

APPENDIX B  
CHEMICAL ANALYSIS AND FLOW DATA  
STREAM SAMPLING

\*Denotes questionable chemical analysis on the following pages,  
not included in data averaging.

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-1 Deer Creek at Mouth below bridge on L.R. 16032

DATE	GPM	PH	PPM				PPD			
			ACD	ALK	T.Fe	S04	ALK	ACD	T.Fe	S04
07-23-73	12,823	3.5	66	0	1.1	200	0	10,156	169	30,775
11-12-73	14,509	3.4	56	0	3.1	160	0	9,750	540	26,857
04-19-74	73,575	3.7	30	0	1.7	175	0	26,487	1501	154,508
*07-10-74	18,118	3.0	1100	0	1.0	300	0	239,158	217	65,225
09-18-74	14,953	3.2	56	0	1.2	325	0	10,048	215	58,317
MIN.	12,823	3.2	30	0	1.1	160	0	7,750	169	26,857
MAX.	73,575	3.7	66	0	3.1	325	0	26,487	1501	154,508
AVG.	28,965	3.5					0	14,110	606	67,614

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-2 Deer Creek downstream of junction with Paint Creek and upstream of first bridge on T-424.

07-23-73	12,587	3.5	79	0	2.5	220	0	11,932	378	33,230
11-12-73	13,980	3.4	61	0	4.9	210	0	10,233	822	35,230
04-18-74	95,960	3.6	40	0	3.2	200	0	46,061	3685	230,304
*07-02-74	40,620	2.9	1200	0	3.3	350	0	584,928	1609	170,604
09-18-74	15,752	3.1	74	0	2.6	250	0	13,988	491	47,256
MIN	12,587	3.1	40	0	2.5	200	0	10,233	378	33,230
MAX.	95,960	3.5	79	0	4.9	250	0	46,061	3685	230,304
AVG.	34,569	3.4					0	20,553	1344	86,505

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-3 Paint Creek upstream of bridge on U.S. Route 322

PPM

PPD

DATE	GPM	PH	PPM				PPD			
			ACD	ALK	T.Fe	S04	ALK	ACD	T.Fe	S04
07-24-73	6,969	3.5	84	0	3.4	410	0	7,025	284	34,287
11-13-73	9,022	3.3	69	0	6.8	200	0	7,470	736	21,653
04-17-74	63,755	3.4	32	0	4.0	150	0	24,482	3,060	114,759
*06-03-74	35,517	3.5	52	0	3.5	350	0	22,163	1,492	149,171
09-18-74	12,648	3.1	74	0	13.0	350	0	11,231	1,973	53,122
MIN.	9,969	3.1	32	0	3.4	150	0	7,025	284	21,653
MAX.	63,755	3.5	84	0	13.0	410	0	24,482	3,060	114,759
AVG.	23,099	3.3		0			0	12,552	1,513	55,955

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-4 Paint Creek upstream of Stony Run

07-24-73	6,672	3.4	83	0	4.0	220	0	6,645	320	17,614
12-04-73	19,545	3.0	60	0	3.6	110	0	14,072	844	25,799
04-16-74	58,818	3.5	32	0	3.0	200	0	22,586	2,117	141,163
*07-22-74	6,108	2.7	1000	0	4.9	275	0	73,296	359	20,156
09-18-74	9,060	4.5	20	0	0.3	300	0	2,174	33	32,616
MIN.	6,672	3.0	20	0	0.3	110	0	2,174	33	17,614
MAX.	58,818	4.5	83	0	4.0	300	0	22,586	2,117	141,163
AVG.	23,524	3.6		0			0	11,369	823	54,298

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-5 Deer Creek upstream of junction with Paint Creek and second bridge on T-424.

DATE	GPM	PH	PPM				PPD			
			ACD	ALK	T.Fe	S04	ALK	ACD	T.Fe	S04
07-25-73	2,792	3.5	72	0	3.0	220	0	2,412	101	7,371
11-13-73	4,403	3.5	58	0	4.4	230	0	3,064	232	12,152
04-11-74	25,445	3.5	52	0	4.3	175	0	15,878	1313	53,435
*07-02-74	5,140	3.4	74	0	3.1	375	0	4,564	191	23,130
09-18-74	2,392	3.0	70	0	3.8	375	0	2,009	109	10,764
MIN.	2,392	3.0	52	0	3.0	175	0	2,009	101	7,371
MAX.	25,445	3.5	74	0	4.4	375	0	15,878	1313	53,435
AVG.	8,758	3.4						5,841	439	20,930

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-6 Little Paint Creek at mouth.

