

Pinedale Anticline Field Data 2000-2008

This report was prepared by Sublette County Conservation District. Telephone: (307)367-2257 Website: www.sublettecountycd.com Address: P.O. Box 36, Pinedale, WY 82941

Site Id	Sample Collection Date	Sample Collection Time	Personnel Present	Personnel Present	Photos	Weather	Dissolved Oxygen Meter	pH, Conductivity, Temperature Meter	Turbidity Meter	Flow Meter	Temperature (F)	Temperature (C)	pH	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Elevation used for DO meter	Turbidity (NTU)	Notes
NF1	5/1/2000	7:00 AM				sunshine, cool temperatures	YSI Probe	YSI Probe	None	Global Water Flow	39.55		7.15	0		74	8017		
NF1	7/24/2000	7:20 AM			23u;24d;25a;26sl	sunshine	YSI Probe	YSI Probe	None	Global Water Flow		17	6.61	0	7.25	75			photo 26sl stands for photo 26 stake location; air temperature 13.86
NF1	9/5/2000	6:55 AM				cool temperatures	YSI Probe	YSI Probe	None	Global Water Flow		15	6.70	0	9.87	97	7782		air temperature 52 degrees F; no flow taken
NF1	11/9/2000	9:40 AM			17u;18a;19d	cloudy, crisp air, 2 -3 inches of fresh snow	YSI Probe	YSI Probe	None			4	7.23	23	11.24	87	7857		saved as NF1A on GPS; no flow taken; Cnd (23.00 uS/cm) 0.024
NF1	3/28/2001	6:15 AM				snowing, overcast, cold	YSI Probe	YSI Probe	None			2	6.78	0	10.46	75			no flow taken
NF1	5/17/2001	7:25 AM			24u;25a;1d	partly cloudy	None	None	None										grab samples, no probes
NF1	6/25/2001	6:30 AM				partly cloudy to overcast rained twice day before pretty hard short rains	None	Hydac	None		61.2		6.68	37					high flow - too high for flow measurements; flow meter not necessarily working well last Thursday
NF1	9/17/2001	6:45 AM					None	Hydac	None		54.2		6.56	45					
NF1	10/29/2001	6:53 AM			11u;12a;13d	partly cloudy, sun came up just before sampling, a little crisp	YSI Probe	Hydac	None		50	7	7.34	42	9.16	75			no flow taken; YSI temperatures 6.83 degrees C and 44.3 degrees F
NF1	3/26/2002	11:45 AM			7u;8a;9d	mild, slight breeze, pt cloudy	YSI 55	Hydac	Turbidimeter		48	2	7.29		10.56	77			no flow taken - too much ice

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NF1	6/4/2002	8:10 AM			23u;24a;25d	clear and sunny	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter		48.3		7.43	44	8.04	69		0.00	turbidimeter: having trouble only reads zero at this site (water was clear not much suspended material visible); no flow taken, water too high
NF1	6/4/2002	2:45 PM			16u;17a;18&19d	overcast, north breezy	YSI 55	Hydac	Turbidimeter		59.7		7.66	209	7.04	68	6600		turbidimeter could use not working correctly
NF1	7/6/2002	6:32 AM			2u;3&4a;5d		YSI 55	Hydac	Turbidimeter		60.3		7.12	41	7.89	80	7812	0	no flow taken
NF1	10/14/2002	8:45 AM			18u;19a;20d	clear, cool	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter		44.5	8	7.70	42	8.78	75	7200	2.47	no flow taken
NF1	11/12/2002	7:30 AM			23u;24a;25d	crisp, partly cloudy, calm	YSI 55	Hydac	Turbidimeter		34.6	1	6.78	70	10.08	72			turbidity - no reading taken, not working; sampling upstream from site about 0.5 miles downstream from dam - too much snow to access other site
NF1	3/18/2003	8:15 AM	Kathy Raper	Charlie Raper			None	None	None	None									Did not sample. Could not reach site.
NF1	5/27/2003	12:30 PM			1u;2a;3d	Clear, breezy, warm	YSI 55	Hanna	Turbidimeter	None		12	8.00		10.04	94	7800	19.20	No flow taken. Hydac not working properly borrowed from WY Game & Fish Hanna pH Meter.
NF1	7/16/2003	8:45 AM	Kathy Raper		6u;7a;8d	Partly cloudy, no breeze, sunny very warm	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	None	64.9	15	7.29	46	7.55	76	7800	12.87	No flow taken because gauging station located on dam upstream.
NF1	9/3/2003	1:15 PM			10u;11&12a;13d	Warm/cool breeze, partly cloudy	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	None	66	18	8.00	41	6.41	67	7800	8.01	
NF1	11/3/2003	4:40 PM			11u;12a;13d	Cold, snowy, cloudy	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	Global Water Flow	43.6	7		46				0.42	Bald eagle fishing trout. No flow - guaging station upstream. 0.37, 0.41, 0.40, 0.35 ave. = 0.42 ntu

