

## APPENDIX C. MICROBIAL SOURCE TRACKING DATA

This appendix presents microbial source tracking data. The table headings are defined as follows:

Isolate: A unique number Dr. Samadpour gave to each isolate from the water samples the County of Santa Cruz submitted.

Provider sample: A number that identifies which water sample was analyzed on a given date. In other words, if the County of Santa Cruz took four water samples on a given date, this column identifies which of the four water samples was analyzed.

Stanum: The sampling station number (see Figure 3-1 in report for location).

Note: The specific fecal coliform source

Source: The category of the fecal coliform source

Sample Date: Date the sample was collected

FeColi: Fecal coliform concentration per 100 ml of water

Log FC: The logged fecal coliform concentration per 100 ml of water

Rain-1: Rainfall within the previous 24-hour time period

Rain-3: Rainfall within the previous 72 hour time period

Rain-7: Rainfall within the previous 168-hour time period

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
87135	SO-1	S0	human	Human	1/13/04	1270	3.1038037	0	0	0.35
87136	SO-2	S0	avian	Bird	1/13/04	1120	3.049218	0	0	0.35
87137	SO-2	S0	avian	Bird	1/13/04	1120	3.049218	0	0	0.35
87138	SO-2	S0	avian	Bird	1/13/04	1120	3.049218	0	0	0.35
87139	SO-3	S0	avian	Bird	1/13/04	1070	3.0293838	0	0	0.35
87140	SO-3	S0	rodent	Rodent	1/13/04	1070	3.0293838	0	0	0.35
87141	SO-3	S0	avian	Bird	1/13/04	1070	3.0293838	0	0	0.35
87142	SO-3	S0	rodent	Rodent	1/13/04	1070	3.0293838	0	0	0.35
87419	SO-1	S0	avian	Bird	1/21/04	80	1.90309	0	0	0
87420	SO-1	S0	dog	Dog	1/21/04	80	1.90309	0	0	0
87421	SO-1	S0	Rodent	Rodent	1/21/04	80	1.90309	0	0	0
87422	SO-2	S0	avian	Bird	1/21/04	130	2.1139434	0	0	0
87423	SO-2	S0	rodent	Rodent	1/21/04	130	2.1139434	0	0	0
87424	SO-2	S0	gull	Bird	1/21/04	130	2.1139434	0	0	0
87425	SO-3	S0	gull	Bird	1/21/04	50	1.69897	0	0	0
87426	SO-3	S0	gull	Bird	1/21/04	50	1.69897	0	0	0
87427	SO-3	S0	Unknown	Unknown	1/21/04	50	1.69897	0	0	0
89656	SO-1	S0	Raccoon	Wildlife	3/9/04	160	2.20412	0	0	0
89657	SO-1	S0	avian	Bird	3/9/04	160	2.20412	0	0	0
89658	SO-1	S0	Rodent	Rodent	3/9/04	160	2.20412	0	0	0
89659	SO-1	S0	Raccoon	Wildlife	3/9/04	160	2.20412	0	0	0
89660	SO-2	S0	dog	Dog	3/9/04	10	1	0	0	0
89661	SO-2	S0	avian	Bird	3/9/04	10	1	0	0	0
89662	SO-3	S0	avian	Bird	3/9/04	70	1.845098	0	0	0
89663	SO-3	S0	Unknown	Unknown	3/9/04	70	1.845098	0	0	0
89664	SO-3	S0	avian	Bird	3/9/04	70	1.845098	0	0	0
89665	SO-3	S0	avian	Bird	3/9/04	70	1.845098	0	0	0
89666	SO-3	S0	Rodent	Rodent	3/9/04	70	1.845098	0	0	0

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
90629	S0-1	S0	avian	Bird	3/23/04	310	2.4913617	0	0	0
90630	S0-1	S0	avian	Bird	3/23/04	310	2.4913617	0	0	0
90631	S0-1	S0	dog	Dog	3/23/04	310	2.4913617	0	0	0
90632	S0-2	S0	avian	Bird	3/23/04	250	2.39794	0	0	0
90633	S0-2	S0	rodent	Rodent	3/23/04	250	2.39794	0	0	0
90634	S0-2	S0	avian	Bird	3/23/04	250	2.39794	0	0	0
90635	S0-3	S0	avian	Bird	3/23/04	330	2.5185139	0	0	0
90636	S0-3	S0	dog	Dog	3/23/04	330	2.5185139	0	0	0
90637	S0-3	S0	rodent	Rodent	3/23/04	330	2.5185139	0	0	0
93192	S0-1	S0	avian	Bird	5/18/04	590	2.770852	0	0	0
93193	S0-1	S0	gull	Bird	5/18/04	590	2.770852	0	0	0
93194	S0-1	S0	sewage	Human	5/18/04	590	2.770852	0	0	0
93195	S0-2	S0	Raccoon	Wildlife	5/18/04	590	2.770852	0	0	0
93196	S0-2	S0	dog	Dog	5/18/04	590	2.770852	0	0	0
93197	S0-2	S0	avian	Bird	5/18/04	590	2.770852	0	0	0
93198	S0-3	S0	rodent	Rodent	5/18/04	590	2.770852	0	0	0
93199	S0-3	S0	gull	Bird	5/18/04	590	2.770852	0	0	0
93200	S0-3	S0	avian	Bird	5/18/04	590	2.770852	0	0	0
93201	S0-3	S0	avian	Bird	5/18/04	590	2.770852	0	0	0
95455	6-15-04-S0-1	S0	Raccoon	Wildlife	6/15/04	1580	3.1986571	0	0	0
95456	6-15-04-S0-1	S0	avian	Bird	6/15/04	1580	3.1986571	0	0	0
95457	6-15-04-S0-1	S0	avian	Bird	6/15/04	1580	3.1986571	0	0	0
95458	6-15-04-S0-2	S0	gull	Bird	6/15/04	1620	3.209515	0	0	0
95459	6-15-04-S0-2	S0	avian	Bird	6/15/04	1620	3.209515	0	0	0
95460	6-15-04-S0-2	S0	dog	Dog	6/15/04	1620	3.209515	0	0	0
95461	6-15-04-S0-2	S0	rodent	Rodent	6/15/04	1620	3.209515	0	0	0
95462	6-15-04-S0-3	S0	raccoon	Wildlife	6/15/04	1120	3.049218	0	0	0
95463	6-15-04-S0-3	S0	dog	Dog	6/15/04	1120	3.049218	0	0	0

