2005 Water Resources Baseline Data

TABLE A-1
2005 SUMMARY OF SURFACE WATER DATA
FIELD MEASUREMENTS AND PHYSICAL PARAMETERS
PANELS F AND G

Site		Sample Date	Flow (cfs)	Temp. (C)	Field pH	Lab pH	Field Conductivity (umhos/cm)	Lab Conductivity (umhos/cm)	Field ORP (mV)	Field DO (mg/L)	Field Turbidity (NTU)	Lab Turbidity (NTU)	Total Dis-solved Solids (mg/L)	Total Sus-pended Solids (mg/L)
IDAHO DEQ Standards**				22	6.5 - 9.0	6.5 - 9.0	NE	NE	NE	6.0	50	50	NE	NE
CROW CREEK														
SW-CC-100	N	10/17/2005	11.55	10.9	10.21	8.44	385	463	--	10.36	--	H 1.88	240	<5
SW-CC-300	N	5/25/2005	76.05	12.6	7.71	8.38	490	450	267	12.6	9.86	He% 1.77	H 273	He 24
SW-CC-300	N	10/17/2005	20.82	12.5	10.31	8.66	386	403	--	11.84	--	H 0.623	207	7
CC-2	N	10/19/2005	19.98	8.3	8.04	8.43	443	584	--	11.26	--	H 1.03	303	5
SW-CC-500	N	10/19/2005	38.14	9.5	8.11	8.51	388	510	--	11.7	--	H 0.755	300	<5
SP-RIEDE	N	10/18/2005	No Flow	9.9	7.4	7.49	354	463	--	7.11	--	H 0.918	264	<5
SP-BOOKS	N	5/25/2005	1.93	12.7	7.66	8.01	500	451	265	14	0.65	He% 0.443	H 369	H <5
SP-BOOKS	N	10/18/2005	3.11	12.4	7.55	8.02	343	434	--	11.31	--	H 0.294	258	<5
SOUTH FORK SAGE CREEK														
SW-SFSC-500	N	10/19/2005	0.163	6	6.75	7.98	270	347	--	9.36	--	H 0.105	205	<5
SW-SFSC-800	N	10/19/2005	5.9	11.7	7.59	8.1	298	396	--	9.02	--	H 0.537	228	9
LSV-4	N	10/17/2005	15.11	14.1	9.5	8.54	294	377	--	10.43	--	H 0.724	219	<5
SP-SFSC-750	N	5/25/2005	13.37	10.7	7.63	8.14	330	307	237	11.2	10.5	He% 10.5	H 195	He 25
SP-UTSC-850	N	5/25/2005	0.003	19.1	7.58	7.98	460	421	43	9.6	4.05	He% 12.8	H 293	He 97
MANNING CREEK														
SP-MC-300	N	5/26/2005	0.15	6.1	7.86	7.79	470	183	285	11.1	0.64	He% 0.174	e% 98	<5
DEER CREEK														
SW-DC-500	N	5/24/2005	35.77	8.8	6.05	8.29	320	303	234	12.1	12.7	H 3.19	170	27
SW-DC-500	N	10/18/2005	0.282	5	7.74	8.39	300	390	--	11.02	--	H 0.759	237	<5
SW-DC-800	N	5/25/2005	34.35	8.4	7.69	8.2	350	312	265	13	10.2	He% 6.33	H 187	He 21
SP-DC-350	N	5/24/2005	1.03	5.8	7.31	7.87	280	263	283	12.1	1.56	0.922	147	<5
SP-UTDC-700	N	5/24/2005	0.006	8.5	7.36	8.32	160	140	279	10.6	2.85	0.627	89	<5
SP-UTDC-700	S	5/24/2005	0.006	8.5	7.36	7.94	160	144	279	10.6	2.85	0.93	45	<2
SP-UTDC-800	N	5/24/2005	0.72	3.6	7.42	7.48	240	212	272	13.1	1.04	1.39	140	<5
SP-UTDC-800	S	5/24/2005	0.72	3.6	7.42	7.72	240	220	272	13.01	1.04	3.4	80	3.2
NORTH FORK DEER CREEK														
SW-NFDC-200	N	10/18/2005	0.004	6.3	8.04	8.16	323	438	--	12.75	--	H 38.6	234	81
SW-NFDC-500	N	5/24/2005	4.81	13	7.31	8.35	400	365	239	10.4	3.51	0.691	207	6
SW-NFDC-900	N	5/24/2005	5.53	10.7	6.65	8.32	410	379	226	11.2	3.96	H 0.675	209	<5
SW-NFDC-900	N	10/18/2005	0.279	5.4	7.54	8.15	307	410	--	10.34	--	H 0.8	232	<5
SW-UTNFDC-800	N	5/24/2005	0.135	9.7	7.45	7.84	360	326	248	11.1	1.21	H 0.131	166	<5
SP-UTNFDC-400	N	5/26/2005	0.009	4.3	8.35	7.91	210	407	280	11.8	2.96	He% 2.46	e% 92	<5
SP-UTNFDC-540	S	5/24/2005	1.45	9	7.21	8.33	460	439	245	10.6	0.99	0.76	200	3.4