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NF1	3/30/2004	11:15 AM	Kathy Raper	Sunny Raper	7u;8a;9d	Warm temperatures, no clouds, very sunny.	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	43.8	4	7.31	72	7.92	60	7800	0.67	No flows taken - gaging station above site.
NF1	6/11/2004	9:00 AM	Kathy Raper	Kathleen Petersen	51u;52a;54d	Overcast with drizzel	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	50.6	11	7.11	40	4.38	39	7800	2.32	Approximately 4" of snow night before. No flows taken. High flow/spring runoff/gauging station upstream.
NF1	7/19/2004	9:15 AM	Kathy Raper	Charlotte Keyser	1u;2a;3d	Overcast, muggy, some evidence of rain.	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	60	16	7.19	42	5.57	57	7800	3.19	No flows taken due to gauging station upstream @ dam. Julian date: 201
NF1	9/13/2004	8:00 AM	Kathy Raper	Charlotte Keyser	16u;15a;14d	Cool, sunny to partly cloudy	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	45.8	12	7.51	43	6.28	59	7800	2.0	No flows taken because gauging station located usptream @ dam.
NF1	11/2/2004	3:45 PM	Kathy Raper	Charlotte Keyser	6u;7a;8d	Warmish cool, sunny, no breeze	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	40.9	5	7.39	65	7.53	59	7800	1.46	Update GPS point 12T 0583482 UTM 4770711 No flows taken. Julian date: 307
NF1	3/18/2005	8:45 AM	Kathy Raper	Heather Schmit	1u;2a;3d	4F clear, sunny and a few inches of fresh snow.	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	31.4	0	6.86	8	9.94	68	7800	0.25	Very thin ice with some open water. No flows taken.
NF1	6/2/2005	8:00 PM	Kathy Raper	Charlotte Keyser	21u;22a;23d	Cool, calm, overcast	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	44	6	6.89	40	12.7	102	7800	0.44	Highest water seen this time of year since SCCD started sampling at this site. River running @ bankfull. No flows taken.
NF1	7/25/2005	7:45 AM	Kathy Raper	Heather Cole	1u; 2a; 3d	partly cloudy, cool	YSI 55	Hydac	2100 Hach Turbidity	None	57.9	17	6.82	47	5.26	55	7800	2.01	no flows taken
NF1	9/26/2005	7:15 PM	Kathy Raper	Charlotte Keyser	62u; 63a; 64d	cool, crisp	YSI 55	Hydac	2100 Hach Turbidity	None	54.1	12	6.78	39	6.83	63	7800	2.34	no flows taken
NF1	11/7/2005	11:45 AM	Kathy Raper	Charlotte Keyser	16u; 17a; 18d	overcast, cool	YSI 55	Hydac	2100 Hach Turbidity	None	43.6	7	7.21	39	6.04	50	7800	0.82	no flows taken
NF1	5/2/2006	9:00 AM	Kathy Raper	Delsa Allen		hazey	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	41.9	6	6.25	39	7.54	58	7800	0.5	Deer urinated upstream; no flows taken

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NF1	5/31/2006	7:45 PM	Kathy Raper	Delsa Allen		clear	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	52.6	9	6.78	40	7.35	64	7800	1.85	no flows taken
NF1	7/19/2006	5:15 PM	Kathy Raper	Delsa Allen	1 up, 2 across, 1 down	mostly clear	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	71.7	20	7.50	40	5.91	65	7800	1.15	No flows taken due to gauging station upstream
NF1	9/13/2006	10:30 AM	Kathy Raper		1 up, 1 down, 1 across	warm, blue skies, no breeze	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None	58	14			5.74	56	7800	0.47	A hand-held thermometer was used to read F temperature; no flows taken; Oakton meter not working properly, no conductivity reading or pH; BTEX samples collected
NF1	11/1/2006	5:00 PM	Kathy Raper	Delsa Allen		clear	YSI 55	YSI 55 and Hanna	2100 Hach Turbidity	None		6	8.28	50	10.07	81	7500	1.15	no flows taken due to gauging station upstream; the YSI was used to take one C temperature reading (5.8) and the Hanna was used to take another reading (5.6), the average was entered into database
NF1	5/16/2007	10:00 AM	Delsa Allen	Isabel Rucker		sunny	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		7	6.83	37	3.5	28	7800	0.52	
NF1	7/23/2007	2:15 PM	Kathy Raper	Delsa Allen		partly cloudy	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		22	8.05	44	3.09	35	7500	0.45	
NF1	9/17/2007	1:45 PM	Kathy Raper	Delsa Allen		mostly clear	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		15	8.21	36	3.64	36	7800	0.62	
NF1	11/6/2007	2:00 PM	Kathy Raper	Delsa Allen		clear, slight breeze	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		6	7.04	48	6.59	53	7800	0.43	
NF19	7/25/2000	10:45 AM				warm temperatures	YSI Probe	YSI Probe	None	None		17	7.40	0	8.95	93			air temperature 16.90; no flow taken
NF19	9/13/2000	10:21 AM			10u;12a;11d	partly cloudy, slight breeze	YSI Probe	YSI Probe	None			13	7.80	0	11.91	113			no flow taken; air temperature 16. 14.63