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
95464	6-15-04-S0-3	S0	gull	Bird	6/15/04	1120	3.049218	0	0	0
95544	6-16-04-S0-1	S0	dog	Dog	6/15/04	1160	3.064458	0	0	0
95545	6-16-04-S0-1	S0	gull	Bird	6/15/04	1160	3.064458	0	0	0
95546	6-16-04-S0-1	S0	avian	Bird	6/15/04	1160	3.064458	0	0	0
95547	6-16-04-S0-2	S0	rodent	Rodent	6/15/04	1460	3.1643529	0	0	0
95548	6-16-04-S0-2	S0	dog	Dog	6/15/04	1460	3.1643529	0	0	0
95549	6-16-04-S0-2	S0	avian	Bird	6/15/04	1460	3.1643529	0	0	0
95550	6-16-04-S0-3	S0	dog	Dog	6/15/04	1200	3.0791812	0	0	0
95551	6-16-04-S0-3	S0	feline	Cat	6/15/04	1200	3.0791812	0	0	0
95552	6-16-04-S0-3	S0	gull	Bird	6/15/04	1200	3.0791812	0	0	0
95849	6-24-04-S0-1	S0	avian	Bird	6/24/04	1100	3.0413927	0	0	0
95850	6-24-04-S0-1	S0	avian	Bird	6/24/04	1100	3.0413927	0	0	0
95851	6-24-04-S0-1	S0	avian	Bird	6/24/04	1100	3.0413927	0	0	0
95852	6-24-04-S0-2	S0	sewage	Human	6/24/04	1480	3.1702617	0	0	0
95853	6-24-04-S0-2	S0	Unknown	Unknown	6/24/04	1480	3.1702617	0	0	0
95854	6-24-04-S0-2	S0	avian	Bird	6/24/04	1480	3.1702617	0	0	0
95855	6-24-04-S0-3	S0	avian	Bird	6/24/04	1420	3.1522883	0	0	0
95856	6-24-04-S0-3	S0	avian	Bird	6/24/04	1420	3.1522883	0	0	0
95857	6-24-04-S0-3	S0	sewage	Human	6/24/04	1420	3.1522883	0	0	0
97590	07-19-2004-S0-1	S0	avian	Bird	7/19/04	1720	3.2355284	0	0	0
97591	07-19-2004-S0-1	S0	Rodent	Rodent	7/19/04	1720	3.2355284	0	0	0
97592	07-19-2004-S0-1	S0	raccoon	Wildlife	7/19/04	1720	3.2355284	0	0	0
97593	07-19-2004-S0-2	S0	avian	Bird	7/19/04	1520	3.1818436	0	0	0
97594	07-19-2004-S0-2	S0	avian	Bird	7/19/04	1520	3.1818436	0	0	0
97595	07-19-2004-S0-2	S0	gull	Bird	7/19/04	1520	3.1818436	0	0	0
97596	07-19-2004-S0-3	S0	avian	Bird	7/19/04	1500	3.1760913	0	0	0
97597	07-19-2004-S0-3	S0	gull	Bird	7/19/04	1500	3.1760913	0	0	0
97598	07-19-2004-S0-3	S0	rodent	Rodent	7/19/04	1500	3.1760913	0	0	0

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
98789	8-02-04-S0-1	S0	gull	Bird	8/2/04	3080	3.4885507	0	0	0
98790	8-02-04-S0-1	S0	rodent	Rodent	8/2/04	3080	3.4885507	0	0	0
98791	8-02-04-S0-1	S0	gull	Bird	8/2/04	3080	3.4885507	0	0	0
98792	8-02-04-S0-2	S0	Unknown	Unknown	8/2/04	3440	3.5365584	0	0	0
98793	8-02-04-S0-2	S0	sewage	Human	8/2/04	3440	3.5365584	0	0	0
98794	8-02-04-S0-2	S0	Raccoon	Wildlife	8/2/04	3440	3.5365584	0	0	0
98795	8-02-04-S0-3	S0	gull	Bird	8/2/04	2980	3.4742163	0	0	0
98796	8-02-04-S0-3	S0	Unknown	Unknown	8/2/04	2980	3.4742163	0	0	0
98797	8-02-04-S0-3	S0	avian	Bird	8/2/04	2980	3.4742163	0	0	0
99830	8-18-04-S0-1	S0	rodent	Rodent	8/18/04	2700	3.4313638	0	0	0
99831	8-18-04-S0-1	S0	avian	Bird	8/18/04	2700	3.4313638	0	0	0
99832	8-18-04-S0-1	S0	gull	Bird	8/18/04	2700	3.4313638	0	0	0
99833	8-18-04-S0-2	S0	avian	Bird	8/18/04	2240	3.350248	0	0	0
99834	8-18-04-S0-2	S0	avian	Bird	8/18/04	2240	3.350248	0	0	0
99835	8-18-04-S0-2	S0	sewage	Human	8/18/04	2240	3.350248	0	0	0
99836	8-18-04-S0-3	S0	canine	Dog	8/18/04	2160	3.3344538	0	0	0
99837	8-18-04-S0-3	S0	dog	Dog	8/18/04	2160	3.3344538	0	0	0
99838	8-18-04-S0-3	S0	gull	Bird	8/18/04	2160	3.3344538	0	0	0
102084	SO-1	S0	raccoon	Wildlife	9/21/04	860	2.9344985	0	0.02	0.02
102085	SO-1	S0	dog	Dog	9/21/04	860	2.9344985	0	0.02	0.02
102086	SO-1	S0	dog	Dog	9/21/04	860	2.9344985	0	0.02	0.02
102087	SO-1	S0	Unknown	Unknown	9/21/04	860	2.9344985	0	0.02	0.02
102472	S0-2	S0	gull	Bird	9/21/04	720	2.8573325	0	0.02	0.02
102473	S0-2	S0	dog	Dog	9/21/04	720	2.8573325	0	0.02	0.02
102474	S0-2	S0	sewage	Human	9/21/04	720	2.8573325	0	0.02	0.02
102475	S0-3	S0	gull	Bird	9/21/04	840	2.9242793	0	0.02	0.02
102476	S0-3	S0	gull	Bird	9/21/04	840	2.9242793	0	0.02	0.02
102477	S0-3	S0	avian	Bird	9/21/04	840	2.9242793	0	0.02	0.02

