

**CIMARRON DISTRIBUTION COEFFICIENT EVALUATION
2002 SOIL AND GROUNDWATER DATA - ALLUVIAL WELLS**

Well ID	2015 DTW (feet)	2002 Soil Data				2002 Groundwater Uranium Data (pCi/L)	Distribution Coefficient (mg/mL)
		Depth (feet)	Sample Length (feet)	Soil Type in Saturated Zone	Total U (pCi/g)		
02W03	8.62	8	5	Sand w/ Some Clay	9.1	368	15.9
		15	3		2.6		
02W04	8.68	9	1	Clean Sand	3.4	3,450	0.9
		10	5		4.1		
		15	1		1.6		
02W05	8.07	5	5	Sand w/ Some Clay	3.0	1,340	1.9
		10	5		2.1		
02W06	8.13	5	5	Clean Sand	2.5	739	2.5
		20	1.5		1.2		
02W07	8.6	5	5	Clean Sand	2.9	162	12.3
		10	5		2.0		
		15	5		2.3		
		20	2		0.8		
02W08	8.92	10	1	Clean Sand	3.6	9.95	255.9
		11	1		3.1		
		12	1		2.5		
		13	1		2.2		
		14	1		2.7		
		15	1		1.4		
		16	1		2.7		
		17	1		1.9		
		18	1		1.5		
		20	1		3.1		
21	1	3.7					
22	1	2.1					
02W11	9.56	20	1	Clean Sand	1.6	12.60	124.6
02W12	9.72	8	5	Sand w/ Clay Lens	2.3	30.50	62.0
		20	5		1.5		
02W13	8.85	7	5	Sand and Clay	2.4	63.70	31.4
		19	5		1.6		
02W14	13.51	21	5	Clean Sand	1.7	45.90	36.4
02W15	7.93	9.5	2.5	Clean Sand	1.8	9.23	196.1
02W16	7.29	8	2	Clean Sand	1.9	218	9.2
		15	2		2.1		
02W17	8.54	8	5	Clean Sand	2.2	459	3.0
		15	7.5		1.3		
		22.5	0.5		0.6		

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		Depth (feet)	Sample Length (feet)	Soil Type in Saturated Zone	Total U (pCi/g)		
02W18	8.83	10	5	Clean Sand	3.0	120	11.7
		15	5		1.5		
		25	0.5		0.8		
		25.5	0.5		0.3		
02W19	8.94	7.5	7.5	Sand w/ Clay Lens	2.1	163	13.8
		15	5	2.4			
02W21	8.7	11	1.5	Clean Sand	1.3	6.87	232.9
		20	5		1.9		
02W22	7.2	8	5	Clean Sand	2.0	6.62	302.1
02W23	7.35	9.5	5.5	Clean Sand	1.0	7.85	184.7
		20	2.5		1.9		
02W24	8.76	9	7	Clean Sand	1.8	646	2.8
		23	1		1.8		
		24	1		2.2		
		25	0.5		1.4		
02W32	9.11	9.5	5	Clean Sand	2.7	263	7.6
		14.5	5.5		1.3		
02W33	7.3	6	5	Clean Sand	1.7	3.80	447.4
02W34	8.11	9	5	Clean Sand	1.6	5.81	275.4
02W35	8.05	9	5	Clean Sand	1.1	18.90	58.2
02W36	8.25	20	5	Clean Sand	1.4	464	3.0
02W37	8.5	20	5	Clean Sand	1.8	91.40	19.7
02W38	9.66	21	5	Clean Sand	1.4	25.40	55.1
02W43	8.7	20	7.5	Clean Sand	1.7	191	8.9
02W44	8.65	10	5	Clean Sand	1.2	43.30	32.3
		22	4.5		1.6		
02W45	8.82	10	5	Clean Sand	2.0	69.60	41.7
		23	5		3.8		

Average K_d for Alluvium when uranium concentration is < 30 pCi/L.	213.2
Average K_d for Alluvium for all uranium concentrations.	84.5
Average K_d for Alluvium when uranium concentration is > 30 pCi/L.	16.7
Average K_d for Alluvium when uranium concentration is > 300 pCi/L.	4.5
Average K_d for Alluvium when uranium concentration is > 1,000 pCi/L.	1.4