

Cave Spring Branch - WBID 3246U001 (unclassified)
Water Chemistry data by Mo. DNR and Ok. DEQ
Water Chemistry data from Cave Spring Branch at state line

Org	Site	Site Name	Yr	Mo	Dy	NH3N	NO3N	TP
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1996	6		69	3.76	
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1996	7		33.90	117	
		Mean 1996				51.45	60.38	
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1997	1	6	0.44		
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1997	1		0.7	26.4	14.4
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1997	2		0.3	38.7	15.6
		Mean 1997				0.48	32.55	15.00
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	1	28	0.93	30.39	2.71
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	2	4	0.4	7.36	0.13
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	2	11	0.86	29.49	2.88
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	2	18	1.11	39.38	4.69
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	2	22	2.15	44.32	6.12
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	2	25	0.05	5.1	0.201
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	3	1	0.05	5.02	0.228
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	3	4	0.05	4.938	0.738
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	3	5		5.17	0.16
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	3	11	0.05	6.55	0.051
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	3	15	0.13	17.4	1.42
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	3	18	0.02499	10.8	0.82
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	3	18	0.05	11.42	0.888
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	3	26	0	5.87	
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	3	26	0.05	15.05	0.025
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	4	1	0.07	17.5	1.51
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	4	6	0	25.1	1.16
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	4	7	0.12	22.06	1.156
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	4	14	0	40.3	3.63
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	4	15	0.05	45.56	4.223
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	4	22	0.05	61.57	6.178
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	4	29	0.18	52.5	4.986
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	4	30	0.04	53.8	3.96
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	5	6	0.2	67.27	6.75
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	5	11	0.13	70.31	7.16
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	5	19	0.02499	85.4	4.63
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	5	29	0.05	80.4	8.1
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	6	3	0.21	109.88	4.83
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	6	8	0.26	93.61	6.44
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	6	10	0.12	97.72	7.44
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	6	30	1.45	52.33	6.23
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	7	15	0.28	93.41	10.655
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	7	18	0.03	106.39	6.5
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	7	28	0.02499	5.35	0.09
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	7	29	0.09	115.97	8.61
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	8	6	0.16	65.48	4.72
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	8	19	0.1	92.99	9.424
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	8	27	0.11	110	7.56
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	9	10	0.13	110.43	9.61
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	9	16	0.16	59.33	6.271
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	9	30	0.24	92.98	19.61
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	10	8	18.200001	23.43	2.37
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	10	14	0.33	37.08	3.303
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	10	20	0.12	60.7	7.62
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	11	18	0.39	64.94	5.954
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	12	9	0.02499	48.5	1.02
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	12	9	0.12	55.94	1.507
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	12	16	0.45	68.79	5.621
Org	Site	Site Name	Yr	Mo	Dy	NH3N	NO3N	TP
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1998	12	29	1.16	46.5	1.89
		Mean 1998				0.65	50.44	4.41

OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	1	6	0.4	34.22	1.919
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	1	19	0.499	20	6
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	1	20	0.65	49.02	4.469
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	2	2	0.02499	42.6	1.38
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	2	3	0.05	47.67	2.817
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	2	17	0.05	45.66	5.816
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	3	10	0.1	13.54	1.106
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	3	24	0.16	5.74	1.194
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	4	4	0.05	9.47	0.253
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	4	5	0.07	7.65	2.157
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	4	21	0.05	9.47	0.25
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	5	5	0.05	3.69	0.46
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	5	19	0.45	3.92	0.392
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	5	21	0.05	3.69	0.46
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	6	3	0.0499	8.33	0.19
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	6	7	0.05	5.93	0.146
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	6	23	0.32	0.52	5.53
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	7	7	0.16	3.47	0.205
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	8	4	0.14	2.62	0.162
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	8	25	0.06	16.33	0.115
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	9	15	0.05	13.99	0.124
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	9	25	0.02499	9.66	0.2
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	10	6	0.32	14.56	
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	10	20	0.16	12.38	0.17
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	11	3	0.45	0.82	0.041
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	11	17	0.1	1.03	0.202
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	12	1	0.36	6.27	0.134
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	12	15	0.35	3.97	0.13
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	1999	12	29	1.4400001	4.56	0.06
		Mean 1999				0.23	13.82	1.29
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	1	12	0.05	3.36	0.198
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	2	9	1.22	1.69	0.171
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	2		0.83	1.14	0.21
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	2		5.2600002	3.8	0.06
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	3	22	0.19	4.72	0.064
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	3		0.0499	3.29	0.03
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	3		1.15	3.96	0.05
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	4	19	0.02499	2.05	0.06
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	5	3	0.16	3.77	0.148
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	5	31	0.05	1.38	0.131
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	6	28	0.13	3.77	0.242
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	6	29	0.05	5.29	0.15
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	7	13	0.02499	5.85	0.3
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	7	26	0.07	2.89	0.104
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	8	3	0.02499	5.77	0.06
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	8	14	0.06	2.4	0.18
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	8	23	0.14	4.05	0.167
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	8	31	0.02499	2.5	
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	9	7	0.02499	2.97	0.1
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	9	19	0.4	9.93	0.12
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	9	20	1.24	2.23	0.192
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	10	18	0.23	1.01	0.118
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2000	11	15	0.28	3.45	0.068
		Mean 2000				0.51	3.53	0.13
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	1	3	4.9	2.99	0.15
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	1	24	3.8	11.54	0.046
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	2	7	3.64	9.87	0.084
Org	Site	Site Name	Yr	Mo	Dy	NH3N	NO3N	TP
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	3	21	2.74	7.89	0.049
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	4	18	0.25	2.47	0.057
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	5	23	0.15	6.1	0.05
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	6	13	0.15	1.96	0.056
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	6	14	0.13	3.89	0.05

OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	7	18	0.51	2.28	0.094
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	8	22	0.13	8.17	0.105
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	9	19	0.15	3.86	0.123
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	10	13	0.25	2.36	0.079
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	12	5	0.33	1.44	0.301
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2001	12	19	0.1	4.41	0.409
		Mean 2001				1.23	4.95	0.12
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2002	1	30	0.59	1.35	0.25
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2002	2	13	0.71	12.79	0.22
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2002	3	13	0.21	4.97	0.06
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2002	4	24	0.15	2.64	0.1
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2002	5	22	0.19	3.78	0.08
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2002	6	26	0.08	3.32	0.09
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2002	7	24	0.06	1.51	0.11
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2002	8	4	0.23	9.57	0.22
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2002	8	21	0.47	5.6	0.86
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2002	11	19	2.85	0.61	0.03
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2002	12	17	2.68	0.22	0.06
		Mean 2002				0.75	4.21	0.19
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	1	6	0.76	2.82	0.11
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	1	22	6	1.95	0.32
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	2	19	0.8	1.54	0.74
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	3	25	0.25	4.2	0.09
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	4	8	0.2	8.03	0.21
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	5	12	0.11	6.29	0.07
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	6	17	0.44	5.97	0.12
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	6	25	0.05	2.09	0.1
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	7	16	0.33	3.62	0.14
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	7	31	0.01499	11.6	0.11
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	8	18	0.15	4.3	0.12
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	9	22	0.1	10.4	0.11
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	9	23	0.04	10.9	0.11
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	10	14	2.32	8.04	0.09
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	10	20	0.07	8.2	0.14
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	11	18	0.11	6.23	0.11
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	12	16	0.41	5.85	0.04
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2003	12	17	1.3	4.2	0.05
		Mean 2003				0.75	5.90	0.15
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	1	14	0.16	2.92	0.02
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	1	27	0.28	3.81	0.04
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	2	24	0.32		0.04
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	3	16	0.3		0.07
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	3	23	0.01499	6.61	0.02
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	3	31	0.29	5.86	0.11
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	4	20	0.09		0.04
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	5	18	0.12		0.07
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	6	21	0.06		0.09
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	7	20	0.25		0.26
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	8	24	0.13		0.09
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	8	30	0.01499	8.86	0.09
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	9	28	0.24		0.05
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	10	18	0.05		0.08
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	11	9	0.05	5.6	0.04
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	11	16	0.64		0.09
Org	Site	Site Name	Yr	Mo	Dy	NH3N	NO3N	TP
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2004	12	14	0.16		0.09
		Mean 2004				0.19	5.61	0.08
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	1	25	0.12		0.06
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	2	22	0.09		0.06
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	3	22	0.05		0.05
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	4	12	0.22	3.11	0.06
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	4	19	0.05		0.07
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	5	17	0.07		0.05

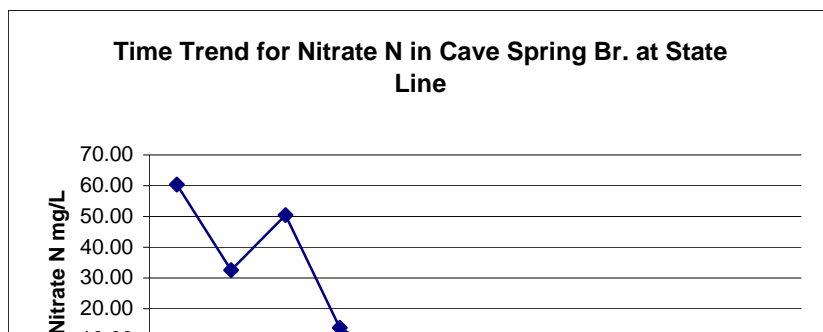
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	6	21	0.1		0.07
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	7	19	0.07		0.08
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	8	23	0.07		0.12
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	9	19	0.05		0.09
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	10	31	0.08		0.16
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	11	15	0.17		0.47
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	12	5	1.25		1
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2005	12	28	0.41	11.9	0.24
		Mean 2005				0.20	7.51	0.18
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2006	1	23	0.17		0.13
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2006	2	27	0.1		0.06
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2006	3	20	0.14		0.05
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2006	4	24	0.07		0.1
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2006	5	15	0.05		0.12
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2006	6	27	0.28		0.14
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2006	8	14	0.12		0.12
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2006	9	26	2.06		0.55
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2006	11	13	0.09		0.05
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2006	11	28	0.38		0.18
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2006	12	12	0.59		0.1
		Mean 2006				0.37		0.15
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2007	2	27	0.07		0.03
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2007	3	27	0.09		0.04
OKDEQ	3245/-5.0/4.3	Cave Spg.Br. @State Line	2007	4	24	0.05		0.02
MDNR	3245/-5.0/4.3	Cave Spg.Br. @State Line	2007	9	24	0.01499	4.67	0.16
		Mean 2007				0.06	4.67	0.06