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NF19	11/9/2000	11:45 AM				overcast skies	YSI Probe	YSI Probe	None		0		7.52	0	13.37	92	6911		no flow taken; Ena Olson Ranch - new sampling location
NF19	3/26/2001	6:53 AM			1u;2d;3a	cold, foggy	YSI Probe	YSI Probe	None		0		7.32	0	8.53	58			no flow taken due to ice cover
NF19	5/17/2001	12:00 PM			8u;9a;10d	mostly sunny	None	None	None										grab sample, no probes; pictures in different location due to high water
NF19	6/27/2001	11:45 AM				partly cloudy, with sun, very light breeze	None	Hydac	None		69.6		8.19	195					this site was actually labelled NF19A not NF19; water too high for flow
NF19	9/20/2001	1:10 PM					None	Hydac	None		70.1		8.38	210					no flow taken
NF19	10/31/2001	11:30 AM			19u;20a;21d	partly cloudy, very windy, fresh snow on mountains	None	Hydac	None		48.4		8.09	255					no flow taken; heavy rains night before sampling
NF19	4/1/2002	9:00 AM			24u; 25a;1d	some clouds, sunny, light breeze	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter		36.8	0	7.72	262	9.45	65			no flow taken, too much ice
NF19	6/4/2002	3:53 PM			20u;21a;22&23d		YSI 55	Hydac	Turbidimeter		62		7.19	109	8.67	83			turbidity: not working correctly, no reading; 353NF19 New Fork; no flow taken, water too high
NF19	7/8/2002	6:20 AM			10u;11a;12&13d	cool, slight breeze, clear skies	YSI 55	Hydac	Turbidimeter		63		7.40	194	6.86	72			turbidimeter does not work; no flow taken
NF19	10/15/2002	8:15 AM			12&13u;14a;15&16d	clear, cool, calm	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter		38.8	4	8.06	250	8.63	66	6800	2.40	temperature (3.51 C), DO (63.7%), DO (8.49 mg/L); no flow taken
NF19	11/13/2002	12:45 PM			23u;24&25a;1&2d	cool, overcast skies, calm	YSI 55	Hydac	Turbidimeter		38.9	2	7.92	252	11.08	82	6900		turbidity: not taken, equipment not working; no flows taken
NF19	3/21/2003	10:45 AM			1u;2a;3d	High scattered clouds, sharp, cold breeze.	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	None	39.9	0	7.20	258	11.71	81	6900	5.82	

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NF19	5/29/2003	2:30 PM			4u;5a;6d	Warm breeze, mostly scattered clouds, some rain to the north west.	YSI 55	Hanna	Turbidimeter	None		15	7.70		8.54	84	6900	65.71	No flow taken - high runoff. Hydac not working properly - borrowed Hanna pH meter from WY. Game & Fish Dept. Conductivity and temp (F) not recorded because Hydac not working properly.
NF19	7/14/2003	7:30 AM			1u;2a;3&4d	Clear skies, no clouds, smoky along mtns., no breeze	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	None	63.2	17	7.31	196	7.37	76	6900	13.65	No flow taken - H2O too high, used tube for turbidimeter, foam on the water. Took nitric sample with sulfuric bottle so had to take sample to office and preserve at office.
NF19	9/8/2003	6:45 PM			24&24u; 26a; 27&28d	Cool breeze, clear to partly cloudy	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	Global Water Flow	58.2	15	8.72	201	6.63	66	6900	20.37	No flow taken.
NF19	11/7/2003	3:30 PM			19u; 20a; 21&22 d	Sunny, crisp, clear, cold	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	38	0	7.51	276	6.76	48	6900	3.2	Turbidity readings: 3.18, 3.39, 3.15, 3.09 ave. = 3.20 No flow taken
NF19	3/16/2004	1:45 PM	Kathy Raper	Charlotte Keyser	4u;5a;6d	Warm, breezy, overcast/sunny	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	47.1	2	7.06	204	7.31	53	6900	3.46	The sample was collected downstream about 30'. The sample may not be of good quality due to lots of ice on stream and unable to reach running water. No flows taken.
NF19	6/11/2004	6:00 PM	Kathy Raper	Kathleen Petersen	64u;65a;66&67d	Mostly cloudy, breezy	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	53.1	12	7.24	84	6.15	56	6900		No flows taken. High water, spring runoff. Turbidity - Reading is a condition called "going blind". (See Hach manual pgs. 68 & 69). Could not obtain a turbidity reading.
NF19	7/22/2004	8:45 AM	Kathy Raper	Charlotte Keyser	48u;47a;49&50d	Cool, partly cloudy, breeze	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	64.4	17	7.72	188	7.15	75	6900	2.50	No flows taken because of high water and guaging station upstream. Julian date: 204
NF19	7/28/2004	1:00 PM	Kathy Raper	Charlotte Keyser	17u;18a;19d		None	None	None	None									No samples collected. Only pictures taken.

