

## **ATTACHMENT 6**

Utah Division of Radiation Control

Summary of  
4/11/96 DWQ  
Colorado River  
Up and Downstream Results:  
Inorganics, Nutrients, and Heavy Metals.

DRC Spreadsheet  
CR4-96.XLS - 4-11io

DWQ Colorado River: Samples Collected 4/11/96 - Inorganic/Organics																
Sample Point No.		1	2	3	4	5										
Sample Location:		R @ Bridge	R @ Seep	R .25 mi BL Seep	R .5 mi BL Seep	R -1 mi BL Seep										
Approx. Dstream Rbank Dist. (ft)		0	3900	5400	7700	9600										
Samples from	Sample Date:	4/11/96	4/11/96	4/11/96	4/11/96	4/11/96	Sample Results > WQNC?					Downstream > R @ Bridge?				
North Riverbank	Lab No.:	9602314	9602316	9602317	9602318	9602319	R @	R @	R .25	R .5	R -1	R @	R .25	R .5	R -1	
Parameter	Units	WQNC	< Conc.	< Conc.	< Conc.	< Conc.	Bridge	Seep	mi BL	mi BL	mi BL	Seep	mi BL	mi BL	mi BL	
Ammonia N	mg/l	0.44	0.132	3.57	< 0.05	0.14	0.127	no	YES	no	no	no	YES	no	YES	no
B.O.D. 5	mg/l	5	n/a	n/a	n/a	n/a	n/a									
Bicarbonate	mg/l	n/a	134	137	135	134	134	no	no	no	no	no	YES	YES	no	no
C.O.D. *	mg/l	?	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
Carbon Dioxide	mg/l	n/a	2	2	2	2	2	no	no	no	no	no	no	no	no	no
Carbonate	mg/l	n/a	0	0	0	0	0	no	no	no	no	no	no	no	no	no
Chloride	mg/l	n/a	49.5	50	48	48.5	47	no	no	no	no	no	YES	no	no	no
CO3 Solids	mg/l	n/a	66	67	67	66	66	no	no	n/a	no	n/a	YES	YES	no	YES
D-Aluminum	ug/l	87	87	103	13200.0	50	35	no	YES	n/a	no	no	YES	YES	no	no
D-Antimony	ug/l	146	< 3	< 3	< 3	< 3	< 3	no	no	no	no	no	no	no	no	no
D-Arsenic	ug/l	0.002	< 5	< 5	< 5	< 5	< 5	?	?	?	?	?	no	no	no	no
D-Barium	ug/l	1	62.5	72.9	9.5	350	137	YES	YES	YES	YES	YES	YES	no	YES	YES
D-Beryllium	ug/l	0.0037	< 1	< 1	< 1	< 1	< 1	?	?	?	?	?	no	no	no	no
D-Cadmium	ug/l	1.1	< 1	< 1	< 1	< 1	< 1	no	no	no	no	no	no	no	no	no
D-Calcium	mg/l	n/a	56.9	56.4	< 1	56.7	84	no	no	no	no	no	no	no	no	YES
D-Chromium	ug/l	50	< 5	< 5	< 5	< 5	< 5	no	no	no	no	no	no	no	no	no
D-Copper	ug/l	12	< 12	< 12	< 12	< 12	< 12	no	no	no	no	no	no	no	no	no
D-Iron	ug/l	1000	101	163	< 20	37.3	71.2	no	no	no	no	no	YES	no	no	no
D-Lead	ug/l	3.2	9	< 3	10	< 3	< 3	YES	no	YES	no	no	no	YES	no	no
D-Magnesium	mg/l	n/a	17.2	16.7	< 1	19.2	46.7	no	no	no	no	no	no	no	YES	YES
D-Manganese	ug/l	50	7.7	14.5	< 5	9.4	49.9	no	no	no	no	no	YES	no	YES	YES
D-Mercury	ug/l	0.012	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	?	?	?	?	?	no	no	no	no
D-Molybdenum	ug/l	10	8	10	3	7	3	no	no	no	no	no	YES	no	no	no
D-Nickel	ug/l	160	< 10	< 10	< 10	< 10	< 10	no	no	no	no	no	no	no	no	no
D-NO2+NO3 (N)	mg/l	10	n/a	n/a	n/a	n/a	n/a						no	no	no	no
D-Potassium	mg/l	n/a	3.3	3.2	1.1	4	11.8	no	no	no	no	no	no	no	YES	YES
D-Selenium	ug/l	5	2	1	2	2	1	no	no	no	no	no	no	no	no	no
D-Silver	ug/l	0.12	< 2	< 2	< 2	< 2	< 2	?	?	?	?	?	no	no	no	no
D-Sodium	mg/l	n/a	50.9	58.4	< 1	124	673	no	no	no	no	no	YES	no	YES	YES
D-Thallium	ug/l	13	< 1	< 1	< 1	< 1	< 1	no	no	no	no	no	no	no	no	no
D-Total P	mg/l	0.05	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
D-Vanadium	ug/l	?	< 40	< 40	< 40	< 40	< 40	no	no	no	no	no	no	no	no	no
D-Zinc	ug/l	110	< 30	42.9	< 30	< 30	46.4	no	no	no	no	no	YES	no	no	YES
Fluoride	mg/l	1.4	0.312	0.37	0.356	0.344	0.341	no	no	no	no	no	YES	YES	YES	YES
Hydroxide	mg/l	n/a	0	0	0	0	0	no	no	no	no	no	no	no	no	no
L-pH		6.5-9.0	7.96	7.96	7.97	8.01	8.04	no	no	no	no	no	no	YES	YES	YES
L-Sp. Cond.	umhos	n/a	638	685	649	638	633	no	no	no	no	no	YES	YES	no	no
NO2+NO3 (N)	mg/l	10	0.3	0.14	0.37	0.33	0.33	no	no	no	no	no	no	YES	YES	YES