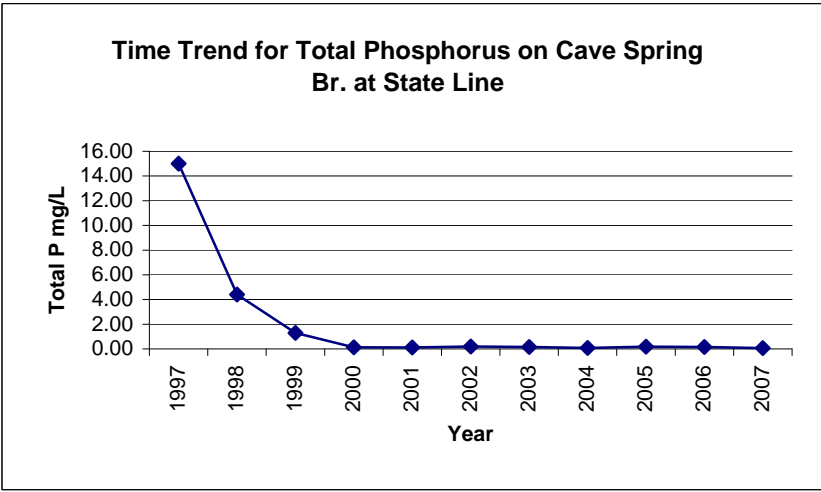
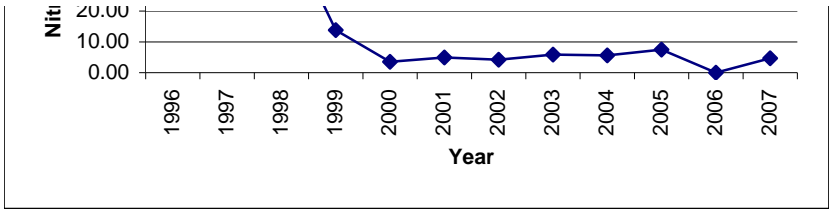
This stream receives treated wastewater from the Simmons poultry processing facility near Southwest City. Sampling of the stream in 1996 occurred in response to malfunctions in Simmons wastewater treatment plant and discharges of toxic levels of ammonia to the receiving stream. Monitoring by the states of Missouri and Oklahoma in subsequent years document improved wastewater treatment and improved water quality conditions in Cave Spring Branch. The table below shows annual means for ammonia and nitrate nitrogen and for total phosphorus.

Annual Mean Levels of Nutrients in Cave Spring Branch at state line.

units are mg/L.

Year	Ammonia -N	Nitrate-N	Total P
1996	51.45	60.38	
1997	0.48	32.55	15.00
1998	0.65	50.44	4.41
1999	0.23	13.82	1.29
2000	0.51	3.53	0.13
2001	1.23	4.95	0.12
2002	0.75	4.21	0.19
2003	0.75	5.90	0.15
2004	0.19	5.61	0.08
2005	0.20	7.51	0.18
2006	0.37		0.15
2007	0.06	4.67	0.06





Comparison of Nutrient Levels in Selected Southwest Missouri Streams

Grand Mean Nutrient Levels (mg/L) for Four Streams 2002-2007			
Stream	NH3-N	NO2+NO3-N	TP
Cave Spg Br.	0.39	5.58	0.14
Wilson Cr.	0.31	10.7	0.39
Honey Cr.	0.05	2.45	0.05
Buffalo Cr.	0.02	1.66	0.03

Cave Spring Branch is a very small stream whose flow is predominantly wastewater most of the time. It has higher levels of nitrogen and phosphorus than two nearby streams, Honey and Buffalo Creeks where wastewater discharge is a small component of total stream flow. However nutrient levels in Cave Spring Branch are lower than in Wilson Creek whose flow is usually dominated by wastewater discharge from an advanced wastewater treatment plant with phosphorus control.