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NF19	9/14/2004	8:00 AM	Kathy Raper	Charlotte Keyser	1u;2a;3d	Warm, breezy, a few scattered clouds, evidence of heavy rain night before. Water is very turbid.	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	47.3	11	7.82	222	5.55	51	7000	9.87	Update the GPS point: 12T 0589555 UTM 4715735 Elev. 6943 No flows taken. Julian date: 258
NF19	11/8/2004	9:30 AM	Kathy Raper	Charlotte Keyser	1u;2a;3&4d	Cold, overcast	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	34.9	2	7.72	208	8.59	62	6900	2.68	No flows taken.
NF19	3/10/2005	11:00 AM	Kathy Raper	Heather Schmit	1u;2a; 3&4d	Partly cloudy & sunny, 35 F	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	45.6	2	7.33	759	6.46	46	6900	42.6	Used a hole dug in the ice about 15' from shore. Ice was 4" thick. Also used an ice pick. No flows taken.
NF19	6/2/2005	6:00 PM	Kathy Raper	Charlotte Keyser	20u;21a;22&23d	Cool, windy, overcast/sunny	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	55.2	11	7.32	101	11.38	103	6900	5.87	Highest water seen this time of year since SCCD started sampling at this site. No flows taken.
NF19	7/27/2005	1:15 PM	Kathy Raper	Charlotte Keyser	10u; 11a; 12,13d	cool breeze, clear	YSI 55	Hydac	2100 Hach Turbidity	None	69	19	7.88	180	6.55	71	6900	2.16	no flows taken, riffle totally submerged
NF19	9/30/2005	11:15 AM	Kathy Raper		30u; 31a; 32,32d	clear, warm, slight breeze, blue skies	YSI 55	Hydac	2100 Hach Turbidity	None	57.5	10	7.80	201	7.83	69	6900	1.58	no flows taken; BTEX samples collected
NF19	11/9/2005	4:00 PM	Kathy Raper	Charlotte Keyser	75u; 76a; 77,78d	clear, sunny, warm, slight breeze	YSI 55	Hydac	2100 Hach Turbidity	None	46.6	7	7.88	196	7.08	59	6900	2.2	no flows taken
NF19	3/14/2006	10:00 AM	Kathy Raper	Delsa Allen		Partly cloudy	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	35.1	0	6.71	177	7.93	55	6900	2.67	River not open yet (looks like it was open and then re-froze); took BTEX samples; no flows taken
NF19	5/31/2006	4:45 PM	Kathy Raper	Delsa Allen		clear	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	59.3	13	6.26	87	7.42	70	6900	6.2	no flows taken
NF19	7/21/2006	3:30 PM	Kathy Raper	Delsa Allen		clear	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	79.8	23	8.52	259	9.78	114	7000	1.68	Water is too high to do flows.

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Site Id	Sample Collection Date	Sample Collection Time	Personnel Present	Personnel Present	Photos	Weather	Dissolved Oxygen Meter	pH, Conductivity, Temperature Meter	Turbidity Meter	Flow Meter	Temperature (F)	Temperature (C)	pH	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Elevation used for DO meter	Turbidity (NTU)	Notes
NF19	9/13/2006	12:30 PM	Kathy Raper		1 up; 1 across; 1 down	warm, light breeze, blue skies with a few clouds	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None	64	16			6.84	69	6900	2.54	A hand-held thermometer was used to read F temperature; no flows taken; Oakton meter not working properly, no conductivity reading or pH; BTEX samples collected
NF19	11/8/2006	1:45 AM	Kathy Raper	Delsa Allen		mostly cloudy, windy	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		8	8.44	223	11.56	97	6900	14	no flows taken; winds has the water's surface very rough - probably making water more turbid; The YSI was used to take one C temperature reading (7.6) and the Oakton was used to take another reading (8.4), the average was entered into the database
NF19	3/19/2007	11:15 AM	Kathy Raper	Sno Ann Engler	1u; 2d; 2a	sunny blue skies	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		0	7.65	256	4.29	29	6900	14.8	Ice still quite overall downstream with chunks breaking up upstream
NF19	5/16/2007	1:00 PM	Delsa Allen	Isabel Rucker		clear, windy	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		11	6.82	51	3.7	34	6900	19.1	
NF19	7/30/2007	4:20 PM	Delsa Allen	Isabel Rucker		mostly cloudy	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		22	8.78	184	4.24	49	6900	3.30	began doing flows, but too windy, tape got ripped
NF19	9/27/2007	10:00 AM	Kathy Raper	Delsa Allen		mostly clear, slight chill in air	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		9	8.03	313	5.59	52	6900		took TPH and BTEX samples
NF19	11/6/2007	11:45 AM	Kathy Raper	Delsa Allen		clear	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		3	8.35	284	6.31	47	6900	1.78	Took TPH and BTEX samples
NF19	3/26/2008	12:05 PM	Kathy Raper	Meghann Durbrow	2u, 1a, 3d	very windy, sunny	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		0	6.92	197	8.71	60	6900	17.3	Took sample down stream from site due to ice conditions. Took BTEX. Temp C from Oakton 0.4 degrees. MD recorder
NF19	6/24/2008	7:30 PM	Kathy Raper		2u, 2a, 3d	Slight breeze, warm, sunny						16	7.44	91	5.78	58	6900	10	
NF19	8/25/2008	1:00 AM	Kathy Raper	Whitney Philpott	2u, 2d, 2a	sunny, warm						19	8.89	196	8.37	91	6900	1.07	