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
106894	06-06-05-S04-1	S04	rac	Wildlife	6/6/05	230	2.361728	0	0	0
106895	06-06-05-S04-1	S04	gull	Bird	6/6/05	230	2.361728	0	0	0
106896	06-06-05-S04-1	S04	dog	Dog	6/6/05	230	2.361728	0	0	0
106897	06-06-05-S04-2	S04	dog	Dog	6/6/05	230	2.361728	0	0	0
106898	06-06-05-S04-2	S04	raccoon	Wildlife	6/6/05	230	2.361728	0	0	0
106899	06-06-05-S04-2	S04	avian	Bird	6/6/05	230	2.361728	0	0	0
106900	06-06-05-S04-3	S04	gull	Bird	6/6/05	230	2.361728	0	0	0
106901	06-06-05-S04-3	S04	gull	Bird	6/6/05	230	2.361728	0	0	0
106902	06-06-05-S04-3	S04	gull	Bird	6/6/05	230	2.361728	0	0	0
106903	06-06-05-S04-3	S04	dog	Dog	6/6/05	230	2.361728	0	0	0
108143	07-11-05-S04-1	S04	avian	Bird	7/11/05	420	2.623249	0	0	0
108144	07-11-05-S04-1	S04	raccoon	Wildlife	7/11/05	420	2.623249	0	0	0
108145	07-11-05-S04-1	S04	rac	Wildlife	7/11/05	420	2.623249	0	0	0
108146	07-11-05-S04-2	S04	avian	Bird	7/11/05	400	2.60206	0	0	0
108147	07-11-05-S04-2	S04	avian	Bird	7/11/05	400	2.60206	0	0	0
108148	07-11-05-S04-2	S04	gull	Bird	7/11/05	400	2.60206	0	0	0
108149	07-11-05-S04-3	S04	rac	Wildlife	7/11/05	460	2.662758	0	0	0
108150	07-11-05-S04-3	S04	rac	Wildlife	7/11/05	460	2.662758	0	0	0
108151	07-11-05-S04-3	S04	rac	Wildlife	7/11/05	460	2.662758	0	0	0
108432	080105-S04-1	S04	avian	Bird	8/1/05	1100	3.041393	0	0	0
108433	080405-S04-1	S04	avian	Bird	8/1/05	1100	3.041393	0	0	0
108434	080105-S04-1	S04	rac	Wildlife	8/1/05	1100	3.041393	0	0	0
108435	080105-S04-2	S04	avian	Bird	8/1/05	1100	3.041393	0	0	0
108436	080105-S04-2	S04	rac	Wildlife	8/1/05	1100	3.041393	0	0	0
108437	080105-S04-2	S04	raccoon	Wildlife	8/1/05	1100	3.041393	0	0	0
108438	080105-S04-3	S04	feline	Cat	8/1/05	1100	3.041393	0	0	0
108439	080105-S04-3	S04	rac	Wildlife	8/1/05	1100	3.041393	0	0	0
108440	080105-S04-3	S04	avian	Bird	8/1/05	1100	3.041393	0	0	0

