Davis California

WELL 30: HISTORICAL TITLE 22 RESULTS

General Mineral, Physical, and Inorganic Analyses

Constituent	Common Name	Units	MCL	PHG or (MCLG)	Aug-01	Mar-02	Jul-03	Nov-04	Mar-06	Jul-07	Nov-08	Aug-10	Aug-11	Aug-12	Aug-13	Apr-18
					30	30	30	30	30	30	30	30	30	30	30	30
Hardness	$CaCO_3$	mg/L			130	120	110	100	93	100	100	110	110	110	130	83
Calcium	Ca	mg/L			20	19	19	17	16	17	17	18	18	17	19	16
Magnesium	Mg	mg/L			20	17	16	15	13	14	14	16	16	15	20	11
Sodium	Na	mg/L			100	97	85	95	100	90	88	88	90	84	88	100
Potassium	K	mg/L			<2.0	<2.0	2	3	2.9	2.7	2.7	2.6	2.7	2.6	2.5	2.9
Alkalinity	$CaCO_3$	mg/L			220	210	230	250	200	240	230	240	220	230	240	210
Hydroxide	OH	mg/L			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<3.0	<3.0	<3.0
Carbonate	CO_3	mg/L			<1.0	<1.0	7.5	<1.0	7.4	2.4	8.5	6.8	12	11	12	<3.0
Bicarbonate	HCO_3	mg/L			210	210	230	250	200	240	220	280	200	210	220	210
Sulfate	SO_4	mg/L	*500*		38	38	38	42	43	36	37	39	36	40	51	45
Ortho-Phosphate	O-P	mg/L			<0.2	<0.2	<0.2									
Chloride	Cl	mg/L	*500*		34	26	26	26	24	22	23	23	21	24	30	28
Nitrate	NO_3	mg/L	45	45	2	1	<1.0	<1.0	<1	<1	1	4.5	<2.0	<2.0	<2.0	<2.0
Fluoride	F	mg/L	2	1	<.1	<.1	0.1	0.1	0.1	0.2	0.1	0.13	0.25	0.17	0.15	0.13
pH			*6.5-8.5*		7.9	8.1	8.4	8.3	8.4	8.3	8.4	8.4	8.2	8.4	8.4	8
Specific Conductance	E.C.	µmhos/cm	*1600*		620	570	570	570	580	570	570	580	1000	580	610	610
Total Filterable Residue	TDS	mg/L	*1000*		370	350	360	350	360	350	340	340	570	340	370	340
Color		units	*15*		0	0	0	0	0	0	5	5	<1.0	<1.0	<1.0	<1.0
Odor		TON	*3*		1	1	1.0	1.0	1.0	1.0	1.0	1	<1.0	<1.0	<1.0	7.1
Turbidity		NTU	5		<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	1.4	<0.1	<0.1	<0.1	<0.1	0.38
MBAS (foaming agents)		mg/L	*0.5*		<0.5	<0.5	<0.5	<0.5	<.05	0	<.05	<.05	<0.05	<0.05	<0.05	<0.05
Radioactivity: Gross Alpha [1]		pCi/L	15		0.59	0.59	0.59	0.59	0.6	0.6	1.4	1.38	1.38	1.38	1.38	4.18