07-26-73	1,289	3.6	75	0	2.6	210	0	1,160	40	3,248
11-13-73	1,535	3.5	44	0	2.4	190	0	810	44	3,500
04-22-74	10,994	3.5	44	0	3.0	150	0	5,805	396	19,789
*07-08-74	1,768	3.3	70	0	3.2	400	0	1,485	68	8,486
09-18-74	114	3.0	800	0	4.9	300	0	1,094	6.7	410
MIN.	114	3.0	44	0	2.4	150	0	810	6.7	410
MAX.	10,994	3.6	800	0	4.9	300	0	5,805	396	19,789
AVG.	3,433	3.4						2,217	122	6,736

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-7 Paint Creek above bridge on L.R. 16078

PPM

PPD

DATE	GPM	PH	PPM			PPD		
			ACD	ALK	T.Fe	ACD	ALK	T.Fe
07-25-73	4,623	3.9	95	0	5.4	5,270	0	300
11-13-73	5,811	3.2	94	0	12.0	6,555	0	837
04-10-74	41,939	3.5	30	0	0.0	15,098	0	0.0
*07-08-74	13,890	3.3	74	0	3.4	12,334	0	567
09-18-74	09,235	3.0	50	0	5.2	5,541	0	576
MIN.	4,623	3.0	30	0	0.0	5,270	0	0.0
MAX.	41,939	3.9	95	0	12.0	15,098	0	837
AVG.	15,402	3.4				8,116	0	428

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-8 Mahles Run downstream bridge on L.R. 16051.

07-26-73	1,146	4.2	86	0	0.30	1,183	0	4.1
12-03-73	2,003	3.8	48	0	0.15	1,154	0	3.6
04-03-74	9,573	3.9	20	0	5.70	2,298	0	655
*07-05-74	3,377	3.9	44	0	0.50	1,783	0	20
09-18-74	746	3.8	50	0	0.20	448	0	1.8
MIN.	746	3.8	20	0	0.15	448	0	1.8
MAX.	9,573	4.2	86	0	5.70	2,298	0	655
AVG.	3,367	3.9				1,271	0	166

1000 900 800 700 600 500 400 300 200 100 0

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-9 Licking Creek downstream of bridge on L.R. 16051  
near Huefner

PPM

PPD

DATE	GPM	PH	PPM				PPD			
			ACD	ALK	T.Fe	S04	ALK	ACD	T.Fe	S04
07-26-73	3,514	3.6	82	0	14.0	210	0	3,458	590	8,885
12-03-73	9,492	3.2	54	0	2.7	120	0	6,151	308	13,668
04-10-74	29,215	3.6	40	0	2.8	100	0	14,023	982	35,058
*07-05-74	19,115	3.5	50	0	2.4	350	0	11,469	551	80,283
09-18-74	7,549	3.0	60	0	8.2	250	0	5,435	743	22,647
MIN.	3,514	3.0	40	0	2.7	100	0	3,458	308	8,855
MAX.	29,215	3.6	82	0	14.0	250	0	14,023	982	35,058
AVG.	12,442	3.4		0			0	7,267	656	20,057

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-10 Step Run at mouth.

07-30-73	209	5.0	10	0	0.10	29	0	25	0.25	73
12-05-73	1,530	4.4	14	2	0.00	30	37	257	0.0	551
04-17-74	5,554	4.5	6	0	1.00	45	0	400	67	2,999
*07-11-74	1,361	3.9	26	0	0.00	300	0	425	0.0	4,900
09-19-74	720	4.2	10	0	0.20	275	0	86	1.7	2,376
MIN.	209	4.2	6	0	0.00	29	0	25	0.0	73
MAX.	5,554	5.0	14	0	1.00	275	37	400	67	2,999
AVG.	2,003	4.5					9.2	192	17.2	1,500

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-11 Licking Creek upstream of bridge on L.R. 16052

DATE	GPM	PH	PPM				PPD			
			ACD	ALK	T.Fe	S04	ALK	ACD	T.Fe	S04
07-30-73	2,532	3.5	78	0	2.0	180	0	2,370	61	5,469
12-04-73	6,592	3.9	56	0	2.4	120	0	4,430	190	9,492
04-19-74	17,676	3.6	30	0	1.7	150	0	6,363	361	31,817
*07-09-74	7,413	2.7	900	0	2.8	300	0	80,060	249	26,687
09-18-74	5,313	3.1	60	0	2.4	325	0	3,825	153	20,721
MIN.	2,532	3.1	30	0	1.7	120	0	2,370	61	5,469
MAX.	17,676	3.9	78	0	2.4	325	0	6,363	361	31,817
AVG.	8,028	3.5					0	4,247	191	16,875

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-12 Rattlesnake Run at mouth

07-31-73	95	4.7	24	0	0.10	55	0	27	0.11	63
12-05-73	342	4.2	22	0	0.15	65	0	90	0.62	267
04-22-74	1844	4.5	10	0	0.00	45	0	221	0.00	996
*07-11-74	649	3.2	22	0	0.20	325	0	171	1.60	2,531
09-19-74	378	4.0	12	0	0.20	300	0	54	0.91	1,361
MIN.	95	4.0	10	0	0.00	45	0	27	0.00	63
MAX.	1844	4.7	24	0	0.20	300	0	221	1.60	1,361
AVG.	665	4.4					0	98	0.41	672

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-13 Frills Run at mouth.