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
108441	080105-S04-3	S04	avian	Bird	8/1/05	1100	3.041393	0	0	0
110452	092805-S04-1	S04	rodent	Rodent	9/28/05	420	2.623249	0	0	0
110453	092805-S04-1	S04	rac	Wildlife	9/28/05	420	2.623249	0	0	0
110454	092805-S04-1	S04	rodent	Rodent	9/28/05	420	2.623249	0	0	0
110455	092805-S04-2	S04	avian	Bird	9/28/05	420	2.623249	0	0	0
110456	092805-S04-2	S04	canine	Dog	9/28/05	420	2.623249	0	0	0
110457	092805-S04-2	S04	gull	Bird	9/28/05	420	2.623249	0	0	0
110458	092805-S04-3	S04	gull	Bird	9/28/05	420	2.623249	0	0	0
110459	092805-S04-3	S04	unknown	Unknown	9/28/05	420	2.623249	0	0	0
110460	092805-S04-3	S04	rac	Wildlife	9/28/05	420	2.623249	0	0	0
110461	092805-S04-3	S04	rac	Wildlife	9/28/05	420	2.623249	0	0	0
110695	102405-S04-1	S04	avian	Bird	10/24/05	280	2.447158	0	0	0.04
110696	102405-S04-1	S04	avian	Bird	10/24/05	280	2.447158	0	0	0.04
110697	102405-S04-1	S04	avian	Bird	10/24/05	280	2.447158	0	0	0.04
110698	102405-S04-2	S04	avian	Bird	10/24/05	280	2.447158	0	0	0.04
110699	102405-S04-2	S04	avian	Bird	10/24/05	280	2.447158	0	0	0.04
110700	102405-S04-2	S04	rac	Wildlife	10/24/05	280	2.447158	0	0	0.04
110701	102405-S04-2	S04	gull	Bird	10/24/05	280	2.447158	0	0	0.04
110702	102405-S04-3	S04	avian	Bird	10/24/05	300	2.477121	0	0	0.04
110703	102405-S04-3	S04	avian	Bird	10/24/05	300	2.477121	0	0	0.04
110704	102405-S04-3	S04	rac	Wildlife	10/24/05	300	2.477121	0	0	0.04
111069	111505-S04-1	S04	raccoon	Wildlife	11/15/05	800	2.90309	0	0	0.1
111070	111505-S04-1	S04	raccoon	Wildlife	11/15/05	800	2.90309	0	0	0.1
111071	111505-S04-1	S04	avian	Bird	11/15/05	800	2.90309	0	0	0.1
111072	111505-S04-2	S04	raccoon	Wildlife	11/15/05	550	2.740363	0	0	0.1
111073	111505-S04-2	S04	dog	Dog	11/15/05	550	2.740363	0	0	0.1
111074	111505-S04-2	S04	rodent	Rodent	11/15/05	550	2.740363	0	0	0.1
111075	111505-S04-3	S04	rac	Wildlife	11/15/05	350	2.544068	0	0	0.1

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
111076	111505-S04-3	S04	dog	Dog	11/15/05	350	2.544068	0	0	0.1
111077	111505-S04-3	S04	avian	Bird	11/15/05	350	2.544068	0	0	0.1
105194	02-17-05-S04-1	S04	avian	Bird	2/17/05	520	2.716003	1.38	3.42	4.7
105195	02-17-05-S04-1	S04	gull	Bird	2/17/05	520	2.716003	1.38	3.42	4.7
105196	02-17-05-S04-1	S04	avian	Bird	2/17/05	520	2.716003	1.38	3.42	4.7
105197	02-17-05-S04-2	S04	raccoon	Wildlife	2/17/05	520	2.716003	1.38	3.42	4.7
105198	02-17-05-S04-2	S04	feline	Cat	2/17/05	520	2.716003	1.38	3.42	4.7
105199	02-17-05-S04-2	S04	dog	Dog	2/17/05	520	2.716003	1.38	3.42	4.7
105200	02-17-05-S04-3	S04	rodent	Rodent	2/17/05	580	2.763428	1.38	3.42	4.7
105201	02-17-05-S04-3	S04	rodent	Rodent	2/17/05	580	2.763428	1.38	3.42	4.7
105202	02-17-05-S04-3	S04	feline	Cat	2/17/05	580	2.763428	1.38	3.42	4.7
105203	02-17-05-S04-3	S04	avian	Bird	2/17/05	580	2.763428	1.38	3.42	4.7
72437	S1	S1	unknown	Unknown	1/13/03	14200	4.152288	0	0	1.8
72438	S1	S1	human	Human	1/13/03	14200	4.152288	0	0	1.8
72439	S1	S1	human	Human	1/13/03	14200	4.152288	0	0	1.8
106904	06-06-05-S1-1	S1	raccoon	Wildlife	6/6/05	100	2	0	0	0
106905	06-06-05-S1-1	S1	avian	Bird	6/6/05	100	2	0	0	0
106906	06-06-05-S1-1	S1	avian	Bird	6/6/05	100	2	0	0	0
106907	06-06-05-S1-2	S1	avian	Bird	6/6/05	100	2	0	0	0
106908	06-06-05-S1-2	S1	avian	Bird	6/6/05	100	2	0	0	0
106909	06-06-05-S1-2	S1	avian	Bird	6/6/05	100	2	0	0	0
106910	06-06-05-S1-3	S1	avian	Bird	6/6/05	100	2	0	0	0
106911	06-06-05-S1-3	S1	deer	Wildlife	6/6/05	100	2	0	0	0
106912	06-06-05-S1-3	S1	unknown	Unknown	6/6/05	100	2	0	0	0
110705	102405-S1-1	S1	avian	Bird	10/24/05	660	2.819544	0	0	0.04
110706	102405-S1-1	S1	avian	Bird	10/24/05	660	2.819544	0	0	0.04
110707	102405-S1-1	S1	avian	Bird	10/24/05	660	2.819544	0	0	0.04
110708	102405-S1-2	S1	avian	Bird	10/24/05	660	2.819544	0	0	0.04



Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
110709	102405-S1-2	S1	avian	Bird	10/24/05	660	2.819544	0	0	0.04
110710	102405-S1-2	S1	avian	Bird	10/24/05	660	2.819544	0	0	0.04
110711	102405-S1-3	S1	avian	Bird	10/24/05	620	2.792392	0	0	0.04
110712	102405-S1-3	S1	avian	Bird	10/24/05	620	2.792392	0	0	0.04
110713	102405-S1-3	S1	avian	Bird	10/24/05	620	2.792392	0	0	0.04
111078	111505-S1-1	S1	rodent	Rodent	11/15/05	600	2.778151	0	0	0.1
111079	111505-S1-1	S1	gull	Bird	11/15/05	600	2.778151	0	0	0.1
111080	111505-S1-1	S1	rodent	Rodent	11/15/05	600	2.778151	0	0	0.1
111081	111505-S1-1	S1	rodent	Rodent	11/15/05	600	2.778151	0	0	0.1
111082	111505-S1-2	S1	gull	Bird	11/15/05	570	2.755875	0	0	0.1
111083	111505-S1-2	S1	gull	Bird	11/15/05	570	2.755875	0	0	0.1
111084	111505-S1-2	S1	gull	Bird	11/15/05	570	2.755875	0	0	0.1
111085	111505-S1-3	S1	rodent	Rodent	11/15/05	680	2.832509	0	0	0.1
111086	111505-S1-3	S1	rodent	Rodent	11/15/05	680	2.832509	0	0	0.1
111087	111505-S1-3	S1	gull	Bird	11/15/05	680	2.832509	0	0	0.1
104695	12-27-04-S1-1	S1	avian	Bird	12/27/04	15800	4.198657	1.92	3.85	3.85
104696	12-27-04-S1-1	S1	raccoon	Wildlife	12/27/04	15800	4.198657	1.92	3.85	3.85
104697	12-27-04-S1-1	S1	gull	Bird	12/27/04	15800	4.198657	1.92	3.85	3.85
104698	12-27-04-S1-2	S1	dog	Dog	12/27/04	16750	4.224015	1.92	3.85	3.85
104699	12-27-04-S1-2	S1	gull	Bird	12/27/04	16750	4.224015	1.92	3.85	3.85
104700	12-27-04-S1-2	S1	gull	Bird	12/27/04	16750	4.224015	1.92	3.85	3.85
104701	12-27-04-S1-2	S1	raccoon	Wildlife	12/27/04	16750	4.224015	1.92	3.85	3.85
104702	12-27-04-S1-3	S1	gull	Bird	12/27/04	19100	4.281033	1.92	3.85	3.85
104703	12-27-04-S1-3	S1	raccoon	Wildlife	12/27/04	19100	4.281033	1.92	3.85	3.85
104704	12-27-04-S1-3	S1	avian	Bird	12/27/04	19100	4.281033	1.92	3.85	3.85
105204	02-17-05-S1-1	S1	avian	Bird	2/17/05	2260	3.354108	1.38	3.42	4.7
105205	02-17-05-S1-1	S1	raccoon	Wildlife	2/17/05	2260	3.354108	1.38	3.42	4.7
105206	02-17-05-S1-1	S1	gull	Bird	2/17/05	2260	3.354108	1.38	3.42	4.7

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
105207	02-17-05-S1-2	S1	raccoon	Wildlife	2/17/05	1940	3.287802	1.38	3.42	4.7
105208	02-17-05-S1-2	S1	gull	Bird	2/17/05	1940	3.287802	1.38	3.42	4.7
105209	02-17-05-S1-2	S1	gull	Bird	2/17/05	1940	3.287802	1.38	3.42	4.7
105210	02-17-05-S1-3	S1	raccoon	Wildlife	2/17/05	2340	3.369216	1.38	3.42	4.7
105211	02-17-05-S1-3	S1	gull	Bird	2/17/05	2340	3.369216	1.38	3.42	4.7
105212	02-17-05-S1-3	S1	gull	Bird	2/17/05	2340	3.369216	1.38	3.42	4.7
108133	07-11-05-S11-1	S11D	rodent	Rodent	7/11/05	300	2.477121	0	0	0
108134	07-11-05-S11-1	S11D	raccoon	Wildlife	7/11/05	300	2.477121	0	0	0
108135	07-11-05-S11-1	S11D	dog	Dog	7/11/05	300	2.477121	0	0	0
108136	07-11-05-S11-2	S11D	raccoon	Wildlife	7/11/05	400	2.60206	0	0	0
108137	07-11-05-S11-2	S11D	gull	Bird	7/11/05	400	2.60206	0	0	0
108138	07-11-05-S11-2	S11D	dog	Dog	7/11/05	400	2.60206	0	0	0
108139	07-11-05-S11-3	S11D	sewage	Human	7/11/05	360	2.556303	0	0	0
108140	07-11-05-S11-3	S11D	raccoon	Wildlife	7/11/05	360	2.556303	0	0	0
108141	07-11-05-S11-3	S11D	raccoon	Wildlife	7/11/05	360	2.556303	0	0	0
108142	07-11-05-S11-3	S11D	avian	Bird	7/11/05	360	2.556303	0	0	0
108442	080105-S11-1	S11D	avian	Bird	8/1/05	800	2.90309	0	0	0
108443	080105-S11-1	S11D	avian	Bird	8/1/05	800	2.90309	0	0	0
108444	080105-S11-1	S11D	avian	Bird	8/1/05	800	2.90309	0	0	0
108445	080105-S11-2	S11D	rodent	Rodent	8/1/05	800	2.90309	0	0	0
108446	080105-S11-2	S11D	rodent	Rodent	8/1/05	800	2.90309	0	0	0
108447	080105-S11-2	S11D	canine	Dog	8/1/05	800	2.90309	0	0	0
108448	080105-S11-3	S11D	avian	Bird	8/1/05	800	2.90309	0	0	0
108449	080105-S11-3	S11D	avian	Bird	8/1/05	800	2.90309	0	0	0
108450	080105-S11-3	S11D	horse	Horse	8/1/05	800	2.90309	0	0	0
110462	092805-S11-1	S11D	dog	Dog	9/28/05	260	2.414973	0	0	0
110463	092805-S11-1	S11D	canine	Dog	9/28/05	260	2.414973	0	0	0
110464	092805-S11-1	S11D	avian	Bird	9/28/05	260	2.414973	0	0	0