TABLE A-1
2005 SUMMARY OF SURFACE WATER DATA
FIELD MEASUREMENTS AND PHYSICAL PARAMETERS
PANELS F AND G

Site	Sample Date	Flow (cfs)	Temp. (C)	Field pH	Lab pH	Field Conductivity (umhos/cm)	Lab Conductivity (umhos/cm)	Field ORP (mV)	Field DO (mg/L)	Field Turbidity (NTU)	Lab Turbidity (NTU)	Total Dis-solved Solids (mg/L)	Total Sus-pended Solids (mg/L)
IDAHO DEQ Standards**			22	6.5 - 9.0	6.5 - 9.0	NE	NE	NE	6.0	50	50	NE	NE
SP-UTNFDC-540 N	5/24/2005	1.45	9	7.21	7.55	460	417	245	10.6	0.99	H 0.255	230	<5
SP-UTNFDC-540 N	10/18/2005	0.1	9.7	8.05	8.44	290	430	--	9.62	--	H 0.117	255	<5
SOUTH FORK DEER CREEK													
SP-UTSFDC-500 N	5/25/2005	0.031	2.8	7.5	7.3	160	133	301	11.6	3.61	He% 3.07	H 120	H <5
WELLS CANYON													
SW-WC-800 N	5/25/2005	0.27	8.6	7.68	8.39	400	360	268	12.1	5.55	He% 3.69	H 215	He 13
SW-WC-800 N	10/18/2005	0.177	9.6	8.05	8.31	276	370	--	8.87	--	H 0.394	211	<5
SP-UTWC-300 N	5/25/2005	0.0018	12.5	7.42	7.06	50	38	284	8.7	9.16	He% 5.9	H 91	H <5
SP-WC-400 N	5/25/2005	0.192	7.3	7.35	8	310	275	230	11.8	3.16	He% 1.38	195	<5
SP-WC-400 N	10/18/2005	0.007	9	7.73	8.04	271	362	--	8.23	--	H 1.79	216	9
SP-WC-750 N	10/18/2005	0.032	8	7.36	7.71	269	302	--	7.24	--	H 0.129	206	<5
STEWART CANYON													
SW-ST-500 N	7/28/2005	--	10.69	8.28	--	306	--	--	9.59	3.8	--	--	--
SW-ST-500 N	10/20/2005	0.124	6.18	8.33	8.33	347	350	--	9.65	5.8	--	208	11
SP-ST-100 N	7/28/2005	--	6.73	7.57	--	341	--	--	10.3	0.4	--	--	--
SP-ST-100 N	10/20/2005	2.15	6.72	7.56	7.9	338	346	--	7.87	0.5	--	208	<5
SP-ST-200 N	7/28/2005	--	5.89	7.52	--	340	--	--	9.7	0.5	--	--	--
SP-ST-200 N	10/20/2005	--	5.95	7.49	7.52	357	362	--	8.62	0.8	--	203	<5
LAMB CANYON													
SW-LC-500 N	7/28/2005	--	8.94	8.44	--	380	--	--	10.13	4.6	--	--	--
SW-LC-500 N	10/20/2005	0.237	5.1	8.4	8.37	253	395	--	9.88	1.8	--	246	<5

Notes:

<	Indicates analyte not detected above laboratory practical quantification limit (PQL)
--	Field data or laboratory samples were not collected or analyzed
N	Natural sample
S	Split sample
(mg/L)	Milligrams per liter
C	Degrees centigrade
cfs	Cubic feet per second
(umhos/cm)	Micromhos per centimeter
ORP	Oxygen reduction potential
(mV)	Millivolts
DO	Dissolved oxygen
(NTU)	Nephelometric Turbidity Unit
e	Field duplicate results exceed acceptable limits - PQL based determination.
e%	Field duplicate results exceed acceptable limits - relative percent difference determinat
H	Sample analyzed out of holding time.
q	Associated values are estimates - field blank showed evidence of contamination.
NE	Not Established
U	Field observations indicate low turbidity (clear) water
**	The surface water standards are from IDAPA 58.01.02.250.
	Shading indicates results above Idaho DEQ Standards.

TABLE A-2
2005 SUMMARY OF SURFACE WATER DATA ANALYSIS FOR MAJOR IONS AND NUTRIENTS PANELS F AND G

Site		Sample Date	Calcium (mg/L)	Hardness (mg/L)	Magnesium (mg/L)	Sulfate (mg/L)
IDAHO DEQ Standards**			NE	NE	NE	NE
CROW CREEK						
SW-CC-100	N	10/17/2005	--	210	--	13.4
SW-CC-300	N	5/25/2005	57.3	193	12.2	13.3
SW-CC-300	N	10/17/2005	--	209	--	16.3
CC-2	N	10/19/2005	--	220	--	26.5
SW-CC-500	N	10/19/2005	--	224	--	27.8
SP-RIEDE	N	10/18/2005	--	209	--	8.53
SP-BOOKS	N	5/25/2005	46.8	180	15.4	9
SP-BOOKS	N	10/18/2005	--	198	--	8.65
SP-BOOKS	D	10/18/2005	--	190	--	8.73
SOUTH FORK SAGE CREEK						
SW-SFSC-500	N	10/19/2005	--	191	--	12.1
SW-SFSC-800	N	10/19/2005	--	209	--	13.7
LSV-4	N	10/17/2005	--	209	--	29.5
SP-SFSC-750	N	5/25/2005	41.6	157	13	8.44
SP-UTSC-850	N	5/25/2005	67.3	242	17.9	11.8
MANNING CREEK						
SP-MC-300	N	5/26/2005	60.8	214	15	6.54
SP-MC-300	D	5/26/2005	62.4	219	15.4	6.59
SP-MC-300	--	10/19/2005	--	--	--	--
DEER CREEK						
SW-DC-400	--	10/18/2005	--	--	--	--
SW-DC-500	N	5/24/2005	49.8	164	9.71	6.63
SW-DC-500	N	10/18/2005	--	226	--	13
SW-DC-800	N	5/25/2005	50	168	10.4	7.29
SP-DC-350	N	5/24/2005	45.4	140	6.37	5.27
SP-DC-350	D	5/24/2005	44.9	138	6.31	5.3
SP-UTDC-700	S	5/24/2005	24	68	2	<10
SP-UTDC-700	N	5/24/2005	24.5	69	1.92	3.19
SP-UTDC-800	S	5/24/2005	36	109	4.7	<10
SP-UTDC-800	N	5/24/2005	35.6	109	4.8	9.1
NORTH FORK DEER CREEK						
SW-NFDC-200	N	10/18/2005	--	240	--	11.5
SW-NFDC-500	N	5/24/2005	56.5	201	14.5	7.74
SW-NFDC-900	N	5/24/2005	58.7	211	15.7	11
SW-NFDC-900	N	10/18/2005	--	220	--	13
SW-UTNFDC-800	N	5/24/2005	51.3	179	12.3	4.45
SP-UTNFDC-400	N	5/26/2005	30.1	93.1	4.37	3.61
SP-UTNFDC-540	S	5/24/2005	61	239	21	<10
SP-UTNFDC-540	N	5/24/2005	64.1	246	20.8	12.1
SP-UTNFDC-540	N	10/18/2005	--	247	--	9.99
SOUTH FORK DEER CREEK						
SW-SFDC-300	--	10/18/2005	--	--	--	--
SP-UTSFDC-500	N	5/25/2005	24.4	66.6	1.35	2.4
WELLS CANYON						
SW-WC-800	N	5/25/2005	53.7	187	13	4.98

