

2010 State of Utah Ground-Water Program



ACKNOWLEDGMENTS

The Utah Department of Agriculture and Food's (UDAF) 2010 Ground-Water Sampling Program is successful because of contributions made by many people. UDAF's ground-water steering committee includes of Commissioner Leonard Blackham; Deputy Commissioner Kathleen Clarke; Directors Clair Allen, and Dr. David Clark; and Program Leader Clark Burgess. This committee gives guidance, support, and direction to the program.

Efforts by members of the Utah Association of Conservation Districts (UACD) have also contributed greatly to the success of the 2010 sampling program. They helped select sampling sites and navigate us to the locations of wells to be sampled. Their knowledge of local areas and contact with people who desired well sampling proves invaluable. UDAF's Grazing Improvement Program coordinators participated in the selection of sample sites and submitted samples for testing.

Terry Monroe and Will Atkin of Utah Division of Water Rights (WR) helped in selection of well sites in the Pahvant and Curlew valleys. Mike Handy and Dana Dredge with WR helped us in sampling various areas of the state and acted as liaison with UDAF and WR. Water Rights also provided a sampling vehicle for this year's effort.

This program has received excellent support from the UDAF Chemistry Laboratory Division, which performs the sample analyses. The State Chemist, Dr. David Clark; staff chemists, Mohammed Sharaf, Cham Hoang, and Ivett McQueen and technical assistant; James Palmer provided prompt analysis of pesticide and inorganic samples collected during the year.

A critical part of the program is the collection, distribution, and maintenance of data. Anne M. Johnson, UDAF's GIS Coordinator, has been most helpful by efficiently producing GIS-based maps and giving suggestions for proper data management. Her work is exhibited throughout this report. This year a new computerized data collection and management software package has been written which binds sample collection, testing, reporting, and data management into one system. Pavel Milyasvkly a computer programmer for UDAF has written the software. Much of this report is generated by this software. We are grateful for Pavel's help and support.

Virginia Sligting, secretary in The Division of Marketing and Conservation, has prepared all individual report mailings for those participating in this program.

Finally, thanks are extended to the owners of wells without whose participation and trust this program would not have functioned.

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Front Cover: Will Atkin of Water Rights Bailing Well in Northern Utah.

Utah Department of Agriculture & Food State Ground-Water Program Report 2010

Utah Department of Agriculture and Food's (UDAF) State Ground-Water Program is funded by the legislature to assist private well owners and other agencies, organizations, and concerned citizens to have a better understanding of water quality. Provisions of the Federal Clean Water Act require drinking water testing of public water systems. This act does not require testing of private wells used for drinking water, irrigation, and livestock watering even though these wells account for the majority of ground-water use in the State of Utah.

This year because of budget restrictions UDAF was only able to sample 100 wells. To reduce sampling costs UDAF also allowed well owners to ship samples to UDAF from remote areas of the state. This allowed samples to be tested in every UACD Zone without the expense of traveling. This report covers the 86 wells tested during 2010.

Cooperative Effort

UDAF has a memorandum of understanding with the Utah Division of Water Rights (WR) for collecting ground-water data from Pahvant and Curlew valleys. Sample analyses were done for inorganic and organic constituents that influence water quality. Guidance from WR has helped in selecting sampling sites and sharing data.

UDAF also works closely with the Department of Environmental Quality (DEQ) in providing expertise for the State Pesticide Management Plan and other ground-water programs. This relationship benefits UDAF by allowing agriculture's voice to be heard and its ideas considered during the planning process. UDAF is an essential link between DEQ and farmers and ranchers of the state regarding environmental issues.

The State Ground-Water Program works with members of local Soil Conservation Districts (SCDs) and Utah Association of Conservation Districts (UACD) to identify private wells for sampling. SCD cooperation and knowledge of the local area has been very beneficial in identifying wells for sampling, meeting well owners, and distributing information. The work of local district members who advertise, collect names, and organize sampling events helps to make the program successful.

UDAF's Ground-Water Sampling Procedures

UDAF meets with SCDs to inform and update members on ground-water issues. Districts then select wells for sampling in their area and obtain preliminary sample information by using UDAF's Pre-Sample Information Form (Fig. 1). WR selected wells to be sampled for Pahvant and Curlew valleys,.

Local SCD members accompanied UDAF personnel to selected well sites. At each well, location was determined using a Global Positioning System (GPS) receiver. Using established protocol Water was then collected for inorganic, bacteria, and pesticide analyses. Samples were packed in ice and taken to the laboratory for analysis. Reports summarizing laboratory results were sent to each well owner. GPS information was provided to UDAF's GIS administrator who provided maps of the sampled areas.

During 2010, UDAF tested all samples for coliform and E. coli bacteria using IDEXX Colilert MUG kits in the field. This has been a significant addition to the program. Major changes in chemical analysis have taken place during 2007. UDAF's laboratory has added three new analytical devices, Dionex IC3000 for ion measurements, automated titrator for carbonate and

bicarbonate, and an ICP mass spectrophotometer for elements. These advancements have increased the number elements, ions, and compounds that can be tested as well as improved the accuracy of the analysis. The laboratory now reports to us Fluoride, Mercury, Nitrate, Perchlorate, and Silver as well as lower detection limits for many of the elements. Total Dissolved Solids (TDS) is now calculated using "sum of constituents" instead of using electrical conductivity measurements.

