

**OGMCOAL - Mine-Well-Discharge January 2011**

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**To:** "OGMCOAL@utah.gov" <OGMCOAL@utah.gov>  
**Date:** 2/4/2011 9:49 AM  
**Subject:** Mine-Well-Discharge January 2011  
**CC:** Jim Smith <jimsmith@utah.gov>, Karl Houskeeper <karlhouskeeper@utah.gov...>  
**Attachments:** Mine-James- Discharge.xls

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Jim / Karl / Kevin,

Per Permit Condition #2, attached is the cumulative monthly flow data for discharges into both Electric Lake and Eccles Creek – updated through January 2011.

Let me know if you have any questions,

***Austin R. Belcher***

Environmental Engineer  
Canyon Fuel Company, LLC  
Skyline Mine  
(435)448-2668

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		Scofield Reservoir Storage Capacity 73,600 ac-ft					Electric Lake Storage Capacity 31,500 ac-ft											
		<b>ECCLES CREEK</b>					<b>ELECTRIC LAKE</b>										<b>Discharge to Both Drainages</b>	
		Discharge to Eccles			Cumulative		JC-1 Well			Cumulative		JC-3 Well			Cumulative		Cumulative	
Month	Days	GPM	CFS	MGD	Gallons	Ac-Ft	GPM	CFS	MGD	Gallons	Ac-Ft	GPM	CFS	MGD	Gallons	Ac-Ft	Gallons	Acre-Feet
Jan-99	31	340	0.8	0.49	15,190,000	47											15,190,000	47
Feb-99	28	229	0.5	0.33	24,430,000	75											24,430,000	75
Mar-99	31	465	1.0	0.67	45,200,000	139											45,200,000	139
Apr-99	30	215	0.5	0.31	54,500,000	167											54,500,000	167
May-99	31	278	0.6	0.40	66,900,000	205											66,900,000	205
Jun-99	30	188	0.4	0.27	75,000,000	230											75,000,000	230
Jul-99	31	181	0.4	0.26	83,060,000	255											83,060,000	255
Aug-99	31	229	0.5	0.33	93,290,000	286											93,290,000	286
Sep-99	30	139	0.3	0.20	99,290,000	305											99,290,000	305
Oct-99	31	243	0.5	0.35	110,140,000	338											110,140,000	338
Nov-99	30	514	1.1	0.74	132,340,000	406											132,340,000	406
Dec-99	31	90	0.2	0.13	136,370,000	419											136,370,000	419
Jan-00	31	722	1.6	1.04	168,610,000	517											168,610,000	517
Feb-00	29	681	1.5	0.98	197,030,000	605											197,030,000	605
Mar-00	31	993	2.2	1.43	241,360,000	741											241,360,000	741
Apr-00	30	1,354	3.0	1.95	299,860,000	920											299,860,000	920
May-00	31	1,181	2.6	1.70	352,560,000	1,082											352,560,000	1,082
Jun-00	30	1,000	2.2	1.44	395,760,000	1,215											395,760,000	1,215
Jul-00	31	1,236	2.8	1.78	450,940,000	1,384											450,940,000	1,384
Aug-00	31	993	2.2	1.43	495,270,000	1,520											495,270,000	1,520
Sep-00	30	1,361	3.0	1.96	554,070,000	1,700											554,070,000	1,700
Oct-00	31	2,354	5.2	3.39	659,160,000	2,023											659,160,000	2,023
Nov-00	30	1,688	3.8	2.43	732,060,000	2,247											732,060,000	2,247
Dec-00	31	2,201	4.9	3.17	830,330,000	2,548											830,330,000	2,548
Jan-01	31	2,569	5.7	3.70	945,030,000	2,900											945,030,000	2,900
Feb-01	28	2,500	5.6	3.60	1,045,830,000	3,210											1,045,830,000	3,210
Mar-01	31	3,542	7.9	5.10	1,203,930,000	3,695											1,203,930,000	3,695
Apr-01	30	4,028	9.0	5.80	1,377,930,000	4,229											1,377,930,000	4,229
May-01	31	3,542	7.9	5.10	1,536,030,000	4,714											1,536,030,000	4,714
Jun-01	30	2,986	6.7	4.30	1,665,030,000	5,110											1,665,030,000	5,110
Jul-01	31	4,514	10.1	6.50	1,866,530,000	5,728											1,866,530,000	5,728
Aug-01	31	4,514	10.1	6.50	2,068,030,000	6,347											2,068,030,000	6,347
Sep-01	30	7,795	17.4	11.23	2,404,786,960	7,380	969	2.2	1.40	41,860,500	128						2,446,647,460	7,508
Oct-01	31	9,000	20.1	12.96	2,806,546,960	8,613	2,136	4.8	3.08	137,198,100	421						2,943,745,060	9,034
Nov-01	30	8,907	19.8	12.83	3,191,314,960	9,794	1,509	3.4	2.17	202,406,100	621						3,393,721,060	10,415
Dec-01	31	7,911	17.6	11.39	3,544,460,560	10,878	1,270	2.8	1.83	259,106,100	795						3,803,566,660	11,673