TABLE A-2
2005 SUMMARY OF SURFACE WATER DATA
ANALYSIS FOR MAJOR IONS AND NUTRIENTS
PANELS F AND G

Site		Sample Date	Calcium (mg/L)	Hardness (mg/L)	Magnesium (mg/L)	Sulfate (mg/L)
IDAHO DEQ Standards**			NE	NE	NE	NE
SW-WC-800	N	10/18/2005	--	198	--	5.07
SP-UTWC-300	N	5/25/2005	4.68	16.1	1.09	0.78
SP-WC-400	N	5/25/2005	43.8	145	8.77	9.43
SP-WC-400	D	5/25/2005	41.8	139	8.42	9.6
SP-WC-400	N	10/18/2005	--	191	--	18.6
SP-WC-750	N	10/18/2005	--	189	--	4.7
STEWART CANYON						
SW-ST-500	N	7/28/2005	--	--	--	--
SW-ST-500	N	10/20/2005	--	191	--	12.9
SP-ST-100	N	7/28/2005	--	--	--	--
SP-ST-100	N	10/20/2005	--	192	--	5.17
SP-ST-200	N	7/28/2005	--	--	--	--
SP-ST-200	N	10/20/2005	--	197	--	7.86
LAMB CANYON						
SW-LC-500	N	7/28/2005	--	--	--	--
SW-LC-500	N	10/20/2005	--	224	--	12.4
PRESERVATIVE BLANK						
SW-OC-200	N	5/26/2005	< 0.0072	0.0422	<0.0102	0.3
SW-OC-200	N	10/18/2005	--	<0.06	--	0.3
ST-BL	N	7/28/2005	--	--	--	--

Notes:

<	Indicates analyte not detected above laboratory practical quantification limit (PQL)
(mg/L)	Milligrams per liter
D	Field duplicate sample
N	Located in Site column indicates natural sample.
N	Located in analyte columns indicates percent recovery not within control limits 75-125% (SVL).
S	Located in Site column indicates split sample.
--	Field data or laboratory samples were not collected or analyzed.
e	Field duplicate results exceed acceptable limits - PQL based determination.
e%	Fieild duplicate results exceed acceptable limits - relative percent difference determination.
H	Sample analyzed out of holding time.
q	Associated values are estimates - field blank showed evidence of contamination.
NE	Not Established
B	Not detected above quantitation limit but present above the method detection limit.
**B	Analyte was detected in method blank. Results are not corrected for the method blank concentration.
**	Based on IDAPA 58.01.02, there are no surface water quality standards for major ions and nutrients.