Areas Sampled

During 2010, 100 samples were taken from wells, drains, and springs in all of the seven UACD zones in the state. Each UACD zone and district sampled is addressed in this report, with a map showing sample location and a table of chemical analyses. Narrative reports are also provided for each sampled district. Below is a general summary of ground-water quality for samples taken during 2010, based on EPA standards.

At the well owner's requests, UDAF provided all collected data on over 65 wells and springs to WR to be included in their database. This will assist well owners by having a permanent record of their well's chemistry on file.

Summary of Water Quality for 2010

There were no confirmed pesticide detections in the 100 samples taken during the 2010 sampling season based on EPA standards.

Bacteria (Coliform & Ecoli)

As found in previous years, bacteria are a major problem for private water systems. Fortynine (49%) of the wells and springs sampled this year tested positive for coliform bacteria, as compared to 59% in 1999, 36% in 2000, 29% in 2001, 27% in 2002, 31% in 2003, 33% in 2004, 35% in 2005, 29% in 2006, 34% in 2007, 23% in 2008, and 38% in 2009. Although most coliform bacteria do not pose a health problem, their presence in well water indicates that surface waters, soil, or other contamination is getting into the well. Bacteria problems are usually seen in older wells, wells with improper casing and caps, wells that are too shallow or systems that have been improperly maintained.

Of greater concern is the presence of E. coli in water samples. Even though the percentage of contaminated wells is dropping, E. coli is still a serious problem as it indicates that fecal material has gotten into the well. During 2010, 9.3% of the wells and springs sampled tested positive for E. coli as compared to 34% in 1999, 7% in 2000, 4% in 2001, 3.4% in 2002, 5.8% in 2003, 6.6% in 2004, 7.8% in 2005, 4% in 2006, 3% in 2007, 3.5% in 2008, and 10% in 2009. These wells have been contaminated with mammalian fecal material, the only source for this bacterium. The source could be effluent from septic systems near the well, poor well construction with livestock near the well head, or open wells in areas where animals and manure are present.

Specific elements that exceed irrigation, livestock, or drinking water standards are discussed in the district reports as described below.

More detailed descriptions of water quality for each sampled area are presented in this report. The report covers specific UACD zones and districts where sampling was conducted, and in some cases separate areas within districts are included where circumstances warrant separate treatment. Tables of chemical, bacterial, and physical characteristics of sampled water are also included. Each district report will include 4 tables, Primary Drinking Water Standards, Secondary Drinking Water Standards, Irrigation Standards, and Livestock Standards. The tables show standard values, detection limits, and measured results for each sample. If a standard is exceeded the result is underlined and highlighted. A map for each

district is included in the report showing each sample location.

Sample site locations can be identified on the map using the "ld#" column from the related table. Values of "ND" indicate that this element or compound was not measured above the detection limit of the procedure used to test for the element or compound.

Clarification of Drinking Water Standards

Primary:

- Perchlorate does not have a primary standard
- NO-N is 10, however in this report we are reporting NO3 so the standard is 44.3
- No standard for sodium or nickel
- o Sulfate is 1000

Secondary:

- Aluminum is listed as a range 0.05 0.2
- o Si is not regulated
- o TDS should be 500

Pesticides

The generic Pesticide Management Plan (PMP) for the State of Utah identifies five pesticides which have the potential to be a threat to the ground water supply. Each of these pesticides is broad-spectrum herbicides. The pesticides are: (1) Alachlor, (2) Atrazine, (3) Cyanazine, (4) Metolachlor, and (5) Simazine. In addition to these pesticides, the UDAF laboratory also screens for a broad range of other pesticides which are sold and used in the state that have the potential to contaminate ground water resources according to the following list.

List of Pesticides

Hexachlorocyclopentadiene	Alpha Chlordane	2,4,5-TP (Silvex)
Hexachlorobenzene	Dieldrin	Picloram
Simazine	Endrin	Aldicarb
Atrazine	Methoxychlor	Aldicarb sulfone
Gamma-Lindane	Chlordane "T"	Aldicarb sulfoxide
Heptachlor	Toxaphene "T"	Carbofuran
Alachlor *	Prometon	Methomyl
Aldrin	Dicamba	Oxamyl (Vydate)
Heptachlor-Epoxide	2,4-D	3-OH Carbofuran
Gamma Chlordane	PCP	3-Keto Carbofuran
Disulfton	Diazinon	Metolachlor *
A 5		

^{*} Pesticide identified for restriction under the proposed PMP rule.