DATE	GPM	pH	PPM				PPD			
			ACD	ALK	T.Fe	S04	ALK	ACD	T.Fe	S04
07-30-73	150	3.3	160	0	10	314	0	288	18	565
12-06-73	489	4.2	148	0	8.9	225	0	868	52	1320
04-18-74	1662	3.4	40	0	7.4	50	0	798	148	997
*07-09-74	447	2.9	700	0	26	375	0	3755	139	2012
09-19-74	304	2.8	70	0	9.3	350	0	255	34	1277
MIN.	150	2.8	40	0	7.4	50	0	255	18	565
MAX.	1662	4.2	700	0	10	350	0	868	148	1320
AVG.	651	3.4					0	552	63	1040

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-14 Licking Creek upstream of bridge on L.R. 16058

07-30-73	809	3.4	140	0	10	310	0	1359	97	3,009
12-05-73	3482	3.3	70	0	2.9	140	0	2925	121	5,850
04-10-74	9408	3.5	40	0	4.5	150	0	4516	508	16,934
*07-08-74	2489	3.2	90	0	3.7	275	0	2688	111	8,214
09-19-74	3022	2.9	60	0	3.8	325	0	2176	138	11,786
MIN.	809	2.9	40	0	2.9	140	0	1359	97	3,009
MAX.	9408	3.5	140	0	10	325	0	4516	508	16,934
AVG.	4180	3.3					0	2744	244	9,395



DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-15 Deer Creek downstream of junction with Little Deer Creek.

PPM

DATE	GPM	PH	ACD	ALK	T.Fe	S04	ALK	ACD	T.Fe	S04
07-27-73	3,982	3.3	200	0	4.6	420	0	9,557	220	20,069
12-06-73	6,506	4.1	74	0	4.4	160	0	5,777	344	12,492
04-18-74	22,351	3.4	50	0	9.0	175	0	13,411	2,414	46,937
*07-03-74	9,032	3.1	144	0	11	400	0	15,607	1,192	43,354
09-19-74	1,566	2.8	50	0	16	475	0	940	301	8,926
MIN.	1,566	2.8	50	0	4.4	160	0	940	220	8,926
MAX.	22,351	4.1	200	0	16	475	0	15,607	2,414	46,937
AVG.	8,601	3.4					0	7,421	820	22,106

PPD

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-16 Little Deer Creek at mouth upstream of bridge on T-410.

DATE	GPM	PH	ACD	ALK	T.Fe	S04	ALK	ACD	T.Fe	S04
07-27-73	1,355	3.9	54	0	0.30	120	0	878	4.9	1,951
12-06-73	2,176	3.6	60	0	0.74	85	0	1,567	19	2,220
04-05-74	10,181	3.8	30	0	1.2	200	0	3,665	147	24,434
*07-03-74	3,651	3.5	66	0	1.1	300	0	2,892	48	13,144
09-19-74	335	3.2	74	0	1.2	350	0	297	4.8	1,407
MIN.	335	3.2	30	0	0.30	85	0	297	4.8	1,407
MAX.	10,181	3.9	74	0	1.2	350	0	3,665	147	24,434
AVG.	3,512	3.6					0	1,602	444	7,503

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-17 Deer Creek upstream of junction with Judith Run  
and downstream of bridge on L.R. 16077

PPM

DATE	GPM	pH	ACD	ALK	T.Fe	S04	ALK	ACD	T.Fe	S04
07-27-73	780	3.6	120	0	24	280	0	1,123	225	2,621
12-06-73	2,244	3.6	60	0	2.7	175	0	1,616	73	4,712
04-05-74	12,456	3.7	40	0	2.2	150	0	5,979	329	22,421
*07-08-74	603	3.3	114	0	6.6	375	0	825	48	2,714
09-19-74	372	3.1	100	0	8.9	500	0	446	40	2,232
MIN.	372	3.1	40	0	2.2	150	0	446	40	2,232
MAX.	12,456	3.7	120	0	24	500	0	5,979	329	22,421
AVG.	3,963	3.5		0			0	2,291	167	7,997

DEER CREEK WATERSHED FLOW MEASUREMENT & SAMPLING STATION DF-18 Judith Run at mouth.

DATE	GPM	pH	ACD	ALK	T.Fe	S04	ALK	ACD	T.Fe	S04
07-27-73	911	3.3	270	0	32	670	0	2,952	350	7,324
12-06-73	2,040	3.0	158	0	21	345	0	3,868	514	8,446
04-05-74	7,969	3.2	60	0	13	100	0	5,738	1,243	9,563
*07-08-74	1,097	2.8	700	0	52	1,050	0	9,215	685	13,822
09-19-74	565	2.7	60	0	44	1,025	0	407	298	6,950
MIN.	565	2.7	60	0	13	100	0	407	298	6,950
MAX.	7,969	3.3	700	0	44	1,025	0	5,738	1,243	9,563
AVG.	2,871	3.1		0			0	3,241	601	8,071