TABLE A-3
2005 SUMMARY OF SURFACE WATER DATA
ANALYSIS FOR METALS
PANELS F AND G

Site	Sample Date	Type	QC	Aluminum (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Selenium All (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
IDAHO DEQ Standard**				NE	0.001h	0.01+	0.011h	NE	0.0025h	NE	1.2e-5	0.16h	0.005	NE	0.105h
CROW CREEK															
SW-CC-100	10/17/2005	Dissolved	N	--	B0.00004	B 0.00046	--	--	--	--		B 0.002	B 0.00074	B 0.0023	<0.0012
SW-CC-100	10/17/2005	Total	N	--	<0.00005	B 0.0005	--	--	--	--		B 0.0021	B 0.00074	B 0.0024	<0.0012
SW-CC-300	5/25/2005	Dissolved	N	--	<0.00002	<0.0003	--	--	--	--	0.0001	<0.0014	B 0.00091	B 0.0019	B 0.00026
SW-CC-300	5/25/2005	Total	N	--	<0.00005	Be 0.0012	--	--	--	--	0.0001	Be 0.0024	B 0.00083	B 0.0029	B 0.0047
SW-CC-300	10/17/2005	Dissolved	N	--	<0.00002	<0.0004	--	--	--	--		B 0.0032	B 0.00038	B 0.0026	<0.0012
SW-CC-300	10/17/2005	Total	N	--	<0.00005	<0.0004	--	--	--	--		<0.0016	B 0.00042	B 0.0021	<0.0012
CC-2	10/19/2005	Dissolved	N	--	<0.00002	<0.0004	--	--	--	--		B 0.0019	<0.0002	B 0.002	B 0.0065
CC-2	10/19/2005	Total	N	--	B 0.00007	B 0.00062	--	--	--	--		<0.0016	<0.0002	B 0.0018	<0.0012
SW-CC-500	10/19/2005	Dissolved	N	--	<0.00002	B 0.00044	--	--	--	--		B 0.0023	B 0.00068	B 0.0019	B 0.0064
SW-CC-500	10/19/2005	Total	N	--	<0.00005	<0.0004	--	--	--	--		<0.0016	B 0.0013	B 0.0017	<0.0012
SP-RIEDE	10/18/2005	Dissolved	N	--	B0.0001	B 0.00065	--	--	--	--		B 0.0028	B 0.00044	B 0.003	0.256
SP-RIEDE	10/18/2005	Total	N	--	B 0.00007	B 0.00089	--	--	--	--		B 0.0019	B 0.00049	B 0.0026	0.252
SP-BOOKS	5/25/2005	Dissolved	N	--	<0.00002	Be 0.00038	--	--	--	--	0.0001	<0.0014	B 0.0008	B 0.0017	B 0.0017
SP-BOOKS	5/25/2005	Total	N	--	<0.00005	Be 0.00036	--	--	--	--	0.0001	Be 0.0015	B 0.00068	B 0.0015	<0.0002
SP-BOOKS	10/18/2005	Dissolved	N	--	<0.00002	B 0.00043	--	--	--	--		B 0.0018	<0.0002	B 0.0016	<0.0012
SP-BOOKS	10/18/2005	Dissolved	D	--	B0.00003	<0.0004	--	--	--	--		B 0.0023	B 0.0003	B 0.0017	B 0.0018
SP-BOOKS	10/18/2005	Total	N	--	<0.00005	<0.0004	--	--	--	--		<0.0016	B 0.0005	B 0.0015	<0.0012
SP-BOOKS	10/18/2005	Total	D	--	<0.00005	<0.0004	--	--	--	--		<0.0016	B 0.0004	B 0.0015	<0.0012
SOUTH FORK SAGE CREEK															
SW-SFSC-500	10/19/2005	Dissolved	N	--	B0.00006	<0.0004	--	--	--	--		B 0.0023	B 0.00025	<0.0009	B 0.0079
SW-SFSC-500	10/19/2005	Total	N	--	B 0.00007	<0.0004	--	--	--	--		<0.0016	B 0.00021	<0.0009	<0.0012
SW-SFSC-800	10/19/2005	Dissolved	N	--	B0.00006	B 0.00061	--	--	--	--		B 0.0028	0.0034	B 0.002	0.0239
SW-SFSC-800	10/19/2005	Total	N	--	B 0.00009	B 0.0006	--	--	--	--		<0.0016	0.0033	B 0.0018	<0.0012
LSV-4	10/17/2005	Dissolved	N	--	B0.00004	<0.0004	--	--	--	--		<0.0016	0.0059	B 0.0019	<0.0012
LSV-4	10/17/2005	Total	N	--	<0.00005	B 0.0004	--	--	--	--		B 0.0016	0.0062	B 0.002	<0.0012
SP-SFSC-750	5/25/2005	Dissolved	N	--	<0.00002	<0.0003	--	--	--	--	0.0001	B 0.0017	B 0.0012	B 0.00081	B 0.0012
SP-SFSC-750	5/25/2005	Total	N	--	<0.00005	Be 0.00098	--	--	--	--	0.0001	<0.0014	B 0.0014	B 0.0014	B 0.0026
SP-UTSC-850	5/25/2005	Dissolved	N	--	<0.00002	<0.0003	--	--	--	--	0.0001	B 0.003	0.0063	0.0155	B 0.00055
SP-UTSC-850	5/25/2005	Total	N	--	0.0052	0.0094	--	--	--	--	0.0001	0.0181	0.014	0.0522	0.0933
MANNING CREEK															
SP-MC-300	5/26/2005	Dissolved	N	--	Be0.00006	<0.0004	--	--	<0.00005	--	0.0001	<0.0016	Be 0.0003	<0.0009	<0.0012