Laboratory Screening for Pesticides

The UDAF laboratory performs a screening analysis of all water samples using four different EPA approved screening methods. The methods are as follows: (1) EPA Method 515.1 used for detecting chlorinated phenoxy acid, (2) EPA Method 505 for detection of chlorinated

pesticides and organophosphates, (3) EPA Method 531.1 for detection of carbamates, and (4) an immunoassay method for pesticide residue screening used for detection of chlorinated phenoxy acid and carbamates. The immunoassay method indicates the presence or absence of pesticides in the ground water sample. In the event that a sample tests positive for the presence of pesticides using the screening procedure, a more extensive laboratory process utilizing Gas Chromotography(GC) or High Performance Liquid Chromatography(HPLC) is used to determine the actual contamination level of the suspected pesticide.

Water wells constructed of materials containing Poly-Vinyl Chloride (PVC) can produce "false positives" using the immunoassay method for pesticide screening. Other environmental conditions can also combine to produce "hits" in the screening procedure which include: welding done on the well head, which can release compounds from the PVC well casing, dead animals in the wells during sampling, and large diameter shallow wells located in the middle of agricultural fields. When these conditions cause positive "hits" in the screening method, the samples are subjected to the more rigorous GC analysis for further quantification and evaluation.

UTAH DEPARTMENT OF AGRICULTURE AND FOOD



State Ground Water Program

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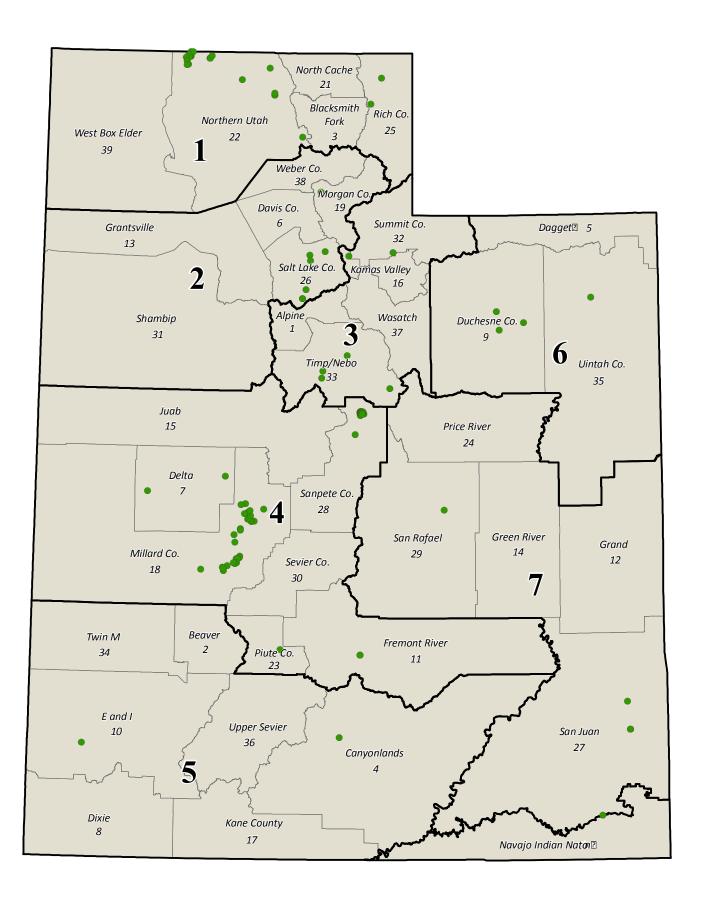
(801) 538-9905 Program Manager (801) 538-9436 FAX

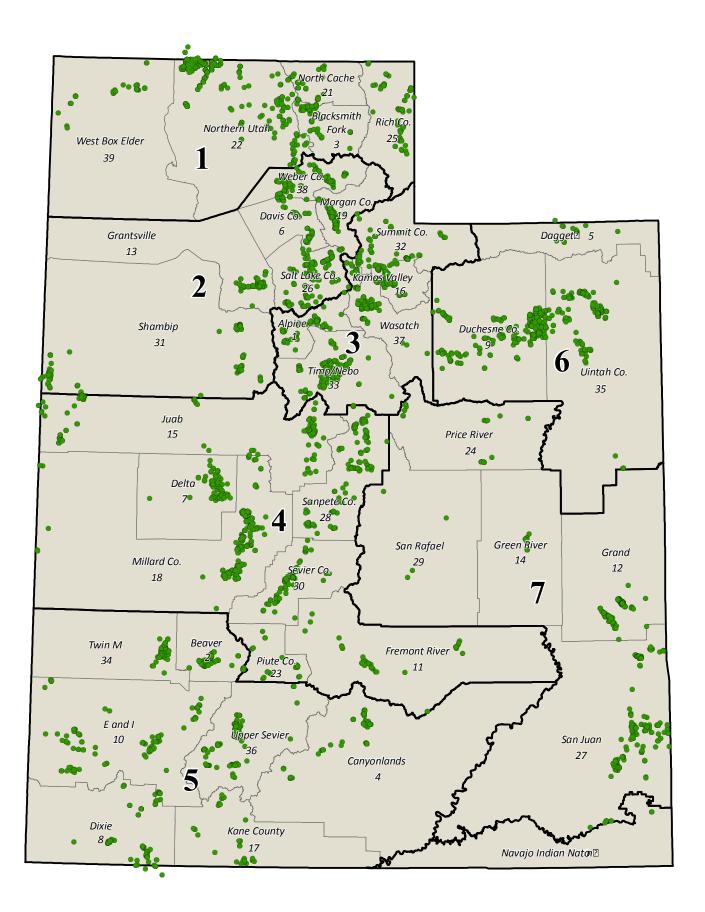
RECEIVED:	Ground Water Pre-S	Sample Information Fo	orm
PLOTTED:			
SAMPLED:	This is a non-regulatory program.	Your personal information is protected u	under
REPORT:		ermission to attach your well information	
Office Use Only	the water rights database will man	ce your name and address public.	
Name:		Telephone #:	
Address:		Other phone #:	
City:		Depth of well:	
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By signing this form and sample your wel	you are giving permission for the State o II.	of Utah Department of Agricultui	e and Food to enter your property
	n the lawful agent of the above describe and sample the above-described well.	ed well and grant permission to t	he Utah Department of Agriculture
-	Signature		Date
For furt	her information contact Mark Quilter at	mquilter@utah.gov, or at the abo	ove phone numbers.