Gross Beta [1]		pCi/L	50		1.2	1.2	1.2	1.2	1.2	1.2	0.229	0.229	0.229	0.229	0.229	2.24
Radon [2]		pCi/L					368	368	368	368	368	368	366	366	366	366
Radium - combined 226 and 228		pCi/L														1.82
Aluminum	Al	µg/L	1000	600	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Arsenic	As	µg/L	50		4.0	6.0	5.0	6.0	7.3	5.9	5.7	5.9	2.8	4.8	2.2	5.1
Antimony	Sb	µg/L	6	20	<6.0	<6.0	<6.0	<6.0	<2.0	<2.0	3.4	<2.0	<2.0	<2.0	<2.0	<2.0
Barium	Ba	µg/L	1000	(2000)	60	<100	<100	<100	<50	<50	<50	<50	<50	<50	59	<50
Beryllium	Be	µg/L	4	(4)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	Cd	µg/L	5	0.07	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Chromium	Cr	µg/L	50		12	16	9	5	<1	6	6	<10	10	<10	<10	<10
Hexavalent Chromium	Cr V1	µg/L		0.1	8	8	5	5	6.0	6.0	6.0	6	6	6	6.2	<0.05
Copper	Cu	µg/L	1000	170~	<50	<50	<50	<50	<50	<50	<50	<50	<5.0	<5.0	6.9	<5
Cyanide	Cn	µg/L	200	150	<10	<10										
Dissolved Iron	Fe	µg/L	*300*		<100	<100										
Total Iron	Fe	µg/L	*300*		<100	<100	<100	<100	<50	<50	<50	<50	<50	<30	<30	<30
Lead	Pb	µg/L	15	2~	<5.0	8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Manganese	Mn	µg/L	*50*		20	40	30	30	98	28	68	26	10	31	<10	<10
Mercury	Hg	µg/L	2	1.2	<1.0	<1.0	<1.0	<1.0	<.4	<.4	<.4	<.4	<0.4	<0.4	<0.4	<0.4
Nickel	Ni	µg/L	100	12	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Selenium	Se	µg/L	50	(50)	<1.0	<1.0	<2.0	<2.0	<2	<2	<2	<2	<2	<2.0	<2.0	<2.0
Silver	Ag	µg/L	*100*		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Thallium	Tl	µg/L	2	0.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	Zn	µg/L	*5000*		<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Boron	B	µg/L	1000		800	900	800	900	1000	870	910	840	930	850	760	970
Nitrite	NO_2	µg/L	1000 (as N)		<400	<400	<400	<400	<.05	<.05	<.05	<.05	<0.1	<0.1	<0.1	<0.1
	Sample Dates:		Routine:	Title 22	Aug 01	Mar-02	Jul-03	Nov-04	Mar-06	Jul-07	Nov-08	Aug-10	Aug-11	Aug-12	Aug-13	