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NF19	10/1/2008	3:00 PM	Kathy Raper	Whitney Philpott	2u, 1a, 3d	Partly cloudy, warm, slight breeze						15	8.93	199	4.78	48	6900	2.17	Took Duplicates @ 3:10 PM BTEX, TPH, GRO, DRO	
NF19	11/11/2008	4:15 PM	Kathy Raper		2u, 2a, 3d	Cold, Windy, Overcast						4	8.48	139	9.04	69	6900	1.79	Took BTEX, GRO, DRO, and TPH Samples	
NF30	9/20/2001	12:10 PM					None	Hydac	None			65		8.45	190				no flow taken, tape not long enough	
NF30	10/31/2001	10:15 AM			18u;17a;16d	partly cloudy, breezy, slight chill	None	Hydac	None			49.3		8.29	235				no flow; BTEX sampled; heavy rains night before sampling	
NF30	4/1/2002	8:20 AM			21u;22a;23d	partly cloudy, slight cool breeze	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter			34.2	0	7.43	276	7.43	52		too much ice, no flow taken; moved downstream about 100 feet to take samples- point where ice could be broken	
NF30	7/8/2002	7:20 AM			14u;16a;15d	warmer, slight, breeze, clear	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter			62.2	17	7.36	146	8.11	85		turbidimeter does not work; no flow taken	
NF30	10/15/2002	9:45 AM			17u;18&19a;20d	clear, cool, clear	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter			39	4	8.18	239	4.42	7	6900	5.44	temperature (3.89 C), DO (8.99 mg/L), DO (68.4%); no flow taken
NF30	11/13/2002	11:45 AM			18u;19a;20d	cool, slight breeze, overcast skies	YSI 55	Hydac	Turbidimeter			38.5	2	7.89	201	11.35	84	6900		turbidity: no readings taken - equipment not working; flows taken
NF30	3/21/2003	1:30 PM			4u;5a;6d	Overcast skies, cold with brisk wind.	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	None		45.3	5	7.46	208	12	9	6900	5.64	
NF30	7/14/2003	9:45 AM			5u;6a;7d	Sunny, warm, clear	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	None		64.3	17	8.08	176	8.38	87	6900	77.01	No flows taked due to equipment problems, used tube for turbidimeter
NF30	9/10/2003	1:45 PM			8u;9a;10d	Cold, blowing wind, overcast & sprinkling	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	None		54.4	12	8.46	193	7.05	66	6900	0.96	

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NF30	11/7/2003	2:30 PM			16u; 17a; 18d	Cold, clear, slight breeze	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	35.2	1	7.61	249	7.3	51	6900	1.475	Turbidity readings: 1.55, 1.47, 1.45, 1.43 ave. = 1.475 No flow taken, too much ice
NF30	3/26/2004	12:30 PM	Kathy Raper	Charlotte Keyser	12u;13a;14d	Cold, windy, overcast	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	41	5	7.83	243	7.71	60	6900	7.83	Tried to sample on 3/16/04. KR dug three 1' holes in the ice. No water so no water samples taken. Returned to site 3/26/04. Early stages of spring runoff. No flows taken. Lost a bottle at this site in river.
NF30	7/22/2004	10:30 AM	Kathy Raper	Charlotte Keyser	51u;52a;53d	Warm, breezy, partly cloudy/sunny	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	64.3	18	8.03	160	7.72	80	6900	1.83	No flows taken because of high water. Highest water ever seen this time of year since SCCD started sampling at this site. Julian date: 204
NF30	9/14/2004	10:00 AM	Kathy Raper	Charlotte Keyser	4u;5a;6d	Cool, windy, sunny, partly cloudy. Evidence of rain night before - water is very turbid.	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	50.2	11	8.20	175	6.69	61	6900	7.33	Update GPS point: 12T 0594888 UTM 4721939 No flows taken. Julian date: 258
NF30	11/8/2004	10:45 AM	Kathy Raper	Charlotte Keyser	5u;6a;7d	Cold, overcast	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	35.2	2	7.94	152	8.86	64	6900	2.68	No flows taken.
NF30	3/10/2005	12:45 PM	Kathy Raper	Heather Schmit	5u;6a;7d	Clear, sunny & windy	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	35.3	1	7.67	104	10.02	70	6900		Mostly rotten brown ice with open spots. Evidence of runoff * after resetting range reading on HACH turbidity meter, meter flashed 1000. Unable to take turbidity reading. No flows taken.
NF30	7/27/2005	2:00 PM	Kathy Raper	Charlotte Keyser	14u; 15a; 16d	cool breeze, clear with a few clouds, sunny	YSI 55	Hydac	2100 Hach Turbidity	None	71.7	20	8.20	169	6.88	75	6900	2.27	no flows taken
NF30	9/30/2005	1:15 PM	Kathy Raper		34u; 35a; 36d	a few clouds, warm, slight breeze	YSI 55	Hydac	2100 Hach Turbidity	None	63.1	13	8.11	176	8.77	82	6900	1.47	no flows taken; BTEX samples collected; replicate samples collected 1:30 PM; 273NF30NewForkKRD
NF30	11/9/2005	5:00 PM	Kathy Raper	Charlotte Keyser	78u; 79a; 80d	cool, clear with a few clouds, calm	YSI 55	Hydac	2100 Hach Turbidity	None	45.8	7	7.67	191	7.08	58	6900	2.0	no flows taken