The above Pre-Sample Information form is available on line at:

http://ag.utah.gov/divisions/conservation/documents/GWPresampleForm.pdf.

This form is used to request UDAF to sample a well.





UACD Zone 1 (Box Elder, Cache, and Rich Counties)

Twenty (22) sites were sampled in the Northern Utah Conservation Districts in Zone 1 during the summer of 2010. No samples were collected in the Blacksmith Fork, North Cache, or West Box Elder districts.

The Statistical Report below shows a summary of the total number of chemical tests collected (Test Count) for each district in Zone 1. The next four columns summarize the number of tests which exceed the standards for either Primary Drinking Water (DW Primary), Secondary Drinking Water (DW Secondary), Irrigation, or Livestock.

Ground Water UACD Zone No 1 Statistical Report For the Samples Collected Between: 7/7/2010 And 11/22/2010

District Name	Sample Count	Test Count	Test Count DW Primary	Which Result I DW Secondary	Exceeded Irrigation	Standards Livestock
Northern Utah	21	840	10	63	88	20
Rich Co.	1	40	0	3	2	0
Zone Totals:	22	880	10	66	90	20

Detailed tables follow covering the above water quality categories - General, Irrigation, Livestock, and Culinary (which includes Primary Drinking Water Standards and Secondary Drinking Water Standards) for each district along with a map(s). For the Irrigation, Livestock, and Culinary tables the first row lists the explicit standard for each element or compound (column). The standards for irrigation and livestock originated from the Water quality for agriculture 29 Revision 1, published by the Food and Agriculture Organization of the United Nations. The drinking water primary and secondary standards are from the State of Utah's water quality standards. Below the standards are the column headings (expressed as the chemical abbreviation) for each element or compound tested. Units used in measuring the concentrations of each element or compound are found below each abbreviation. Each row of the table is a single sample identified with a sample number. This sample number shows the sampling location on the map(s) located after the chemistry tables. Highlighted sample results show samples that exceed a standard for that element or compound. Totals at the bottom of each table show how many samples in each column exceeded the standard for that column. The value "ND" indicates that a particular element or compound was "Not Detected" for a given sample.

Northern Utah District **General**:

General Sample Information

		Collected Date	Coliform	Ecol	i Temperature	EC		SAR Hardness meq/Lmg/L	Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary	Irriga- tion	Indust- rial	Lands- cape	Natural	Drai- nage	Other
1	10007	8/3/2010	ND	ND	62.1 F (16.7 C)	581	369.0	1.300 240.9	Well	Clean	Soil	Steel	Sealed	~	~					
2	10008	8/3/2010	POS	ND	62.4 F (16.9 C)	718	469.0	1.500 311.6	Well	Gravel	Soil	Steel	Sealed	~	~					
3	10009	8/3/2010	POS	POS	62.6 F (17.0 C)	712	463.0	1.500 303.1	Spring	Surface Water	Lawn	PVC	Sealed		~					
4	10010	8/3/2010	ND	ND	65.5 F (18.6 C)	125	71.00	0.400 47.40	Well	Clean	Soil	Steel	Sealed	~	~					
5	10017	8/10/2010	POS	ND	73.4 F (23.0 C)	178	1187.	3.100 622.2	Well	Clean	Concrete Pad	Steel	Open		•					
6	10018	8/10/2010)		72.9 F (22.7 C)	246	1278.	3.600 668.1	Well	Clean	Concrete Pad	Steel	Open		~					
7	10019	8/10/2010	POS	POS	74.5 F (23.6 C)	453	2590.	5.000 1264.	Well	Clean	Concrete Pad	Steel	Open		~					
8	10020	8/10/2010	1		75.7 F (24.3 C)	550	3200.	10.00 1129.	Well	Clean	Concrete Pad	Steel	Open		•					
9	10021	8/10/2010	POS	POS	75.9 F (24.4 C)	805	4839.	9.900 2087.	Well	Clean	Concrete Pad	Steel	Open		~					
10	10022	8/10/2010	ND	ND	86.2 F (30.1 C)	525	3032.	24.10 369.0	Well	Clean	Well House	Steel	Open		~					
11	10023	8/10/2010	ND	ND	65.3 F (18.5 C)	113	685.0	1.000 507.8	Well	Clean	Concrete Pad	Steel	Open		~					
12	10024	8/10/2010	POS	ND	66.0 F (18.9 C)	278	1493.	3.000 871.4	Well	Clean	Concrete Pad	Steel	Sealed		•					
13	10025	8/10/2010	POS	POS	70.3 F (21.3 C)	122	790.0	1.300 544.9	Well	Clean	Concrete Pad	Steel	Sealed		~					
14	10026	8/10/2010	POS	ND	65.3 F (18.5 C)	282	1497.	2.700 959.1	Well	Clean	Concrete Pad	Steel	Sealed		~					
15	10027	8/10/2010	POS	ND	72.5 F (22.5 C)	322	1865.	6.400 690.8	Well	Clean	Soil	Steel	Sealed							
16	10028	8/10/2010	POS	ND	65.8 F (18.8 C)	481	2658.	7.700 983.7	Well	Clean	Concrete Pad	Steel	Sealed		~					
17	10029	8/10/2010	POS	POS	70.9 F (21.6 C)	838	537.0	3.000 249.9	Stream	Livestock	Natural	Earth	Open		~					
18	10030	8/10/2010	ND	ND	57.9 F (14.4 C)	281	1655.	5.800 751.4	Well	Clean	Concrete Pad	Steel	Open		•					
19	10031	8/10/2010	ND	ND	57.6 F (14.2 C)	142	947.0	4.900 380.9	Well	Clean	Pit Concrete	Steel	Sealed	~	~					
20	10032	8/10/2010	POS	ND	82.0 F (27.8 C)	320	1691.	17.00 213.4	Spring	Clean	Natural	Earth	Open	~	~			~		
21	10062	8/31/2010	i		68.0 F (20.0 C)	320	163.0	0.100 157.0	Spring	Vegetated		Steel								

Bacteria Positive Sample Count

Irrigation:

ion Sta	andards		5 A I	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2	5 Fe	73.2;152.5 HCO3	10000 K	2.5 Li	100000 Mg
S	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
10	0007	8/5/2010	ND	0.0760	ND	66.0764	107.1754	ND	ND	0.0038	0.0214	ND	ND	152.9190	2.8819	0.0455	18.3680
10	8000	8/5/2010	ND	0.1268	ND	65.4368	67.5000	ND	ND	0.0006	0.0214	ND	ND	306.6430	15.1184	0.0658	35.9280
10	0009	8/5/2010	ND	0.1338	ND	64.8231	67.6798	ND	ND	ND	0.0087	ND	ND	298.2730	14.8226	0.0647	34.2246
10	0010	8/5/2010	ND	0.0152	ND	12.6470	7.7453	ND	ND	ND	0.2815	ND	ND	56.1887	1.0677	ND	3.8414
10	0017	8/12/2010	ND	0.0682	ND	169.7181	596.6606	0.0012	ND	0.0008	0.0130	ND	ND	202.0930	21.5655	0.0632	48.0343
10	0018	8/12/2010	ND	0.0770	ND	181.5457	641.7610	ND	ND	0.0012	0.0090	ND	ND	146.5800	22.2912	0.0674	51.9875
10	0019	8/12/2010	ND	0.0917	ND	338.9611	1203.1410	0.0003	ND	0.0017	0.0086	ND	ND	140.0690	28.7499	0.1159	101.321
10	0020	8/12/2010	ND	0.1188	ND	316.7701	1562.9760	ND	ND	0.0025	0.0082	ND	ND	138.6370	34.9175	0.1308	81.8097
10	0021	8/12/2010	ND	0.0750	ND	597.2353	2783.7370	0.0007	ND	ND	0.0058	ND	0.3589	21.1286	51.9644	0.1865	144.300
10	0022	8/12/2010	ND	0.1836	ND	96.1323	1544.8290	ND	ND	0.0007	0.0247	ND	0.0130	175.3070	29.3266	0.3097	31.2338
10	0023	8/12/2010	ND	0.0453	ND	147.7830	314.1191	ND	ND	0.0018	0.0044	ND	ND	131.6640	13.0452	0.0214	33.5864
10	0024	8/12/2010	ND	0.0768	ND	241.6880	765.5518	ND	ND	0.0018	0.0138	ND	ND	157.1360	19.9973	0.0647	64.853
10	0025	8/12/2010	ND	0.0587	ND	153.1679	382.0001	ND	ND	0.0021	0.0084	ND	ND	135.9920	15.5701	0.0347	39.324
10	0026	8/12/2010	ND	0.1045	ND	263.0272	778.4574	ND	ND	0.0014	0.0098	ND	ND	149.3270	20.8952	0.0708	73.197
10	0027	8/12/2010	ND	0.1475	ND	179.6660	866.7985	ND	ND	0.0012	0.0133	ND	ND	200.8270	24.1757	0.1077	58.659
10	0028	8/12/2010	ND	0.3121	ND	231.8127	1401.1760	ND	ND	0.0010	0.0131	ND	ND	183.7970	42.5125	0.2769	98.100
10	0029	8/12/2010	ND	0.0926	ND	50.6945	163.5625	ND	20.4992	0.0009	0.0140	ND	ND	187.7080	8.0587	0.0497	29.901
10	0030	8/12/2010	ND	0.1331	ND	165.3497	609.7564	ND	ND	0.0016	0.0048	0.3027	ND	264.8110	18.0880	0.1051	82.038
10	0031	8/12/2010	ND	0.1038	ND	91.1004	382.6826	ND	ND	0.0017	0.0145	0.4323	ND	239.5670	10.0476	0.0743	37.164
10	0032	8/12/2010	ND	0.2371	ND	53.2829	823.7784	ND	ND	0.0008	0.0159	2.0079	ND	254.8700	19.5169	0.2367	19.465
10	0062	9/7/2010	ND	0.0152	ND	59.9834	1.4838	ND	ND	ND	0.0099	ND	ND	177.1360	0.6166	ND	1.7056
ount that	t Exceeded	Standard	0	0	0	0	17	0	0	0	1	1	0	19	0	0	0
Int Dete		Statituaru	Ü	U	U	Ü		U	· ·	Ü			Ü	13	U	Ü	