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Samples from	Sample Date:	4/11/96	4/11/96	4/11/96	4/11/96	4/11/96	Sample Results > WQNC?					Downstream > R @ Bridge?				
North Riverbank	Lab No.:	9602314	9602316	9602317	9602318	9602319	R @ Bridge	R @ Seep	R .25 mi BL	R .5 mi BL	R -1 mi BL	R @ Seep	R .25 mi BL	R .5 mi BL	R -1 mi BL	
Parameter	Units	WQNC	< Conc.	< Conc.	< Conc.	< Conc.	Bridge	Seep	mi BL	mi BL	mi BL	Seep	mi BL	mi BL	mi BL	
Sulfate	mg/l	n/a	150.3	166.3	155.9	149.1	150.4	no	no	no	no	no	YES	YES	no	YES
T-Aluminum	ug/l	87	5650	9730	9100	3800	7350	YES	YES	YES	YES	YES	YES	YES	no	YES
T-Antimony	ug/l	146	< 3	< 3	< 3	< 3	< 3	no	no	no	no	no	no	no	no	no
T-Arsenic	ug/l	0.002	< 5	< 5	< 5	< 5	< 5	?	?	?	?	?	no	no	no	no
T-Barium	mg/l	1	0.141	0.228	0.196	0.0791	0.831	no	no	no	no	no	YES	YES	no	YES
T-Beryllium	ug/l	0.0037	< 1	< 1	< 1	< 1	< 1	?	?	?	?	?	no	no	no	no
T-Cadmium	ug/l	1.1	< 1	< 1	< 1	< 1	< 1	no	no	no	no	no	no	no	no	no
T-Chromium	ug/l	50	7	9	8	< 5	6	no	no	no	no	no	YES	YES	no	no
T-Copper	ug/l	12	< 12	14.8	< 12	< 12	< 12	no	YES	no	no	no	YES	no	no	no
T-Iron	mg/l	1000	6.44	9.51	7.58	1.53	6.83	no	no	no	no	no	YES	YES	no	YES
T-Lead	ug/l	3.2	9	13	10	< 3	10	YES	YES	YES	no	YES	YES	YES	no	YES
T-Manganese	ug/l	50	247	473	388	39.4	357	YES	YES	YES	no	YES	YES	YES	no	YES
T-Mercury	ug/l	0.012	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	?	?	?	?	?	no	no	no	no
T-Molybdenum	ug/l	10	8	11	7	8	7	no	YES	no	no	no	YES	no	no	no
T-Nickel	ug/l	160	< 10	12	10	< 10	< 10	no	no	no	no	no	YES	no	no	no
T-Selenium	ug/l	5	2	2	2	2	2	no	no	no	no	no	no	no	no	no
T-Silver	ug/l	0.12	< 2	< 2	< 2	< 2	< 2	?	?	?	?	?	no	no	no	no
T-Thallium	ug/l	13	< 2	< 2	< 2	< 2	< 2	no	no	no	no	no	no	no	no	no
T-Vanadium	ug/l	?	< 40	< 40	< 40	< 40	< 40	no	no	no	no	no	no	no	no	no
T-Zinc	ug/l	110	79.3	75.7	60.7	< 30	59.2	no	no	no	no	no	no	no	no	no
T. Hardness	mg/l	n/a	212.7	211.8	6.6	220.5	401.7	no	no	no	no	no	no	no	YES	YES
T. Phos. (as PO4)	mg/l	0.05	0.34	0.6	0.58	0.5	0.45	YES	YES	YES	YES	YES	YES	YES	YES	YES
T.K.N.	mg/l	?	NO	NO	NO	NO	NO	n/a	n/a	n/a	n/a	n/a	no	no	no	no
T.O.C.	mg/l	?	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	no	no	no	no
T.Sus.Solids	mg/l	?	320	844	724	932	612	no	no	no	no	no	YES	YES	YES	YES
TDS @ 180C	mg/l	1200	424	438	402	392	394	no	no	no	no	no	YES	no	no	no
Tot. Alkalinity	mg/l	n/a	110	112	111	110	110	no	no	no	no	no	YES	YES	no	no
Turbidity	NTU	?	100	230	210	240	160	no	no	no	no	no	YES	YES	YES	YES
Field Parameters																
Temperature	C		13.1	12.9	12.9	13	13									
pH	S.U.	6.5-9.0	8.1	8.1	7.9	8	8	no	no	no	no	no	no	no	no	no
D.O.	mg/l		8	8.4	8.1	8.3	8.3									
Sp. Cond.	umhos/cm		662	715	679	666	662									
r = rejected results due to lab QA problems							Total:	66	50	64	66	65	77	77	77	77
							YES Count:	6	9	6	3	5	28	19	13	21
							% Yes:	9%	14%	9%	5%	8%	36%	25%	17%	27%