WELL 31 : HISTORICAL TITLE 22 RESULTS

General Mineral, Physical, and Inorganic Analyses

Constituent	Common Name	Units	MCL	PHG or (MCLG) or *Action Level*	Jul-04	Jul-05	.Nov-06	Mar-08	Aug-09	Aug-10	Aug-11	Aug-12	Aug-13	Aug-14	Jul-15	Aug-16	Jul-17
					31	31	31	31	31	31	31	31	31	31	31	31	31
Hardness	$CaCO_3$	mg/L			98	110	120	120	120	120	130	120	130	130	130	130	140
Calcium	Ca	mg/L			16	16	17	17	17	17	18	17	18	19	18	18	19
Magnesium	Mg	mg/L			14	17	18	19	18	19	21	19	20	21	20	20	22
Sodium	Na	mg/L			110	96	82	84	76	90	85	82	81	87	82	85	86
Potassium	K	mg/L			3	2	2.3	2.3	2.4	2.5	2.5	2.4	2.4	2.6	2.5	2.9	2.6
Alkalinity	$CaCO_3$	mg/L			240	240	210	220	230	240	210	220	230	220	210	220	220
Hydroxide	OH	mg/L			<1.0	<1.0	<1.0	<1.0	<5.0	<3.0	<3.0	<3.0	<3.0		<3.0	<3.0	<3.0
Carbonate	CO_3	mg/L			4.0	<1.0	8.8	7.3	<5.0	7	11	13	14	4.8	<3.0	<3.0	<3.0
Bicarbonate	HCO_3	mg/L			240	240	200	210	230	270	200	210	220	220	210	220	220
Sulfate	SO_4	mg/L	*500*		62	43	44	43	50	49	41	46	46	50	45	45	46
Chloride	Cl	mg/L	*500*		31	26	26	27	32	30	24	28	29	34	29	31	29
Nitrate	NO_3	mg/L	45	45	<1.0	<1.0	1	1	1	<1.0	<2.0	1.2	1.1	2	<2.0	<1.0	0.22
Fluoride	F	mg/L	2	1	0.2	0.4	0.1	0.1	0.1	0.16	0.21	0.17	0.13	0.13	0.12	0.15	0.16
pH			*6.5-8.5*		8.3	8.3	8.4	8.4	8.1	8.4	8.2	8.4	8.4	8.3	8.2	8.3	8.2
Specific Conductance	E.C.	µmhos/cm	*1600*		650	560	530	550	600	620	590	580	590	610	580	600	610
Total Filterable Residue	TDS	mg/L	*1000*		400	340	350	330	340	360	330	320	350	330	360	350	330
Color		units	*15*		0	0	0	0	0	5	<1.0	<1.0	<1.0	<1.0	<1.0	<5	<5.0
Odor		TON	*3*		1.0	1	1.0	1.0	1.0	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Turbidity		NTU	5		2	<0.5	<0.1	0	0	0.11	<0.1	<0.1	0.17	0.17	<0.1	<0.10	0.12
MBAS (foaming agents)		mg/L	*0.5*		<0.5	<0.5	<.05	<.05	<.1	<.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Radioactivity: Gross Alpha		pCi/L	15				0.94	0.66	0.66	0.66	0.66	0.66	0.66	0.66	<2.84	0.156	0.2
Gross Beta		pCi/L	50				1.01	0.515	0.515	0.515	0.515	0.515	0.515	0.515	0.515	1.97	
Radon		pCi/L				366	366	366	366	366	368	368	368	368	368		
Radium 226 & 228		pCi/L													1.204		1.97
Uranium (Radiological)		pCi/L													<1.0		<1.0
Aluminum	Al	µg/L	1000	600	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Arsenic	As	µg/L	50	0.004	4.0	4.0	4.0	4.5	4.1	4.4	<2.0	<2.0	3.4	2.2	2.3	3.4	1.8
Antimony	Sb	µg/L	6	20	<6.0	<6.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Barium	Ba	µg/L	1000	2000	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	46	62
Beryllium	Be	µg/L	4	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	Cd	µg/L	5	0.07	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Chromium	Cr	µg/L	50		5	5	9	7	<10	<10	<10	<10	<10	<10	11	<10	9.3
Hexavalent Chromium	Cr V1	µg/L				5.4	5.4	5.4	5.4	5.4	8.2	8.2	6.9		7.3	8.1 3	8.8
Copper	Cu	µg/L	1000	170~	<50	<50	<50	<50	<50	<50	24	<5.0	10	68	2.7	<50	<5.0
Total Iron	Fe	µg/L	*300*		90	90	<50	<50	<100	<100	<50	<30	<30	<30	<30	<30	<30
Lead	Pb	µg/L	15	2~	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6.1	<5.0	<5	<5.0
Manganese	Mn	µg/L	*50*		20	20	21	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Mercury	Hg	µg/L	2	1.2	<1.0	<1.0	<.4	<.4	<1	<1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.20	<0.20
Nickel	Ni	µg/L	100	12	<10	<10	<10	<10	<10	<10	<10	<10	<10	21	<10	<10	<10
Selenium	Se	µg/L	50		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Silver	Ag	µg/L	*100*		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Thallium	Tl	µg/L	2	0.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	Zn	µg/L	*5000*		<50	<50	<50	<50	<50	<50	<50	<50	<50	150	<50	<50	50
Uranium	U	µg/L	*5000*												<1.0	<1	<1.0
Boron	B	µg/L	1000		800	700	780	770	700	740	780	740	720	760	690	690	780
Nitrite	NO_2	µg/L	1000 (as N)		<400	<400	<.05	<.05	<.05	<.05	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<1.0
		Sample Dates:	Routine:	Title 22	Jul-04	Jul-05	Nov-06	Mar-08	Aug-09	Aug-10	Aug-11	Aug-12	Aug-12	Aug-14	Jul-15		