TABLE A-3
2005 SUMMARY OF SURFACE WATER DATA
ANALYSIS FOR METALS
PANELS F AND G

Site	Sample Date	Type	QC	Aluminum (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Selenium All (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
IDAHO DEQ Standard**				NE	0.001h	0.01+	0.011h	NE	0.0025h	NE	1.2e-5	0.16h	0.005	NE	0.105h
SP-MC-300	5/26/2005	Dissolved	D	--	Be0.00004	<0.0004	--	--	<0.00005	--	0.0001	<0.0016	<0.0002	<0.0009	<0.0012
SP-MC-300	5/26/2005	Total	N	--	Be 0.0001	Be 0.00056	--	--	<0.00012	--	0.0001	<0.0016	B 0.00031	<0.0009	<0.0012
SP-MC-300	5/26/2005	Total	D	--	Be 0.00017	<0.0004	--	--	<0.00012	--	0.0001	<0.0016	B 0.00028	<0.0009	<0.0012
DEER CREEK															
SW-DC-500	5/24/2005	Dissolved	N	<0.0066	<0.00002	<0.0004	<0.0026	<0.0045	<0.00005	0.0081	0.0001	<0.0016	B 0.00086	B 0.001	<0.0012
SW-DC-500	5/24/2005	Total	N	e% 0.792	BN 0.00011	B 0.0021	<0.0026	e% 0.778	B 0.0005	e 0.0765	0.0001	<0.0016	B 0.00091	B 0.0027	0.0107
SW-DC-500	10/18/2005	Dissolved	N	--	B0.00007	<0.0004	--	--	--	--	0.0001	<0.0016	B 0.0014	B 0.0012	B 0.0014
SW-DC-500	10/18/2005	Total	N	--	B 0.00006	<0.0004	--	--	--	--	0.0001	B 0.0018	B 0.0015	B 0.0011	<0.0012
SW-DC-800	5/25/2005	Dissolved	N	--	<0.00002	<0.0003	--	--	--	--	0.0001	<0.0014	B 0.00095	B 0.0017	B 0.00068
SW-DC-800	5/25/2005	Total	N	--	B 0.00015	Be 0.00072	--	--	--	--	0.0001	<0.0014	B 0.00096	B 0.0023	B 0.0071
SP-DC-350	5/24/2005	Dissolved	N	<0.0066	B0.00004	B 0.00048	<0.0026	<0.0045	Be 0.00007	<0.0008	0.0001	<0.0016	B 0.00073	B 0.0019	Be 0.004
SP-DC-350	5/24/2005	Dissolved	D	<0.0066	B0.00004	B 0.00042	<0.0026	<0.0045	Be 0.00009	<0.0008	0.0001	<0.0016	B 0.00073	B 0.002	Be 0.0056
SP-DC-350	5/24/2005	Total	N	e% 0.0503	<0.00005	B 0.00054	<0.0026	Be% 0.0317	<0.00012	Be 0.0019	0.0001	<0.0016	B 0.00068	B 0.0019	B 0.0043
SP-DC-350	5/24/2005	Total	D	e% 0.0398	<0.00005	B 0.00058	<0.0026	Be% 0.0254	<0.00012	Be 0.0014	0.0001	<0.0016	B 0.00072	B 0.0019	B 0.0039
SP-UTDC-700	5/24/2005	Dissolved	S	--	--	--	--	--	--	--		--	<0.001	--	--
SP-UTDC-700	5/24/2005	Dissolved	N	<0.0066	0.00065	B 0.0017	<0.0026	<0.0045	<0.00005	<0.0008	0.0001	B 0.003	B 0.0016	0.0157	e 0.012
SP-UTDC-700	5/24/2005	Total	S	--	0.00078	<0.01	--	--	0.0001	--	0.0005	<0.02	<0.001	0.03	<0.05
SP-UTDC-700	5/24/2005	Total	N	e% 0.0464	N 0.00082	B 0.0022	<0.0026	Be% 0.0305	<0.00012	Be 0.00085	0.0001	B 0.0024	B 0.0018	0.0161	0.0134
SP-UTDC-800	5/24/2005	Dissolved	S	--	--	--	--	--	--	--		--	0.002	--	--
SP-UTDC-800	5/24/2005	Dissolved	N	<0.0066	0.00029	B 0.0037	<0.0026	<0.0045	<0.00005	<0.0008	0.0001	B 0.0087	0.0102	0.0064	e 0.0287
SP-UTDC-800	5/24/2005	Total	S	--	0.00031	<0.01	--	--	0.0004	--	0.0002	<0.02	0.002	0.02	<0.05
SP-UTDC-800	5/24/2005	Total	N	e% 0.0697	BN 0.00038	B 0.0049	<0.0026	e% 0.0835	B 0.0004	Be 0.0034	0.0001	B 0.0088	0.0102	0.007	0.0343
NORTH FORK DEER CREEK															
SW-NFDC-200	10/18/2005	Dissolved	N	--	B0.00006	<0.0004	--	--	--	--		B 0.0029	B 0.0014	B 0.0017	B 0.0071
SW-NFDC-200	10/18/2005	Total	N	--	B 0.00024	B 0.00077	--	--	--	--		B 0.0045	B 0.0015	B 0.0024	0.0114
SW-NFDC-500	5/24/2005	Dissolved	N	<0.0066	<0.00002	<0.0004	<0.0026	<0.0045	Be 0.00005	0.164	0.0001	<0.0016	B 0.00059	<0.0009	<0.0012
SW-NFDC-500	5/24/2005	Total	N	e% 0.175	<0.00005	B 0.00053	<0.0026	e% 0.189	<0.00012	e 0.053	0.0001	<0.0016	B 0.00048	B 0.001	<0.0012
SW-NFDC-900	5/24/2005	Dissolved	N	<0.0066	<0.00002	<0.0004	<0.0026	<0.0045	Be 0.00008	0.0066	0.0001	<0.0016	B 0.0012	<0.0009	<0.0012
SW-NFDC-900	5/24/2005	Total	N	e% 0.156	<0.00005	B 0.00073	<0.0026	e% 0.203	B 0.00016	e 0.0482	0.0001	<0.0016	B 0.0012	B 0.0011	B 0.0031
SW-NFDC-900	10/18/2005	Dissolved	N	--	B0.00007	<0.0004	--	--	--	--	0.0001	B 0.0019	B 0.0014	B 0.0013	B 0.0014
SW-NFDC-900	10/18/2005	Total	N	--	B 0.00008	<0.0004	--	--	--	--	0.0001	B 0.0016	B 0.0015	B 0.001	B 0.0025
SW-UTNFDC-800	5/24/2005	Dissolved	N	<0.0066	<0.00002	<0.0004	<0.0026	B 0.0237	Be 0.00006	<0.0008	0.0001	<0.0016	<0.0002	<0.0009	<0.0012