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
110465	092805-S11-2	S11D	deer	Wildlife	9/28/05	260	2.414973	0	0	0
110466	092805-S11-2	S11D	raccoon	Wildlife	9/28/05	260	2.414973	0	0	0
110467	092805-S11-2	S11D	rodent	Rodent	9/28/05	260	2.414973	0	0	0
110468	092805-S11-3	S11D	avian	Bird	9/28/05	260	2.414973	0	0	0
110469	092805-S11-3	S11D	avian	Bird	9/28/05	260	2.414973	0	0	0
110470	092805-S11-3	S11D	dog	Dog	9/28/05	260	2.414973	0	0	0
87428	S23-1	S23	rodent	Rodent	1/21/04	50	1.69897	0	0	0
87429	S23-1	S23	sewage	Human	1/21/04	50	1.69897	0	0	0
87430	S23-1	S23	Unknown	Unknown	1/21/04	50	1.69897	0	0	0
87431	S23-2	S23	Unknown	Unknown	1/21/04	50	1.69897	0	0	0
87432	S23-2	S23	avian	Bird	1/21/04	50	1.69897	0	0	0
87433	S23-2	S23	rodent	Rodent	1/21/04	50	1.69897	0	0	0
87434	S23-3	S23	rodent	Rodent	1/21/04	30	1.4771213	0	0	0
87435	S23-3	S23	avian	Bird	1/21/04	30	1.4771213	0	0	0
87436	S23-3	S23	avian	Bird	1/21/04	30	1.4771213	0	0	0
89667	S23-1	S23	sewage	Human	3/9/04	10	1	0	0	0
89668	S23-1	S23	rodent	Rodent	3/9/04	10	1	0	0	0
89669	S23-2	S23	dog	Dog	3/9/04	20	1.30103	0	0	0
89670	S23-2	S23	sewage	Human	3/9/04	20	1.30103	0	0	0
90638	S23-1	S23	avian	Bird	3/23/04	3010	3.4785665	0	0	0
90639	S23-1	S23	canine	Dog	3/23/04	3010	3.4785665	0	0	0
90640	S23-1	S23	avian	Bird	3/23/04	3010	3.4785665	0	0	0
90641	S23-2	S23	avian	Bird	3/23/04	3200	3.50515	0	0	0
90642	S23-2	S23	Raccoon	Wildlife	3/23/04	3200	3.50515	0	0	0
90643	S23-2	S23	rodent	Rodent	3/23/04	3200	3.50515	0	0	0
90644	S23-3	S23	Raccoon	Wildlife	3/23/04	2970	3.4727564	0	0	0
90645	S23-3	S23	avian	Bird	3/23/04	2970	3.4727564	0	0	0
90646	S23-3	S23	avian	Bird	3/23/04	2970	3.4727564	0	0	0

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
93164	S23-1	S23	deer	Wildlife	5/18/04	210	2.3222193	0	0	0
93165	S23-1	S23	rodent	Rodent	5/18/04	210	2.3222193	0	0	0
93166	S23-1	S23	gull	Bird	5/18/04	210	2.3222193	0	0	0
93167	S23-2	S23	Unknown	Unknown	5/18/04	210	2.3222193	0	0	0
93168	S23-2	S23	sewage	Human	5/18/04	210	2.3222193	0	0	0
93169	S23-2	S23	avian	Bird	5/18/04	210	2.3222193	0	0	0
93170	S23-3	S23	avian	Bird	5/18/04	210	2.3222193	0	0	0
93171	S23-3	S23	avian	Bird	5/18/04	210	2.3222193	0	0	0
93172	S23-3	S23	avian	Bird	5/18/04	210	2.3222193	0	0	0
95474	6-15-04-S23-1	S23	avian	Bird	6/15/04	680	2.8325089	0	0	0
95475	6-15-04-S23-1	S23	raccoon	Wildlife	6/15/04	680	2.8325089	0	0	0
95476	6-15-04-S23-1	S23	feline	Cat	6/15/04	680	2.8325089	0	0	0
95477	6-15-04-S23-2	S23	human	Human	6/15/04	NO SAMPLE	#VALUE!	0	0	0
95478	6-15-04-S23-2	S23	human	Human	6/15/04	NO SAMPLE	#VALUE!	0	0	0
95479	6-15-04-S23-3	S23	avian	Bird	6/15/04	440	2.6434527	0	0	0
95563	6-16-04-S23-1	S23	dog	Dog	6/15/04	420	2.6232493	0	0	0
95564	6-16-04-S23-1	S23	avian	Bird	6/15/04	420	2.6232493	0	0	0
95565	6-16-04-S23-1	S23	gull	Bird	6/15/04	420	2.6232493	0	0	0
95566	6-16-04-S23-2	S23	avian	Bird	6/15/04	480	2.6812412	0	0	0
95567	6-16-04-S23-2	S23	avian	Bird	6/15/04	480	2.6812412	0	0	0
95568	6-16-04-S23-2	S23	avian	Bird	6/15/04	480	2.6812412	0	0	0
95569	6-16-04-S23-3	S23	avian	Bird	6/15/04	540	2.7323938	0	0	0
95570	6-16-04-S23-3	S23	rodent	Rodent	6/15/04	540	2.7323938	0	0	0
95571	6-16-04-S23-3	S23	avian	Bird	6/15/04	540	2.7323938	0	0	0
95824	6-24-04-S23-1	S23	gull	Bird	6/24/04	200	2.30103	0	0	0
95825	6-24-04-S23-1	S23	avian	Bird	6/24/04	200	2.30103	0	0	0
95826	6-24-04-S23-1	S23	gull	Bird	6/24/04	200	2.30103	0	0	0
95827	6-24-04-S23-2	S23	avian	Bird	6/24/04	150	2.1760913	0	0	0