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NF30	3/14/2006	11:45 AM	Kathy Raper	Delsa Allen		Partly cloudy	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	41.7	0	6.92	161	7.72	53	6900	2.72	River not open, completely covered with snow; had to punch through 1 ft of ice; took BTEX samples; no flows taken
NF30	7/21/2006	2:45 PM	Kathy Raper	Delsa Allen		clear, hot	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	76.1	22	8.17	189	8.4	97	7100	1.79	Took TPH samples as well; no flows taken
NF30	9/13/2006	2:30 PM	Kathy Raper			very warm, slight breeze, blue skies with a few clouds, -breeze turned into strong wind	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None	66	20	8.98		7.66	84	6900	2.24	Four moose crossed upstream about 50' from sampling site: 2 cows, 1 calf, and 1 small bull prior to sampling. BTEX samples collected; hand held thermometer used for F temperature reading; no flows taken. Oakton meter not working properly, no conductivity reading was taken.
NF30	11/9/2006	9:15 AM	Kathy Raper	Delsa Allen		overcast, starting to snow	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		6	8.16	199	11.01	88	6900	2.41	no flows taken. The YSI was used to take one C temperature reading (5.6) and the Oakton was used to take another reading (6.5), the average was entered into the database
NF30	3/19/2007	9:45 AM	Kathy Raper	Sno Ann Engler	1u; 1d; 1a	Sunny blue skies	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		0	7.41	255	4.5	30	7000	8.34	Moved approximately 100' downstream to pull samples due to ice problems. A few open runs, remainder is blocky, slushy, iced over spots. Took BTEX and TPH
NF30	7/26/2007	3:40 PM	Delsa Allen	Isabel Rucker		cloudy, thundering	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		21	8.63	169	4.25	48	6900	3.91	Flows not taken, too windy and about to storm at time of sample.
NF30	9/27/2007	11:00 AM	Kathy Raper	Delsa Allen		mostly clear, slight cool breeze	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		10	7.93	301	5.51	48	6900		took TPH and BTEX samples
NF30	11/6/2007	11:00 AM	Kathy Raper	Delsa Allen		clear, slight breeze	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		3	8.35	194	6.97	52	6900	3.17	TPH and BTEX samples taken
NF30	8/5/2008	5:00 PM	Kathy Raper	Whitney Philpott	1u, 1a, 1d	Overcast, Warm wind						20	8.80	150	6.71	73	6900	2.01	Took BTEX, TPH, DRO, GRO

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NF30	10/1/2008	2:30 PM	Kathy Raper	Whitney Philpott	1u, 1a, 1d	Partly cloudy, windy						15	9.02	169	5.33	53	6900	2.25	Took BTEX, TPH, GRO, DRO Samples
NF30	11/12/2008	12:00 PM	Kathy Raper		1u, 2a, 1d	Overcast, Windy, Cool						5	8.38	176	9.11	71	6900	2.22	Duplicate samples collected at 12:15 PM Took duplicate meter readings Took BTEX, GRO, DRO, TPH samples
NF4	5/1/2000	10:17 AM				sunshine, cool temperature	YSI Probe	YSI Probe	None	Global Water Flow	47.35		8.01	0		87	7226		
NF4	7/24/2000	12:45 PM			6u;8a;7d;9s	sunshine	YSI Probe	YSI Probe	None	Global Water Flow		16	8.30	0	9.48	96			Photos - 9s means that Photo 9 was taken at the stake; air temperature 14.70
NF4	9/5/2000	9:20 AM				warm, slight breeze	YSI Probe	YSI Probe	None	Global Water Flow		10	7.82	0	10.37	92			air 62 degrees F; no flow taken
NF4	11/6/2000	12:00 PM			3	partly cloudy, sunny, chilly	YSI Probe	YSI Probe	None	Global Water Flow		0	7.63	0	11.09	76	7206		air temp 19 degrees
NF4	3/27/2001	11:19 AM			19u;20a;21d	sunny, cool, breezy	YSI Probe	YSI Probe	None			1	7.05	0	9.65	68			no flow, to high
NF4	5/17/2001	5:30 AM				partially cloudy to overcast	None	None	None										grab sample, no probe; to dark to take pictures
NF4	6/25/2001	10:15 AM				some clouds, sunny, stronger breeze than other sites	None	Hydac	None		63.9		7.96	339					slightly turbid, rain the day before; when taking flow there was a rock at 21.0
NF4	9/17/2001	11:45 AM					None	Hydac	None		52.2		7.81	401					flow taken 250-300 feet from regular sampling site due to low flow; when taking flow there was a rock at 15.0 feet
NF4	10/29/2001	9:00 AM			20u;21a;22d	overcast skies, slight breeze	YSI Probe	Hydac	None		43.8		8.16	431					evidence of beaver downstream, stream backed up to the county bridge; DO meter would not work; no flow taken

