

**CIMARRON DISTRIBUTION COEFFICIENT EVALUATION  
2002 SOIL AND GROUNDWATER DATA - SANDSTONE B 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)		
02W25	8.76	9	1	Siltstone and Mudstone	4.7	9.49	335.4
		10	1		6.3		
		11	1		16.4		
		12	1		3.7		
		13	1		2.5		
		14	1		3.1		
		15	1		2.0		
		16	1		2.8		
		17	1		2.4		
		18	1		0.8		
		22	1		1.8		
		23	1		1.3		
		24	1		1.5		
		25	1		0.9		
		26	1		1.5		
02W27	9.9	13	3	Sandstone	1.8	132	13.6
02W30	8.75	17.5	5	Sandstone	2.1	382	5.5
02W40	12.43	17	5	Sandstone and Siltstone	2.2	1,330	1.5
		25	5		1.8		
02W41	12.61	23	5	Sandstone and Siltstone	0.6	964	0.6
02W42	10.1	23	5	Sandstone and Siltstone	2.5	11.40	219.3
02W47	14.14	25	5	Sandstone and Siltstone	1.2	266	4.5
02W50	17.64	17	3	Sandstone and Siltstone	1.2	5.02	288.8
		20	5		1.4		
		25	3		1.2		
		28	5		2		
02W51	8.57	30	4	Sandstone and Siltstone	1.3	6.09	213.5
02W52	18.04	28	5.5	Sandstone and Siltstone	2.4	4.09	586.8
02W53	8.43	10	5	Sandstone and Siltstone	1.0	152	8.0
		15	5		1.5		

Average  $K_d$  for Sandstone B when uranium concentration is < 30 pCi/L. 328.8  
Average  $K_d$  for Sandstone B for all uranium concentrations. 152.5  
Average  $K_d$  for Sandstone B when uranium concentration is > 30 pCi/L. 5.6  
Average  $K_d$  for Sandstone B when uranium concentration is > 300 pCi/L. 2.5  
Average  $K_d$  for Sandstone B when uranium concentration is > 1,000 pCi/L. 1.5