/21	110	CVC(23%)/WELLS(77%)	32.0	1.60	9.2	0.75	45.0	1.94	140	2.30	44.0	1.24	10.00	0.16	240	8.3	453	120	1.8	0.06	0.22	1.8	
	Average			24.8	1.2	5.9	0.5	36.0	1.6	111.9	1.8	28.7	0.8	8.4	0.1	185.6	8.2	345.5	86.9	1.6	1.1	0.2	2.5	

EXHIBIT "C1"
ARVIN-EDISON WATER STORAGE DISTRICT
WATER SUPPLY WATER QUALITY SUMMARY

	Date	Flow ¹ cfs	Import Source	Calcium		Magnesium		Sodium		Bicarbonate		Chloride		Nitrate		TDS	pH	EC	Hardness	SAR	Gypsum lbs/AF	Boron mg/l	Turbidity NTU	
				mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l	mg/l	me/l									mg/l
Intertie Pipeline	10/04/22	0	FKC(18%)/WELLS(82%)	31.0	1.55	9.1	0.75	44.0	1.90	130	2.13	41.0	1.15	10.00	0.16	240	8.21	431	120	1.8	ND	0.23	3.2	
	09/06/22	0	FKC(60%)/KD WELLS(10%)/WELLS(30%)	23.0	1.15	6.0	0.49	37.0	1.59	97	1.59	30.0	0.84	7.90	0.13	190	8.51	355	81	1.8	0.35	0.25	3.9	
	08/11/22	0	FKC(53%)/KD WELLS(11%)/WELLS(36%)	27.0	1.35	6.6	0.54	42.0	1.81	110	1.80	34.0	0.96	11.00	0.18	220	8.38	396	94	1.9	0.19	0.26	3.4	
	07/08/22	0	FKC(20%)/KD WELLS(13%)/WELLS(67%)	34.0	1.70	8.5	0.70	43.0	1.85	140	2.30	36.0	1.01	12.00	0.19	240	8.23	442	120	1.7	ND	0.24	2.3	
	06/07/22	0	FKC(34%)/KD WELLS & KD CENTRAL(8%)/WELLS(58%)	29.0	1.45	8.1	0.66	45.0	1.94	130	2.13	38.0	1.07	11.00	0.18	230	8.4	426	110	1.9	0.73	0.24	4.3	
	05/09/22	0	KD WELLS & KD CENTRAL(12%)/WELLS(88%)	30.0	1.50	8.7	0.71	42.0	1.81	130	2.13	37.0	1.04	10.00	0.16	230	8.5	440	110	1.8	0.75	0.19	5.4	
	04/07/22	0	KD WELLS & KD CENTRAL(12%)/WELLS(88%)	33.0	1.65	9.5	0.78	36.0	1.55	140	2.30	35.0	0.98	9.50	0.15	220	8.2	402	120	1.4	ND	0.12	2.7	
	03/09/22	0	WELLS(100%)	15.0	0.75	3.0	0.25	15.0	0.65	65	1.07	10.0	0.28	4.10	0.07	90	8.2	187	51	0.9	0.24	0.07	4.4	
	02/08/22	-40	FKC(100%)	6.7	0.34	0.8	0.06	4.5	0.19	26	0.43	4.4	0.12	0.50	0.01	29	8.1	76	20	0.0	0.00	0.10	7.0	
	01/10/22	-40	FKC(100%)	9.8	0.49	0.9	0.08	5.7	0.25	41	0.67	3.5	0.10	0.54	0.01	44	7.9	87	28	0.5	0.45	0.05	4.5	
	12/13/21	N/A	DOWN FOR WINTER MAINTENANCE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/09/21	0	FKC(100%)	22.0	1.10	4.6	0.38	31.0	1.34	93	1.52	18.0	0.51	4.90	0.08	150	8.4	299	73	1.6	0.72	0.20	4.0	
	10/07/21	0	CVC(17%)/WELLS(83%)	38.0	1.90	12.0	0.98	48.0	2.07	150	2.46	49.0	1.38	12.00	0.19	270	8.3	477	140	1.7	ND	0.17	4.5	
	09/09/21	0	CVC(23%)/WELLS(77%)	37.0	1.85	12.0	0.98	44.0	1.90	160	2.62	49.0	1.38	13.00	0.21	260	8.2	496	140	1.6	ND	0.14	5.3	
		Average			25.8	1.3	6.9	0.6	33.6	1.4	108.6	1.8	29.6	0.8	8.2	0.1	185.6	8.3	347.2	92.8	1.4	0.4	0.2	4.2