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
95828	6-24-04-S23-2	S23	rodent	Rodent	6/24/04	150	2.1760913	0	0	0
95829	6-24-04-S23-2	S23	avian	Bird	6/24/04	150	2.1760913	0	0	0
97599	07-19-2004-S23-1	S23	avian	Bird	7/19/04	520	2.7160033	0	0	0
97600	07-19-2004-S23-1	S23	avian	Bird	7/19/04	520	2.7160033	0	0	0
97601	07-19-2004-S23-1	S23	avian	Bird	7/19/04	520	2.7160033	0	0	0
97602	07-19-2004-S23-1	S23	Unknown	Unknown	7/19/04	520	2.7160033	0	0	0
97603	07-19-2004-S23-2	S23	avian	Bird	7/19/04	520	2.7160033	0	0	0
97604	07-19-2004-S23-2	S23	avian	Bird	7/19/04	520	2.7160033	0	0	0
97605	07-19-2004-S23-2	S23	dog	Dog	7/19/04	520	2.7160033	0	0	0
97606	07-19-2004-S23-3	S23	avian	Bird	7/19/04	470	2.6720979	0	0	0
97607	07-19-2004-S23-3	S23	gull	Bird	7/19/04	470	2.6720979	0	0	0
97608	07-19-2004-S23-3	S23	avian	Bird	7/19/04	470	2.6720979	0	0	0
98808	8-02-04-S23-1	S23	avian	Bird	8/2/04	330	2.5185139	0	0	0
98809	8-02-04-S23-1	S23	avian	Bird	8/2/04	330	2.5185139	0	0	0
98810	8-02-04-S23-1	S23	avian	Bird	8/2/04	330	2.5185139	0	0	0
98811	8-02-04-S23-2	S23	avian	Bird	8/2/04	310	2.4913617	0	0	0
98812	8-02-04-S23-2	S23	avian	Bird	8/2/04	310	2.4913617	0	0	0
98813	8-02-04-S23-2	S23	avian	Bird	8/2/04	310	2.4913617	0	0	0
98814	8-02-04-S23-3	S23	Unknown	Unknown	8/2/04	390	2.5910646	0	0	0
98815	8-02-04-S23-3	S23	avian	Bird	8/2/04	390	2.5910646	0	0	0
98816	8-02-04-S23-3	S23	avian	Bird	8/2/04	390	2.5910646	0	0	0
99849	8-18-04-S23-1	S23	avian	Bird	8/18/04	40	1.60206	0	0	0
99850	8-18-04-S23-1	S23	Unknown	Unknown	8/18/04	40	1.60206	0	0	0
99851	8-18-04-S23-3	S23	gull	Bird	8/18/04	140	2.146128	0	0	0
99852	8-18-04-S23-3	S23	gull	Bird	8/18/04	140	2.146128	0	0	0
99853	8-18-04-S23-3	S23	canine	Dog	8/18/04	140	2.146128	0	0	0
106913	06-06-05-S23-1	S23	avian	Bird	6/6/05	220	2.342423	0	0	0
106914	06-06-05-S23-1	S23	avian	Bird	6/6/05	220	2.342423	0	0	0

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
106915	06-06-05-S23-1	S23	raccoon	Wildlife	6/6/05	220	2.342423	0	0	0
106916	06-06-05-S23-2	S23	sewage	Human	6/6/05	220	2.342423	0	0	0
106917	06-06-05-S23-2	S23	feline	Cat	6/6/05	220	2.342423	0	0	0
106918	06-06-05-S23-2	S23	avian	Bird	6/6/05	220	2.342423	0	0	0
106919	06-06-05-S23-3	S23	rodent	Rodent	6/6/05	220	2.342423	0	0	0
106920	06-06-05-S23-3	S23	avian	Bird	6/6/05	220	2.342423	0	0	0
106921	06-06-05-S23-3	S23	avian	Bird	6/6/05	220	2.342423	0	0	0
106922	06-06-05-S23-3	S23	rac	Wildlife	6/6/05	220	2.342423	0	0	0
108152	07-11-05-S23-1	S23	avian	Bird	7/11/05	80	1.90309	0	0	0
108153	07-11-05-S23-1	S23	rac	Wildlife	7/11/05	80	1.90309	0	0	0
108154	07-11-05-S23-1	S23	rodent	Rodent	7/11/05	80	1.90309	0	0	0
108155	07-11-05-S23-2	S23	gull	Bird	7/11/05	60	1.778151	0	0	0
108156	07-11-05-S23-3	S23	waterfowl	Bird	7/11/05	60	1.778151	0	0	0
108157	07-11-05-S23-3	S23	unknown	Unknown	7/11/05	60	1.778151	0	0	0
108451	080105-S23-1	S23	sewage	Human	8/1/05	240	2.380211	0	0	0
108452	080105-S23-1	S23	avian	Bird	8/1/05	240	2.380211	0	0	0
108453	080105-S23-1	S23	dog	Dog	8/1/05	240	2.380211	0	0	0
108454	080105-S23-2	S23	deer	Wildlife	8/1/05	240	2.380211	0	0	0
108455	080105-S23-2	S23	deer	Wildlife	8/1/05	240	2.380211	0	0	0
108456	080105-S23-2	S23	avian	Bird	8/1/05	240	2.380211	0	0	0
108457	080105-S23-3	S23	unknown	Unknown	8/1/05	240	2.380211	0	0	0
108458	080105-S23-3	S23	dog	Dog	8/1/05	240	2.380211	0	0	0
108459	080105-S23-3	S23	feline	Cat	8/1/05	240	2.380211	0	0	0
110471	092805-S23-1	S23	rodent	Rodent	9/28/05	130	2.113943	0	0	0
110472	092805-S23-1	S23	unknown	Unknown	9/28/05	130	2.113943	0	0	0
110473	092805-S23-1	S23	avian	Bird	9/28/05	130	2.113943	0	0	0
110474	092805-S23-2	S23	avian	Bird	9/28/05	130	2.113943	0	0	0
110475	092805-S23-2	S23	unknown	Unknown	9/28/05	130	2.113943	0	0	0