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NF4	3/28/2002	11:30 AM			9u;10a;11d	partly cloudy, cold wind	YSI 55	Hydac	Turbidimeter		39.5	0	7.37	5	9.32	65			beaver dam present downstream from sampling site; water some what turbid; flow not taken - too much ice
NF4	6/4/2002	5:25 AM			24u;25a;1d		YSI 55	Hydac	Turbidimeter		62.7		8.11	288	8.03	81			turbidity: not working correctly, no reading; no flow taken, water too high
NF4	7/6/2002	10:30 AM			15u;16&17a;18d	warm day, slight breeze, a few clouds	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter		62.8	16	7.99	4	9.99	102			flow was taken by interval not distance, therefore interval was entered in to the distance field; when taking flow there was a rock at depth at interval 26; EW was 0.5 feet and 38.2
NF4	10/16/2002	10:45 AM			3u;4a;5d	slight overcast, breeze, cool	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	Global Water Flow	40.4	4	8.03	417	8.84	68	7200	0.56	temperature (3.45 C), DO (67%), DO (8.9 mg/L), pH (8.21); bank full width greater than 40 feet, bank full depth 2.9; flow was taken by interval not distance, therefore intervals are entered in the distance field; when taking flow there were rocks at 14, 26, 29, and 35; tree at 33
NF4	11/12/2002	11:00 AM			7u;8a;9d	overcast, breezy, slight breezy	YSI 55	Hydac	Turbidimeter		35.5	1	8.09	274	10.2	72			no flow taken
NF4	3/20/2003	8:15 AM			21u;22a;23d	Very foggy, cool temps.	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	None	38.1	0	7.63	316	10.82	74	7200		Very dark color to water. Snowed last night 1" - 2".
NF4	7/16/2003	5:30 PM			28u;29a;30&31d	Overcast skies, muggy, strong winds	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	None	68	18	8.44	345	7.36	79	7200	9.09	No flow taken, equipment not working.
NF4	9/4/2003	10:30 AM			31u;32a;33d	Warm, few clouds, no breeze	YSI 55	YSI 55 (C) and Hydac (F)	Turbidimeter	Global Water Flow	58.5	14	8.11	418	7.03	68	7200	18.39	Wetted width 36.5' Bank full width 40'+ Aquatic plants at 10', rock at 29'
NF4	11/12/2003	3:30 PM			12u; 13a; 14d	Clear	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	41.1	1	7.71	363	10.86	76	7200	2.52	Turbidity readings: 2.50, 2.45, 2.52, 2.60 ave. = 2.52 No flows taken

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Site Id	Sample Collection Date	Sample Collection Time	Personnel Present	Personnel Present	Photos	Weather	Dissolved Oxygen Meter	pH, Conductivity, Temperature Meter	Turbidity Meter	Flow Meter	Temperature (F)	Temperature (C)	pH	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Elevation used for DO meter	Turbidity (NTU)	Notes
NF4	3/16/2004	8:15 AM	Kathy Raper	Charlotte Keyser	1u;2a;3d	Cool, overcast, breezy	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	35.3	0	7.59	460	11.68	81	7200	2.4	Took samples downstream of sampling site about 50' due to too much ice. No flows taken.
NF4	7/19/2004	7:00 PM	Kathy Raper	Charlotte Keyser	19a;20a;21d	Warm, breezy, sunny	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	Marsh McBirney	70.3	22	8.11	364	7.03	80	7200	2.62	Highest water ever seen this time of year since SCCD started sampling at this site. Bankfull width 43', wetted width 37.5'. Julian date: 201
NF4	9/17/2004	11:00 AM	Kathy Raper	Charlotte Keyser	24u,25a,26d	Warm, clear, slight breeze	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	Marsh McBirney	50.6	9	8.31	402	6.45	56	7200	1.16	Update GPS point 12T 0592867 UTM 4743370 Julian date: 261 Bnkfull width 57', wetted width 43', maxium bankfull depth 36' @ 2'9" on the transect, flood prone width 200'+ Rocks located at distances 24 & 32 on transect, large boulders upstream of distances 38 & 40 on transect
NF4	11/3/2004	3:45 PM	Kathy Raper	Charlotte Keyser	14u;15a;16d	Cool, overcast, calm	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	42.5	5	8.12	409	8.33	65	7200	2.26	No flows taken. Julian date: 308
NF4	3/10/2005	3:00 PM	Kathy Raper	Heather Schmit	8u;9a;10d	Clear & sunny, slight breeze.	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	35.8	0	7.97	333	11.23	77	7200	3.11	Sampled through a hole in the ice about 40' downstream of bridge. 25' upstream from regular sample location due to ice. Ice is about 5" thick. No flows taken.
NF4	7/27/2005	7:30 AM	Kathy Raper	Charlotte Keyser	1u; 2a; 3d	cool, sunny, breezy	YSI 55	Hydac	2100 Hach Turbidity	Marsh McBirney	54.4	12	7.55	325	6.03	56	7200	2.19	took flows downstream approx 75' - water not as swift; EW1.4 EW59.2; distance 39 rock
NF4	9/29/2005	11:00 AM	Kathy Raper	Charlotte Keyser	7u; 8a; 9d	warm, slight breeze, sunny and clear	YSI 55	Hydac	2100 Hach Turbidity	Marsh McBirney	49.4	7	7.97	404	8.52	70	7200	1.14	mid channel bar above sampling site below county bridge; took BTEX water samples; EW2.9 EW37.9; distances, 30 and 37 the presence of a rock effected depth
NF4	11/14/2005	10:30 AM	Kathy Raper		4u; 5a; 6d	very windy, cold, overcast skies, blowing snow	YSI 55	Hydac	2100 Hach Turbidity	None	36.2	1	7.72	377	7.35	52	7200	1.5	2" of fresh snow; no flows taken