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		Discharge to Eccles			Cumulative		JC-1 Well			Cumulative			JC-3 Well			Cumulative		Cumulative	
Month	Days	GPM	CFS	MGD	Gallons	Ac-Ft	GPM	CFS	MGD	Gallons	Ac-Ft	GPM	CFS	MGD	Gallons	Ac-Ft	Gallons	Acre-Feet	
Jan-02	31	7,297	16.3	10.51	3,870,198,640	11,877	2,250	5.0	3.24	359,546,100	1,103						4,229,744,740	12,981	
Feb-02	28	7,012	15.6	10.10	4,152,926,800	12,745	2,250	5.0	3.24	450,266,100	1,382						4,603,192,900	14,127	
Mar-02	31	7,196	16.0	10.36	4,474,142,800	13,731	2,044	4.6	2.94	541,526,100	1,662						5,015,668,900	15,393	
Apr-02	30	8,200	18.3	11.81	4,828,382,800	14,818	2,250	5.0	3.24	638,726,100	1,960						5,467,108,900	16,778	
May-02	31	7,740	17.2	11.15	5,173,896,400	15,878	2,145	4.8	3.09	734,468,100	2,254						5,908,364,500	18,132	
Jun-02	30	8,188	18.2	11.79	5,527,605,040	16,964	2,080	4.6	3.00	824,324,100	2,530						6,351,929,140	19,493	
Jul-02	31	8,927	19.9	12.85	5,926,103,440	18,187	2,080	4.6	3.00	917,175,300	2,815						6,843,278,740	21,001	
Aug-02	31	8,773	19.5	12.63	6,317,748,880	19,388	1,183	2.6	1.70	970,001,220	2,977						7,287,750,100	22,365	
Sep-02	30	9,282	20.7	13.37	6,718,735,600	20,619	2,100	4.7	3.02	1,060,721,220	3,255						7,779,456,820	23,874	
Oct-02	31	7,023	15.6	10.11	7,032,262,480	21,581	2,382	5.3	3.43	1,167,065,220	3,582						8,199,327,700	25,163	
Nov-02	30	9,846	21.9	14.18	7,457,606,800	22,887	2,540	5.7	3.66	1,276,781,220	3,918						8,734,388,020	26,805	
Dec-02	31	9,652	21.5	13.90	7,888,459,120	24,209	4,100	9.1	5.90	1,459,805,220	4,480						9,348,264,340	28,689	
Jan-03	31	9,231	20.6	13.29	8,300,520,880	25,473	4,100	9.1	5.90	1,642,829,220	5,042						9,943,350,100	30,515	
Feb-03	28	9,267	20.6	13.34	8,674,147,600	26,620	4,082	9.1	5.88	1,807,421,220	5,547						10,481,568,820	32,167	
Mar-03	31	9,846	21.9	14.18	9,113,678,800	27,969	3,904	8.7	5.62	1,981,679,220	6,082						11,095,358,020	34,050	
Apr-03	30	9,735	21.7	14.02	9,534,229,360	29,259	3,848	8.6	5.54	2,147,927,220	6,592						11,682,156,580	35,851	
May-03	31	8,686	19.4	12.51	9,921,950,800	30,449	3,682	8.2	5.30	2,312,307,060	7,096						12,234,257,860	37,546	
Jun-03	30	9,001	20.1	12.96	10,310,800,480	31,643	3,203	7.1	4.61	2,450,694,660	7,521						12,761,495,140	39,164	
Jul-03	31	8,040	17.9	11.58	10,669,724,800	32,744	3,999	8.9	5.76	2,629,218,660	8,069	552	1.2	0.80	24,660,000	76	13,323,603,460	40,889	
Aug-03	31	2,836	6.3	4.08	10,796,341,120	33,133	3,843	8.6	5.53	2,800,750,260	8,595	4,977	11.1	7.17	246,852,300	758	13,843,943,680	42,486	
Sep-03	30	2,826	6.3	4.07	10,918,438,120	33,507	1,989	4.4	2.86	2,886,675,152	8,859	4,659	10.4	6.71	448,127,611	1,375	14,253,240,883	43,742	