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
110476	092805-S23-2	S23	unknown	Unknown	9/28/05	130	2.113943	0	0	0
110477	092805-S23-3	S23	waterfowl	Bird	9/28/05	130	2.113943	0	0	0
110478	092805-S23-3	S23	rodent	Rodent	9/28/05	130	2.113943	0	0	0
110479	092805-S23-3	S23	dog	Dog	9/28/05	130	2.113943	0	0	0
110714	102405-S23-1	S23	gull	Bird	10/24/05	400	2.60206	0	0	0.04
110715	102405-S23-1	S23	canine	Dog	10/24/05	400	2.60206	0	0	0.04
110716	102405-S23-1	S23	avian	Bird	10/24/05	400	2.60206	0	0	0.04
110717	102405-S23-2	S23	rodent	Rodent	10/24/05	370	2.568202	0	0	0.04
110718	102405-S23-2	S23	canine	Dog	10/24/05	370	2.568202	0	0	0.04
110719	102405-S23-2	S23	dog	Dog	10/24/05	370	2.568202	0	0	0.04
110720	102405-S23-3	S23	gull	Bird	10/24/05	360	2.556303	0	0	0.04
110721	102405-S23-3	S23	gull	Bird	10/24/05	360	2.556303	0	0	0.04
110722	102405-S23-3	S23	avian	Bird	10/24/05	360	2.556303	0	0	0.04
110723	102405-S23-3	S23	rodent	Rodent	10/24/05	360	2.556303	0	0	0.04
111088	111505-S23-1	S23	canine	Dog	11/15/05	340	2.531479	0	0	0.1
111089	111505-S23-1	S23	rodent	Rodent	11/15/05	340	2.531479	0	0	0.1
111090	111505-S23-1	S23	avian	Bird	11/15/05	340	2.531479	0	0	0.1
111091	111505-S23-2	S23	avian	Bird	11/15/05	250	2.39794	0	0	0.1
111092	111505-S23-2	S23	rodent	Rodent	11/15/05	250	2.39794	0	0	0.1
111093	111505-S23-2	S23	rodent	Rodent	11/15/05	250	2.39794	0	0	0.1
111094	111505-S23-3	S23	opossum	Wildlife	11/15/05	450	2.653213	0	0	0.1
111095	111505-S23-3	S23	feline	Cat	11/15/05	450	2.653213	0	0	0.1
111096	111505-S23-3	S23	feline	Cat	11/15/05	450	2.653213	0	0	0.1
102112	S23-1	S23	rodent	Rodent	9/21/04	120	2.0791812	0	0.02	0.02
102113	S23-1	S23	gull	Bird	9/21/04	120	2.0791812	0	0.02	0.02
102114	S23-1	S23	avian	Bird	9/21/04	120	2.0791812	0	0.02	0.02
102115	S23-1	S23	Unknown	Unknown	9/21/04	120	2.0791812	0	0.02	0.02
102116	S23-1	S23	rodent	Rodent	9/21/04	120	2.0791812	0	0.02	0.02

Isolate	Provider Sample.	Stanum	Note	Source	Sample Date	FeColi	LogFC	RAIN-1	RAIN-3	RAIN-7
102478	S23-2	S23	human	Human	9/21/04	100	2	0	0.02	0.02
102479	S23-2	S23	raccoon	Wildlife	9/21/04	100	2	0	0.02	0.02
102480	S23-2	S23	Raccoon	Wildlife	9/21/04	100	2	0	0.02	0.02
102481	S23-2	S23	Raccoon	Wildlife	9/21/04	100	2	0	0.02	0.02
102482	S23-3	S23	gull	Bird	9/21/04	190	2.2787536	0	0.02	0.02
102483	S23-3	S23	gull	Bird	9/21/04	190	2.2787536	0	0.02	0.02
102484	S23-3	S23	gull	Bird	9/21/04	190	2.2787536	0	0.02	0.02
105213	02-17-05-S23-1	S23	unknown	Unknown	2/17/05	100	2	1.38	3.42	4.7
105214	02-17-05-S23-1	S23	horse	Horse	2/17/05	100	2	1.38	3.42	4.7
105215	02-17-05-S23-1	S23	avian	Bird	2/17/05	100	2	1.38	3.42	4.7
105216	02-17-05-S23-2	S23	rac	Wildlife	2/17/05	40	1.60206	1.38	3.42	4.7
105217	02-17-05-S23-2	S23	deer	Wildlife	2/17/05	40	1.60206	1.38	3.42	4.7
105218	02-17-05-S23-2	S23	unknown	Unknown	2/17/05	40	1.60206	1.38	3.42	4.7
105219	02-17-05-S23-3	S23	avian	Bird	2/17/05	80	1.90309	1.38	3.42	4.7
105220	02-17-05-S23-3	S23	dog	Dog	2/17/05	80	1.90309	1.38	3.42	4.7
105221	02-17-05-S23-3	S23	rodent	Rodent	2/17/05	80	1.90309	1.38	3.42	4.7
105222	02-17-05-S23-3	S23	rodent	Rodent	2/17/05	80	1.90309	1.38	3.42	4.7