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NF4	3/13/2006	8:00 AM	Kathy Raper	Delsa Allen		Mostly clear; very cold	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	40.5	0	7.12	341	10.03	68	7200	2.7	No flows taken; took BTEX samples; took samples downstream approx. 50 ft where an opening in the ice was found
NF4	7/21/2006	7:30 AM	Kathy Raper	Delsa Allen	1 up, 2 across, 2 down	clear	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	Marsh McBirney	57.7	14	7.48	343	5.9	58	7200	1.33	Took duplicates at 8:00 AM. Rooted macrophytes throughout stream effecting flow readings. Maximum bankfull width is about 1/4 mile. EW1.9 and EW40.1
NF4	9/15/2006	5:15 PM	Kathy Raper	Delsa Allen		raining very hard, strong wind, cold, overcast	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	Marsh McBirney	50	10	8.36		7.4	66	7200	1.55	F temperature was taken with hand held thermometer; Conductivity probe on the Oakton meter does not seem to be working properly, C temperature reding doesn't seem right either.; Bankfull width is about 1/2 a mile. EW1.6 and EW40
NF4	11/3/2006	4:45 PM	Kathy Raper			overcast skies, cold, medium breeze	YSI 55	see notes	2100 Hach Turbidity	None		5	8.49	398	11.35	88	7200	1.71	no flows taken; The Hanna was used for pH, Oakton for conductivity, The YSI was used to take one C temperature reading (4.6) and the Oakton was used to take another reading (4.5), the average of the two being used for database
NF4	2/27/2007	1:45 PM	Kathy Raper	Delsa Allen		overcast, was snowing prior to sampling	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		0	7.30	536	9.16	62	7200	2.53	
NF4	8/2/2007	11:00 AM	Kathy Raper	Delsa Allen			YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	Marsh McBirney		14	8.06	502	4.2	40	7200	1.51	EW 5.8' EW 39.0'
NF4	9/19/2007	3:00 PM	Kathy Raper	Delsa Allen		clear, breezy	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None		14	8.60	499	5.52	54	7200		

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NF4	11/1/2007	3:00 PM	Kathy Raper	Delsa Allen		cloudy, breezy	None	Oakton	2100 Hach Turbidity	None			8.43	588				1.25	We took samples this day after being contacted by a private citizen who had heard that a land owner upstream of this site approximately 1 to 2 miles had noticed a smell like produced water in the river 4 to 6 days earlier. While sampling, we heard a fish jump just below stream of us.
NF4	11/6/2007	3:15 PM	Kathy Raper	Delsa Allen		clear	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None	6		8.09	575	7.01	56	7200	2.03	
NF4	3/3/2008	3:00 PM	Kathy Raper	Meghann Durbrow	1 up, 1 across, 2 down	partly cloudy, sunny slight breeze	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None	1		7.79	400	9.82	69	7200	4.04	River looked turbid at bridge. Used both sets of instruments. No flow taken
NF4	8/6/2008	5:30 PM	Kathy Raper	Whitney Philpott		Cloudy, windy					19		8.69	259	5.98	64	7200	8.71	Water is very turbid Water tank 20 ft off the ground, possibility of Back flow, 4 inch hose, see pictures Western States Tank 1-877-860-4287 Took BTEX, TPH, DRO, GRO Max. Bankfull Depth: 2.5 @ 18ft on tape EW @ 3.0 and 38.4
NF4	9/26/2008	4:00 PM	Kathy Raper		1u, 1a, 1d	Blue skies, windy, smokey					14		8.69	326	6.44	63	7200	3.81	Water in-take hose and tank just upstream have been removed. TPH, GRO,DRO, BTEX Samples Collected
NF4	11/24/2008	11:30 PM	Kathy Raper			Mostly sunny, cold, slight breeze					0		8.04	401	8.58	59	7200	2.56	
NF40	7/21/2006	2:00 PM	Kathy Raper	Delsa Allen		clear, hot	YSI 55	YSI 55 (C) and Hydac (F)	2100 Hach Turbidity	None	76.7	21	7.94	123	7.19	81	7100	1.6	Took TPH samples as well; no flows taken
NF40	7/26/2007	3:00 PM	Delsa Allen	Isabel Rucker		cloudy, windy	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None	20		8.53	165	46.5	4	6900	2.57	

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NF40	9/27/2007	12:00 PM	Kathy Raper	Delsa Allen		some clouds, slight breeze	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None	8		8.07	198	5.54	47	6900		took TPH and BTEX samples
NF40	11/6/2007	10:00 AM	Kathy Raper	Delsa Allen		clear	YSI 55	YSI 55 and Oakton	2100 Hach Turbidity	None	1		7.28	178	7.31	52	6900	1.78	
NF40	8/5/2008	4:00 PM	Kathy Raper	Whitney Philpott	1u, 1a, 1d	Cloudy, breezy, warm					20		8.58	155	4.17	46	6900	2.44	Took BTEX, TPH, DRO, GRO
NF40	10/1/2008	1:45 PM	Kathy Raper	Whitney Philpott	Yes						14		8.93	180	4.79	47	6900	2.07	
NF40	11/12/2008	1:30 PM	Kathy Raper		1u, 2a, 2d	Overcast, Cold, VERY Windy					4		8.36	161	68.7	9	6900	1.73	Took BTEX, GRO, DRO, AND TPH samples