TABLE A-3
2005 SUMMARY OF SURFACE WATER DATA
ANALYSIS FOR METALS
PANELS F AND G

Site	Sample Date	Type	QC	Aluminum (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Selenium All (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
IDAHO DEQ Standard**				NE	0.001h	0.01+	0.011h	NE	0.0025h	NE	1.2e-5	0.16h	0.005	NE	0.105h
SW-UTNFDC-800	5/24/2005	Total	N	Be% 0.0276	BN 0.00009	<0.0004	<0.0026	Be% 0.0249	<0.00013	e 0.0059	0.0001	<0.0016	<0.0002	<0.0009	<0.0012
SP-UTNFDC-400	5/26/2005	Dissolved	N	--	e0.00094	<0.0004	--	--	<0.00005	--	0.0001	B 0.0026	Be 0.0015	0.0125	0.0267
SP-UTNFDC-400	5/26/2005	Total	N	--	e 0.001	Be 0.0012	--	--	<0.00012	--	0.0001	B 0.0036	B 0.0017	0.0134	0.0275
SP-UTNFDC-540	5/24/2005	Dissolved	S	--	--	--	--	--	--	--		--	0.002	--	--
SP-UTNFDC-540	5/24/2005	Dissolved	N	<0.0066	0.0024	B 0.0017	<0.0026	<0.0045	<0.00005	<0.0008	0.0001	0.01	0.009	0.0236	e 0.0678
SP-UTNFDC-540	5/24/2005	Total	S	--	0.00239	<0.01	--	--	0.0001	--	0.0002	<0.02	0.002	0.03	0.1
SP-UTNFDC-540	5/24/2005	Total	N	e% 0.11	N 0.0037	B 0.0034	<0.0026	e% 0.106	B 0.00018	e 0.008	0.0001	0.013	0.0087	0.0262	0.11
SP-UTNFDC-540	10/18/2005	Dissolved	N	--	0.0024	B 0.0011	--	--	--	--		0.0121	0.0051	0.0219	0.0723
SP-UTNFDC-540	10/18/2005	Total	N	--	B 0.0026	B 0.0014	--	--	--	--		0.0124	0.0056	0.0221	0.0766
SOUTH FORK DEER CREEK															
SP-UTSFDC-500	5/25/2005	Dissolved	N	--	<0.00002	<0.0003	--	--	--	--	0.0001	<0.0014	B 0.00099	B 0.00041	B 0.0021
SP-UTSFDC-500	5/25/2005	Total	N	--	<0.00005	<0.0003	--	--	--	--	0.0001	Be 0.0025	B 0.00021	B 0.00078	B 0.00035
WELLS CANYON															
SW-WC-800	5/25/2005	Dissolved	N	--	<0.00002	<0.0003	--	--	--	--	0.0001	B 0.0015	B 0.00059	B 0.0021	B 0.0016
SW-WC-800	5/25/2005	Total	N	--	B 0.00005	Be 0.00094	--	--	--	--	0.0001	<0.0014	B 0.00059	B 0.0024	B 0.0041
SW-WC-800	10/18/2005	Dissolved	N	--	B0.00007	B 0.00059	--	--	--	--		<0.0016	B 0.00061	B 0.0019	B 0.0033
SW-WC-800	10/18/2005	Total	N	--	B 0.00007	B 0.00062	--	--	--	--		B 0.0022	B 0.00071	B 0.0017	<0.0012
SP-UTWC-300	5/25/2005	Dissolved	N	--	B0.00005	<0.0003	--	--	--	--	0.0001	B 0.0032	B 0.00046	B 0.00055	B 0.0036
SP-UTWC-300	5/25/2005	Total	N	--	<0.00005	Be 0.0006	--	--	--	--	0.0001	Be 0.0026	B 0.00025	B 0.0011	B 0.0022
SP-WC-400	5/25/2005	Dissolved	N	--	B0.00015	Be 0.0006	--	--	--	--	0.0001	B 0.0036	0.0037	B 0.0029	0.0112
SP-WC-400	5/25/2005	Dissolved	D	--	B0.00016	Be 0.00038	--	--	--	--	0.0001	B 0.0037	0.0034	B 0.0029	B 0.0092
SP-WC-400	5/25/2005	Total	N	--	B 0.0002	Be 0.0015	--	--	--	--	0.0001	Be 0.0048	0.0035	B 0.0032	0.0152
SP-WC-400	5/25/2005	Total	D	--	B 0.0002	Be 0.0011	--	--	--	--	0.0001	Be 0.0032	0.0032	B 0.0032	0.0137
SP-WC-400	10/18/2005	Dissolved	N	--	B0.00008	B 0.00076	--	--	--	--	0.0001	B 0.0057	0.0038	B 0.0031	0.017
SP-WC-400	10/18/2005	Total	N	--	B 0.00036	B 0.0015	--	--	--	--	0.0001	B 0.007	0.0039	B 0.0033	0.036
SP-WC-750	10/18/2005	Dissolved	N	--	B0.00004	B 0.0008	--	--	--	--		B 0.0016	B 0.00075	B 0.0023	B 0.0036
SP-WC-750	10/18/2005	Total	N	--	B 0.0001	B 0.00099	--	--	--	--		<0.0016	B 0.00095	B 0.002	<0.0012
STEWART CANYON															
SW-ST-500	7/28/2005	Dissolved	N	--	0.00004	0.0012	--	--	--	--		--	--	0.0028	<0.0012
SW-ST-500	7/28/2005	Total	N	--	--	--	--	--	--	--	0.0001	--	0.0024	--	--
SW-ST-500	10/20/2005	Dissolved	N	--	0.00007	0.0012	--	--	--	--		--	--	0.0027	0.004
SW-ST-500	10/20/2005	Total	N	--	--	--	--	--	--	--	0.0001	--	0.0031	--	--