Oct-03	31	5,925	13.2	8.53	11,182,935,880	34,319	521	1.2	0.75	2,909,925,962	8,930	2,440	5.4	3.51	557,035,740	1,709	14,649,897,582	44,959	
Nov-03	30	5,720	12.7	8.24	11,430,024,040	35,077	4,062	9.0	5.85	3,085,394,461	9,469	1,794	4.0	2.58	634,535,886	1,947	15,149,954,387	46,494	
Dec-03	31	4,493	10.0	6.47	11,630,580,040	35,693	3,839	8.6	5.53	3,256,755,181	9,995	2,700	6.0	3.89	755,081,166	2,317	15,642,416,387	48,005	
Jan-04	31	1,150	2.6	1.66	11,681,923,240	35,851	3,777	8.4	5.44	3,425,349,376	10,512	4,764	10.6	6.86	967,725,874	2,970	16,074,998,490	49,332	
Feb-04	29	955	2.1	1.38	11,721,806,920	35,973	3,951	8.8	5.69	3,590,361,856	11,018	2,657	5.9	3.83	1,078,681,579	3,310	16,390,850,355	50,302	
Mar-04	31	945	2.1	1.36	11,764,011,880	36,102	3,979	8.9	5.73	3,767,966,386	11,563	1,931	4.3	2.78	1,164,860,410	3,575	16,696,838,675	51,241	
Apr-04	30	900	2.0	1.30	11,802,878,920	36,222	3,916	8.7	5.64	3,937,149,591	12,083	2,916	6.5	4.20	1,290,810,771	3,961	17,030,839,282	52,266	
May-04	31	951	2.1	1.37	11,845,353,160	36,352	4,048	9.0	5.83	4,117,832,720	12,637	2,354	5.2	3.39	1,395,900,744	4,284	17,359,086,624	53,273	
Jun-04	30	862	1.9	1.24	11,882,571,400	36,466	4,150	9.2	5.98	4,297,095,125	13,187	1,126	2.5	1.62	1,444,559,982	4,433	17,624,226,507	54,087	
Jul-04	31	860	1.9	1.24	11,920,979,080	36,584	4,121	9.2	5.93	4,481,051,653	13,752	272	0.6	0.39	1,456,694,617	4,470	17,858,725,350	54,806	
Aug-04	31	941	2.1	1.35	11,962,969,480	36,713	3,965	8.8	5.71	4,658,070,117	14,295	-	0.0	0.00	1,456,694,617	4,470	18,077,734,214	55,479	
Sep-04	30	3,125	7.0	4.50	12,097,962,280	37,127	4,073	9.1	5.86	4,834,012,572	14,835	-	0.0	0.00	1,456,694,617	4,470	18,388,669,469	56,433	
Oct-04	31	3,526	7.9	5.08	12,255,358,600	37,610	4,047	9.0	5.83	5,014,657,692	15,389	-	0.0	0.00	1,456,694,617	4,470	18,726,710,909	57,470	
Nov-04	30	3,535	7.9	5.09	12,408,072,040	38,079	3,902	8.7	5.62	5,183,209,692	15,907	-	0.0	0.00	1,456,694,617	4,470	19,047,976,349	58,456	
Dec-04	31	3,602	8.0	5.19	12,568,853,800	38,572	4,028	9.0	5.80	5,362,999,452	16,458	-	0.0	0.00	1,456,694,617	4,470	19,388,547,869	59,501	
Jan-05	31	4,376	9.7	6.30	12,764,191,240	39,172	4,000	8.9	5.76	5,541,568,092	17,006	-	0.0	0.00	1,456,694,617	4,470	19,762,453,949	60,649	
Feb-05	28	4,380	9.8	6.31	12,940,789,960	39,714	3,977	8.9	5.73	5,701,939,452	17,499	-	0.0	0.00	1,456,694,617	4,470	20,099,424,029	61,683	
Mar-05	31	4,034	9.0	5.81	13,120,846,120	40,266	3,963	8.8	5.71	5,878,834,812	18,041	-	0.0	0.00	1,456,694,617	4,470	20,456,375,549	62,778	
Apr-05	30	3,664	8.2	5.28	13,279,120,840	40,752	3,681	8.2	5.30	6,037,833,852	18,529	-	0.0	0.00	1,456,694,617	4,470	20,773,649,309	63,752	