Water Supply Water Quality Note: ¹ Positive flow rate is reverse flow into the District. Where the reported value is ND, the method detection limit is entered.

Water Supply Water Quality Note: ² Reverse flow into the District South Canal (Sycamore check gate was closed).

Water Supply Water Quality Note: ³ Constituent ran past sample hold time.

ND: NONE DETECTED.

NA: NOT AVAILABLE OR NOT TESTED.

mg/l: MILLIGRAMS PER LITER; SAME AS PARTS PER MILLION (ppm).

me/l: MILLEQUIVALENTS PER LITER; SAME AS EQUIVALENTS PER MILLION (epm).

INTAKE: SAMPLE TAKEN AT COTTONWOOD RD. SOUTH OF PANAMA LANE.

NORTH: SAMPLE TAKEN DOWNSTREAM OF SYCAMORE CHECK GATE.

SOUTH: SAMPLE TAKEN DOWNSTREAM OF TEJON CHECK GATE.

INTERTIE: TERMINUS OF SOUTH CANAL (S93 FOREBAY).

SODIUM: FOR SURFACE IRRIGATION: SAR < 3 IS GOOD. FOR SPRINKLER IRRIGATION: SODIUM < 3 me/l IS GOOD.

NITRATE: NITRATE IN WATER SLIGHTLY REDUCES FERTILIZER REQUIREMENT.

BICARBONATE: BICARBONATE < 1.5 me/l IS SATISFACTORY FOR OVERHEAD SPRINKLERS.

CHLORIDE: FOR SURFACE IRRIGATION CHLORIDE < 4 me/l IS GOOD.

TDS: TDS < 450 IS ACCEPTABLE FOR UNRESTRICTED USE.

GYPSUM: AMOUNT OF CALCIUM SULFATE IN POUNDS PER ACRE-FOOT OF WATER APPLIED. INCREASES WATER PERMEABILITY AND HELPS CORRECT EXCESS SODIUM. INCREASES CLAY FLOCCULATION FOR INCREASING PERMEABILITY.

pH: A MEASURE OF ACIDITY. A pH < 7 IS ACIDIC, pH = 7 IS NEUTRAL, pH > 7 IS BASIC. NORMAL RANGE IS 6.5 - 8.4. A pH > 8 MAY NEED TO BE BUFFERED FOR PESTICIDE APPLICATION. AFFECTS NUTRIENT AVAILABILITY.

EC: ELECTRICAL CONDUCTIVITY. A MEASURE OF WATER SALINITY; SOIL - IN MILLIMHOS PER CENTIMETER (mmho/cm); WATER - MORE OFTEN, IN MICROMHOS PER CENTIMETER (umhos/cm). EC < 700 (umhos/cm) HAS NO RESTRICTIONS FOR AGRICULTURAL USE. EC < 200 (umhos/cm) CAN REDUCE INFILTRATION RATE.

HARDNESS: HARD WATER, INDICATING CALCIUM AND MAGNESIUM, IS BENEFICIAL FOR AGRICULTURE.

SAR: SODIUM ADSORPTION RATIO. A RATIO OF SODIUM TO CALCIUM AND MAGNESIUM. EVALUATE WITH EC. SAR = 0 - 3 AND EC > 400 ACCEPTABLE SAR = 3 - 6 AND EC > 900 ACCEPTABLE

BORON: BORON < 0.50 mg/l IS SATISFACTORY FOR ALL CROPS. EXCESSIVE BORON IS PHYTOTOXIC (BURNS) TO PLANTS.