TABLE A-3
2005 SUMMARY OF SURFACE WATER DATA
ANALYSIS FOR METALS
PANELS F AND G

Site	Sample Date	Type	QC	Aluminum (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Selenium All (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
IDAHO DEQ Standard**				NE	0.001h	0.01+	0.011h	NE	0.0025h	NE	1.2e-5	0.16h	0.005	NE	0.105h
SP-ST-100	7/28/2005	Dissolved	N	--	<0.00002	0.00052	--	--	--	--		--	--	0.0026	<0.0012
SP-ST-100	7/28/2005	Total	N	--	--	--	--	--	--	--	0.0001	--	0.0011	--	--
SP-ST-100	10/20/2005	Dissolved	N	--	0.00008	0.00085	--	--	--	--		--	--	0.0027	<0.0012
SP-ST-100	10/20/2005	Total	N	--	--	--	--	--	--	--	0.0001	--	0.0012	--	--
SP-ST-200	7/28/2005	Dissolved	N	--	0.00004	0.00065	--	--	--	--		--	--	0.0019	<0.0012
SP-ST-200	7/28/2005	Total	N	--	--	--	--	--	--	--	0.0001	--	0.0016	--	--
SP-ST-200	10/20/2005	Dissolved	N	--	0.00011	0.00091	--	--	--	--		--	--	0.0023	<0.0012
SP-ST-200	10/20/2005	Total	N	--	--	--	--	--	--	--	0.0001	--	0.0015	--	--
LAMB CANYON															
SW-LC-500	7/28/2005	Dissolved	N	--	0.00003	0.0012	--	--	--	--		--	--	0.0021	<0.0012
SW-LC-500	7/28/2005	Total	N	--	--	--	--	--	--	--	0.0001	--	0.0016	--	--
SW-LC-500	10/20/2005	Dissolved	N	--	0.0001	0.0015	--	--	--	--		--	--	0.0019	0.0034
SW-LC-500	10/20/2005	Total	N	--	--	--	--	--	--	--	0.0001	--	0.0015	--	--
PRESERVATIVE BLANK															
ST-BL	7/28/2005	Dissolved	N	--	0.00002	<0.0004	--	--	--	--		--	--	<0.0009	0.0021
ST-BL	7/28/2005	Total	N	--	--	--	--	--	--	--	0.0001	--	<0.0002	--	--
SW-OC-200	5/26/2005	Dissolved	N	--	Be0.00004	<0.0004	--	--	<0.00005	--	0.0001	<0.0016	<0.0002	<0.0009	<0.0012
SW-OC-200	5/26/2005	Total	N	--	Be 0.0001	<0.0004	--	--	<0.00012	--	0.0001	B 0.0026	<0.0002	<0.0009	<0.0012
SW-OC-200	10/18/2005	Dissolved	N	--	B0.00004	<0.0004	--	--	--	--		B 0.0023	<0.0002	<0.0009	<0.0012
SW-OC-200	10/18/2005	Total	N	--	<0.00005	<0.0004	--	--	--	--		<0.0016	B 0.00026	<0.0009	<0.0012

Notes:

- B Not detected above quantitation limit but present above method detection limit (SVL).
- D Field duplicate sample
- N Located in the QC column indicates natural sample.
- N Located in analyte column indicates percent recovery not within control limits 75-125% (SVL).
- S Located in site column indicates split sample.
- NE Not Established
- M Duplicate precision goal not met (SVL).
- W Post-digestion spike recovery out of control limits 85-115% (SVL).
- < Indicates analyte not detected above laboratory practical quantification limit (PQL).
- (mg/L) Milligrams per liter
- * Dulicate analysis not within control limits (SVL).
- (1) Verified by a second analysis (Northern Analytical).
- -- Field data or laboratory samples were not collected or analyzed.
- H Sample analyzed out of holding time.
- e Field duplicate results exceed acceptable limits - PQL based determination.
- e% Field duplicate results exceed acceptable limits - relative percent difference determination.
- q Associated values are estimates - field blank showed evidence of contamination.
- ** The surface water standards value is the lowest concentration for cold water biota for Criteria Maximum Concentration (CMC), Criteria Continuous Concentration (CCC), or human consumption of organisms. Standards from IDAPA 58.01.02.210 + 250. For Idaho, water quality standards are based on the dissolved fraction for metals in surface water (except total fraction for selenium and mercury as CCC). Standard values followed by an "h" indicate the aquatic life criteria are expressed as a function of total hardness and water effect ratio (WER). Hardness dependent standards are calculated for each watershed based on the average observed hardness. Standards shown are based on a hardness of 100 mg/L.
- Shading indicates results above Idaho DEQ Standards, regardless of physical state (Total or Dissolved).
- + Chromium standard of 0.01 mg/l is for Chromium VI; the chromium III standard is 0.18 mg/l for CCC and is hardness dependent.

TABLE B-1
2005 SUMMARY OF GROUNDWATER DATA
FIELD MEASUREMENTS AND PHYSICAL PARAMETERS
PANELS F AND G
BASELINE STUDY

Site	Sample Date	Depth to Water*** (ft)	Temp. (C)	Field pH	Lab pH	Field Conductivity (umhos/cm)	Lab Conductivity (umhos/cm)	Field ORP (mV)	Field DO (mg/L)	Lab Turbidity (NTU)	Total Dis-solved Solids (mg/L)	Total Sus-pended Solids (mg/L)
IDAHO DEQ Standards**			NE	6.5 - 8.5	6.5 - 8.5s	NE	NE	NE	NE	NE	500s	NE
PANEL F (MANNING CREEK LEASE AREA)												
MC-MW-1	5/24/2005	144.08	9.2	7.9	8.05	345	346	--	4	H 0.32	190	<5
PANEL G (DEER CREEK LEASE AREA)												
DC-MW-2	5/24/2005	53.35	8.1	7.54	7.76	493	509	--	0	1.67	283	9
DC-MW-5	5/25/2005	288.85	5.6	7.59	7.73	430	416	+144	3.8	--	e%275	10
DC-MW-6	5/24/2005	3.82	7	7.34	7.36	250	254	--	1	47.1	193	390

Notes:

***	Depth to water below measuring point.
ft	Feet
(mg/L)	Milligrams per liter
C	Degrees centigrade
(umhos/cm)	Micromhos per centimeter
ORP	Oxygen reduction potential
(mV)	Millivolts
DO	Dissolved oxygen
(NTU)	Nephelometric Turbidity Unit
<	Indicates analyte not detected above laboratory practical quantification limit (PQL).
--	Field data or laboratory samples were not collected or analyzed.
e	Field duplicate results exceed acceptable limits - PQL based determination.
H	Sample analyzed out of holding time.
NE	Not Established
*	Dissolved oxygen measurment may have been affected by nitrogen used to power bladder pump.
**	Standards from IDAPA 58.01.11.200. For Idaho, water quality standards are based on the total fraction for groundwater. Standard values followed by an "s" indicate a secondary standard.
	Shading indicates results above Idaho DEQ Standards.