May-05	31	4,103	9.1	5.91	13,462,268,680	41,314	4,103	9.1	5.77	6,216,801,372	19,079	-	0.0	0.00	1,456,694,617	4,470	21,135,764,669	64,863	
Jun-05	30	4,424	9.9	6.37	13,653,368,200	41,901	3,659	8.2	5.27	6,374,877,920	19,564	-	0.0	0.00	1,456,694,617	4,470	21,484,940,736	65,935	
Jul-05	31	4,596	10.2	6.62	13,858,555,240	42,530	4,079	9.1	5.87	6,556,974,560	20,123	-	0.0	0.00	1,456,694,617	4,470	21,872,224,416	67,123	
Aug-05	31	4,363	9.7	6.28	14,053,309,480	43,128	3,880	8.6	5.59	6,730,179,200	20,654	-	0.0	0.00	1,456,694,617	4,470	22,240,183,296	68,253	
Sep-05	30	4,337	9.7	6.24	14,240,509,480	43,703	1,817	4.0	2.62	6,808,779,200	20,895	-	0.0	0.00	1,456,694,617	4,470	22,505,983,296	69,068	
Oct-05	31	4,593	10.2	6.61	14,445,541,000	44,332	4,097	9.1	5.90	6,991,669,280	21,457	-	0.0	0.00	1,456,694,617	4,470	22,893,904,896	70,259	
Nov-05	30	4,687	10.4	6.75	14,648,019,400	44,953	4,062	9.1	5.85	7,167,147,680	21,995	-	0.0	0.00	1,456,694,617	4,470	23,271,861,696	71,419	
Dec-05	31	4,336	9.7	6.24	14,841,578,440	45,547	4,056	9.0	5.84	7,348,207,520	22,551	-	0.0	0.00	1,456,694,617	4,470	23,646,480,576	72,568	
Jan-06	31	4,499	10.0	6.48	15,042,413,800	46,163	4,015	8.9	5.78	7,527,437,120	23,101	-	0.0	0.00	1,456,694,617	4,470	24,026,545,536	73,735	
Feb-06	28	4,560	10.2	6.57	15,226,273,000	46,728	3,984	8.9	5.74	7,688,072,000	23,594	-	0.0	0.00	1,456,694,617	4,470	24,371,039,616	74,792	
Mar-06	31	4,574	10.2	6.59	15,430,456,360	47,354	3,957	8.8	5.70	7,864,712,480	24,136	-	0.0	0.00	1,456,694,617	4,470	24,751,863,456	75,961	
Apr-06	30	4,622	10.3	6.66	15,630,126,760	47,967	3,805	8.5	5.48	8,029,088,480	24,640	-	0.0	0.00	1,456,694,617	4,470	25,115,909,856	77,078	
May-06	31	3,622	8.1	5.22	15,791,812,840	48,463	3,918	8.7	5.64	8,203,988,000	25,177	-	0.0	0.00	1,456,694,617	4,470	25,452,495,456	78,111	



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		<b>ECCLES CREEK</b>					<b>ELECTRIC LAKE</b>										<b>Discharge to Both Drainages</b>	
		Discharge to Eccles			Cumulative		JC-1 Well			Cumulative		JC-3 Well			Cumulative		Cumulative	
Month	Days	GPM	CFS	MGD	Gallons	Ac-Ft	GPM	CFS	MGD	Gallons	Ac-Ft	GPM	CFS	MGD	Gallons	Ac-Ft	Gallons	Acre-Feet
Nov-10	30	4,096	9.1	5.90	25,399,532,006	77,948	2,000	4.5	2.88	17,589,350,438	53,980	-	0.0	0.00	1,543,938,457	4,738	44,532,820,900	136,666
Dec-10	31	4,749	10.6	6.84	25,611,527,366	78,599	-	0.0	0.00	17,589,350,438	53,980	-	0.0	0.00	1,543,938,457	4,738	44,744,816,260	137,317
Jan-11	31	4,567	10.2	6.58	25,815,398,246	79,225	1,889	4.2	2.72	17,673,675,398	54,239	-	0.0	0.00	1,543,938,457	4,738	45,033,012,100	138,201