Well MC-MW-3 and MC-MW-4 formerly known as MC-MW-11 and MC-MW-6, respectively.

TABLE B-2
2005 SUMMARY OF GROUNDWATER DATA
ANALYSIS FOR MAJOR IONS AND NUTRIENTS
PANELS F AND G

Site		Sample Date	Calcium (mg/L)	Hardness (mg/L)	Phosphorous Ortho (mg/L)	Sulfate (mg/L)
IDAHO DEQ Standards**			NE	NE	NE	NE
PANEL F (MANNING CREEK LEASE AREA)						
MC-MW-1	N	5/24/2005	50.5	--	--	8.05
PANEL G (DEER CREEK LEASE AREA)						
DC-MW-2	N	5/24/2005	86.5	--	--	29.8
DC-MW-5	N	5/25/2005	--	--	H 0.042	13.9
DC-MW-5	D	5/25/2005	--	--	H 0.042	13.6
DC-MW-6	N	5/24/2005	44.3	--	--	9.43

Notes:

<	Indicates analyte not detected above laboratory practical quantification limit (PQL)
(mg/L)	Milligrams per liter
D	Field duplicate sample
N	Located in Site column indicates natural sample.
	Located in analyte columns indicates percent recovery not within control limits 75-125% (SVL).
	Located in Site column indicates split sample.
--	Field data or laboratory samples were not collected or analyzed.
e	Field duplicate results exceed acceptable limits - PQL based determination.
	Fieild duplicate results exceed acceptable limits - relative percent difference determination.
H	Sample analyzed out of holding time.
	Associated values are estimates - field blank showed evidence of contamination.
NE	Not Established
B	Not detected above quantitation limit but present above the method detection limit.
	Shading indicates results above Idaho DEQ Standards.
**	Standards from IDAPA 58.01.11.200. For Idaho, water quality standards are based on the total fraction for groundwater. Standard values followed by an "s" indicate a secondary standard.

TABLE B-3
2005 SUMMARY OF GROUNDWATER DATA
ANALYSIS FOR METALS
PANELS F AND G

Site	Sample Date	Type	QC	Aluminum (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Selenium All (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
IDAHO DEQ Standard**				0.2s	0.005	0.1	1.3	0.3s	0.015	0.05s	0.002	NE	0.05	NE	5.0s
PANEL F (MANNING CREEK LEASE AREA)															
MC-MW-1	5/24/2005	Dissolved	N	<0.0066	<0.00002	B 0.00072	<0.0026	<0.0045	B0.00006	<0.0008	<0.0001	<0.0016	<0.0002	B 0.00093	<0.0012
MC-MW-1	5/24/2005	Total	N	<0.0066	<0.00005	B 0.00054	<0.0026	Be%0.0072	<0.00013	<0.0008	<0.0001	<0.0016	<0.0002	<0.0009	<0.0012
PANEL G (DEER CREEK LEASE AREA)															
DC-MW-2	5/24/2005	Dissolved	N	<0.0066	0.00038	<0.0004	<0.0026	B 0.0063	<0.00005	0.0557	<0.0001	0.0286	<0.0002	B 0.0014	0.0579
DC-MW-2	5/24/2005	Total	N	e% 0.0377	BN 0.00029	<0.0004	<0.0026	e%0.148	<0.00013	e0.058	<0.0001	0.0291	<0.0002	B 0.0028	e 0.0799
DC-MW-5	5/25/2005	Dissolved	N	<0.0116	e0.00078	B 0.0011	<0.0026	<0.0045	<0.00005	<0.0008	--	0.0156	e 0.01	0.0238	0.0913
DC-MW-5	5/25/2005	Dissolved	D	<0.0116	e0.00075	B 0.00089	<0.0026	<0.0045	<0.00005	<0.0008	--	0.0144	e 0.01	0.0241	0.0904
DC-MW-5	5/25/2005	Total	N	B 0.0284	e 0.001	Be 0.0041	<0.0026	2.17	<0.00013	B0.0027	--	0.0162	0.0098	0.04	0.143
DC-MW-5	5/25/2005	Total	D	0.0469	e 0.0012	Be 0.0041	<0.0026	3.09	<0.00013	0.0049	--	0.0149	0.0098	0.0407	0.143
DC-MW-6	5/24/2005	Dissolved	N	<0.0066	0.00051	<0.0004	<0.0026	<0.0045	<0.00005	0.378	<0.0001	B 0.0056	0.0039	B 0.0026	B0.0083
DC-MW-6	5/24/2005	Total	N	e% 9.45	N 0.0039	0.0461	0.0141	e%9.67	B 0.0041	e1.43	<0.0001	0.0552	0.0069	0.038	e 0.29

Notes:

- B Not detected above quantitation limit but present above method detection limit (SVL).
- D Field duplicate sample
- N Located in the QC column indicates natural sample.
- N Located in analyte column indicates percent recovery not within control limits 75-125% (SVL).
- NE Not Established
- W Post-digestion spike recovery out of control limits 85-115% (SVL).
- < Indicates analyte not detected above laboratory practical quantification limit (PQL).
- (mg/L) Milligrams per liter
- * Dulicate analysis not within control limits (SVL).
- -- Field data or laboratory samples were not collected or analyzed.
- e Field duplicate results exceed acceptable limits - PQL based determination.
- e% Field duplicate results exceed acceptable limits - relative percent difference determination.
- ** Standards from IDAPA 58.01.11.200. For Idaho, water quality standards are based on the total fraction for groundwater. Standard values followed by an "s" indicate a secondary standard.
- Shading indicates results above Idaho DEQ Standards, regardless of physical state (Total or Dissolved).