Irrig	ation Standards	Continues	.2 Mn	.01 Mo	70;230 Na	.2 Ni	5 Pb	10000 PO4	3;9 SAR	.02 Se	151;451;13 TDS	3 .1 V	2 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	mg/L	mg/L	mg/L	mg/L
1	10007	8/5/2010	0.0020	0.0016	45.6382	ND	ND	ND	1.3000	ND	369.0000	0.0040	0.0087
2	10008	8/5/2010	0.0005	0.0030	61.6899	0.0009	ND	ND	1.5000	ND	469.0000	0.0176	0.0242
3	10009	8/5/2010	0.0003	0.0032	59.5757	0.0008	ND	ND	1.5000	ND	463.0000	0.0179	0.0036
4	10010	8/5/2010	0.0025	ND	6.9510	ND	ND	ND	0.4000	ND	71.0000	ND	0.0914
5	10017	8/12/2010	0.4034	0.0010	177.1471	0.0014	ND	ND	3.1000	ND	1187.0000	ND	0.0118
6	10018	8/12/2010	0.0193	0.0009	216.2169	0.0012	ND	ND	3.6000	ND	1278.0000	0.0051	0.0049
7	10019	8/12/2010	0.0138	0.0010	411.7050	0.0017	ND	ND	5.0000	0.0169	2590.0000	0.0042	0.0054
8	10020	8/12/2010	0.0043	0.0010	769.0118	0.0017	ND	ND	10.0000	0.0119	3200.0000	0.0057	0.0044
9	10021	8/12/2010	0.4348	ND	1037.6520	0.0036	ND	ND	9.9000	ND	4839.0000	ND	0.0070
10	10022	8/12/2010	0.0012	0.0016	1062.0780	0.0008	ND	ND	24.1000	ND	3032.0000	0.0052	0.0147
11	10023	8/12/2010	0.0009	0.0006	53.3614	ND	ND	ND	1.0000	ND	685.0000	0.0033	0.0391
12	10024	8/12/2010	0.0002	0.0006	206.7738	0.0013	ND	ND	3.0000	0.0041	1493.0000	0.0046	0.0137
13	10025	8/12/2010	0.0006	0.0006	70.8631	0.0008	ND	ND	1.3000	ND	790.0000	0.0037	0.0033
14	10026	8/12/2010	0.0022	0.0006	191.6151	0.0013	ND	ND	2.7000	ND	1497.0000	0.0045	0.0067
15	10027	8/12/2010	0.0013	0.0009	387.6708	0.0013	ND	ND	6.4000	ND	1865.0000	0.0054	0.0120
16	10028	8/12/2010	0.0630	8000.0	557.2109	0.0015	ND	ND	7.7000	ND	2658.0000	0.0044	0.0107
17	10029	8/12/2010	0.0013	0.0017	109.9822	0.0007	ND	ND	3.0000	ND	537.0000	0.0044	ND
18	10030	8/12/2010	0.0029	0.0025	362.2056	0.0035	ND	ND	5.8000	0.0060	1655.0000	0.0049	0.0148
19	10031	8/12/2010	0.0006	0.0020	220.9488	ND	ND	ND	4.9000	ND	947.0000	0.0034	0.0307
20	10032	8/12/2010	ND	0.0024	570.9139	ND	ND	ND	17.0000	ND	1691.0000	ND	0.0042
21	10062	9/7/2010	0.0007	ND	3.2574	ND	ND	ND	0.1000	ND	163.0000	ND	0.0034
Test 0	Count that Exceeded	Standard:	2	0	15	0	0	0	13	0	20	0	0
ND -	Not Detected												

Livestock:

Liv	estock Star	ndards	5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2 F	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	P.,	mg/L	mg/L	mg/L	mg/L
1	10007	8/5/2010	ND	0.0025	0.0760	ND	ND	ND	0.0038	0.0214	ND	ND	17.4024	ND	7.8700	ND	22.7541	369.0000	0.0087
2	10008	8/5/2010	ND	0.0260	0.1268	ND	ND	ND	0.0006	0.0214	ND	ND	10.0078	ND	8.0000	ND	39.9478	469.0000	0.0242
3	10009	8/5/2010	ND	0.0239	0.1338	ND	ND	ND	ND	0.0087	ND	ND	13.2539	ND	8.0600	ND	39.3170	463.0000	0.0036
4	10010	8/5/2010	ND	ND	0.0152	ND	ND	ND	ND	0.2815	ND	ND	ND	ND	6.5400	ND	ND	71.0000	0.0914
5	10017	8/12/2010	ND	ND	0.0682	ND	ND	0.0012	0.0008	0.0130	ND	ND	6.8642	ND	7.5100	ND	43.0551	1187.0000	0.0118
6	10018	8/12/2010	ND	0.0024	0.0770	ND	ND	ND	0.0012	0.0090	ND	ND	10.1327	ND	7.4400	ND	52.3198	1278.0000	0.0049
7	10019	8/12/2010	ND	0.0027	0.0917	ND	ND	0.0003	0.0017	0.0086	ND	ND	113.4313	ND	7.4600	0.0169	297.4628	2590.0000	0.0054
8	10020	8/12/2010	ND	0.0039	0.1188	ND	ND	ND	0.0025	0.0082	ND	ND	145.3783	ND	7.3400	0.0119	190.6381	3200.0000	0.004
9	10021	8/12/2010	ND	0.0020	0.0750	ND	ND	0.0007	ND	0.0058	ND	ND	ND	ND	6.0300	ND	210.4437	4839.0000	0.007
10	10022	8/12/2010	ND	0.0058	0.1836	ND	ND	ND	0.0007	0.0247	ND	ND	ND	ND	7.6200	ND	147.7118	3032.0000	0.014
11	10023	8/12/2010	ND	0.0020	0.0453	ND	ND	ND	0.0018	0.0044	ND	ND	8.6814	ND	7.5300	ND	23.9696	685.0000	0.039
12	10024	8/12/2010	ND	0.0031	0.0768	ND	ND	ND	0.0018	0.0138	ND	ND	17.7581	ND	7.5500	0.0041	72.7102	1493.0000	0.013
13	10025	8/12/2010	ND	0.0023	0.0587	ND	ND	ND	0.0021	0.0084	ND	ND	ND	ND	7.4900	ND	30.0067	790.0000	0.0033
14	10026	8/12/2010	ND	0.0035	0.1045	ND	ND	ND	0.0014	0.0098	ND	ND	ND	ND	7.5600	ND	67.6148	1497.0000	0.0067
15	10027	8/12/2010	ND	0.0034	0.1475	ND	ND	ND	0.0012	0.0133	ND	ND	ND	ND	7.7000	ND	221.8177	1865.0000	0.012
16	10028	8/12/2010	ND	0.0090	0.3121	ND	ND	ND	0.0010	0.0131	ND	ND	ND	ND	7.4200	ND	208.6194	2658.0000	0.010
17	10029	8/12/2010	ND	0.0058	0.0926	ND	ND	ND	0.0009	0.0140	ND	ND	ND	ND	8.5900	ND	56.3591	537.0000	ND
18	10030	8/12/2010	ND	0.0087	0.1331	ND	ND	ND	0.0016	0.0048	0.3027	ND	5.7089	ND	7.5400	0.0060	260.8726	1655.0000	0.014
19	10031	8/12/2010	ND	0.0041	0.1038	ND	ND	ND	0.0017	0.0145	0.4323	ND	ND	ND	7.7100	ND	68.6895	947.0000	0.030
20	10032	8/12/2010	ND	0.0166	0.2371	ND	ND	ND	0.0008	0.0159	2.0079	ND	5.7884	ND	7.7500	ND	63.7502	1691.0000	0.004
21	10062	9/7/2010	ND	ND	0.0152	ND	ND	ND	ND	0.0099	ND	ND	ND	ND	7.4600	ND	5.1185	163.0000	0.003
Tes	t Count that E	xceeded Standard	0	0	0	0	0	0	0	0	1	0	0	0	1	0	6	12	0

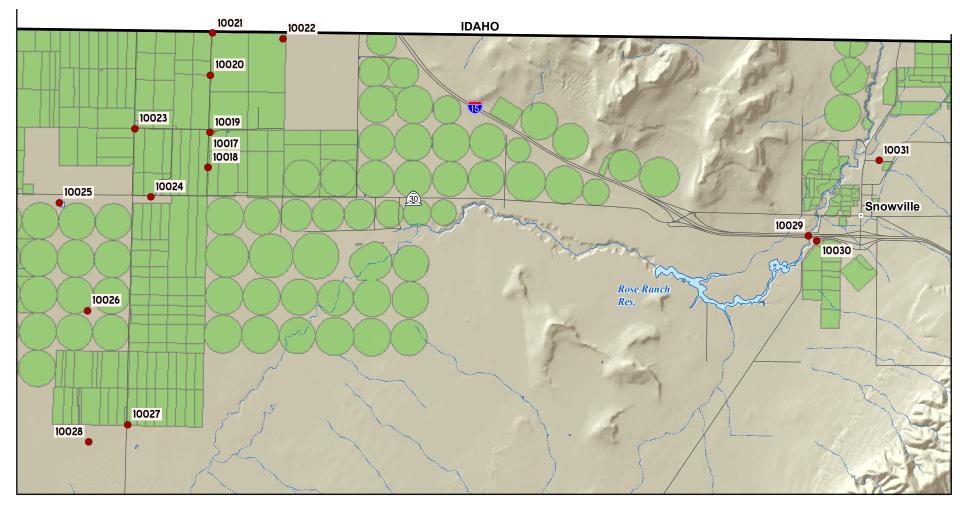
Culinary:

Drink	ing Water Pri	mary Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1	1.3 Cu	4 F	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015 Pb	.05 Se	500 SQ4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L			ug/L		mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10007	8/5/2010	0.0025	0.0997	ND	ND	ND	0.0038	0.0214	ND	ND	45.6382	ND	17.4024	ND	ND	22.7541	369.0000
2	10008	8/5/2010	0.0260	0.0580	ND	ND	ND	0.0006	0.0214	ND	ND	61.6899	0.0009	10.0078	ND	ND	39.9478	469.0000
3	10009	8/5/2010	0.0239	0.0648	ND	ND	ND	ND	0.0087	ND	ND	59.5757	8000.0	13.2539	ND	ND	39.3170	463.0000
4	10010	8/5/2010	ND	0.0713	ND	ND	ND	ND	0.2815	ND	ND	6.9510	ND	ND	ND	ND	ND	71.0000
5	10017	8/12/2010	ND	0.1282	ND	ND	ND	0.0008	0.0130	ND	ND	177.1471	0.0014	6.8642	ND	ND	43.0551	1187.0000
6	10018	8/12/2010	0.0024	0.1362	ND	ND	ND	0.0012	0.0090	ND	ND	216.2169	0.0012	10.1327	ND	ND	52.3198	1278.0000
7	10019	8/12/2010	0.0027	0.0625	ND	ND	ND	0.0017	0.0086	ND	ND	411.7050	0.0017	113.4313	ND	0.0169	297.4628	2590.0000
8	10020	8/12/2010	0.0039	0.2095	ND	ND	ND	0.0025	0.0082	ND	ND	769.0118	0.0017	145.3783	ND	0.0119	190.6381	3200.0000
9	10021	8/12/2010	0.0020	0.3235	ND	ND	ND	ND	0.0058	ND	ND	1037.6520	0.0036	ND	ND	ND	210.4437	4839.0000
10	10022	8/12/2010	0.0058	0.1557	ND	ND	ND	0.0007	0.0247	ND	ND	1062.0780	0.0008	ND	ND	ND	147.7118	3032.0000
11	10023	8/12/2010	0.0020	0.2457	ND	ND	ND	0.0018	0.0044	ND	ND	53.3614	ND	8.6814	ND	ND	23.9696	685.0000
12	10024	8/12/2010	0.0031	0.2092	ND	ND	ND	0.0018	0.0138	ND	ND	206.7738	0.0013	17.7581	ND	0.0041	72.7102	1493.0000
13	10025	8/12/2010	0.0023	0.2639	ND	ND	ND	0.0021	0.0084	ND	ND	70.8631	0.0008	ND	ND	ND	30.0067	790.0000
14	10026	8/12/2010	0.0035	0.1545	ND	ND	ND	0.0014	0.0098	ND	ND	191.6151	0.0013	ND	ND	ND	67.6148	1497.0000
15	10027	8/12/2010	0.0034	0.1497	ND	ND	ND	0.0012	0.0133	ND	ND	387.6708	0.0013	ND	ND	ND	221.8177	1865.0000
16	10028	8/12/2010	0.0090	0.0751	ND	ND	ND	0.0010	0.0131	ND	ND	557.2109	0.0015	ND	ND	ND	208.6194	2658.0000
17	10029	8/12/2010	0.0058	0.0574	ND	ND	ND	0.0009	0.0140	ND	ND	109.9822	0.0007	ND	ND	ND	56.3591	537.0000
18	10030	8/12/2010	0.0087	0.0597	ND	ND	ND	0.0016	0.0048	0.3027	ND	362.2056	0.0035	5.7089	ND	0.0060	260.8726	1655.0000
19	10031	8/12/2010	0.0041	0.1059	ND	ND	ND	0.0017	0.0145	0.4323	ND	220.9488	ND	ND	ND	ND	68.6895	947.0000
20	10032	8/12/2010	0.0166	0.1383	ND	ND	ND	0.0008	0.0159	2.0079	ND	570.9139	ND	5.7884	ND	ND	63.7502	1691.0000
21	10062	9/7/2010	ND	0.0180	ND	ND	ND	ND	0.0099	ND	ND	3.2574	ND	ND	ND	ND	5.1185	163.0000
Test (Count that Exce	eeded Standard	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	5

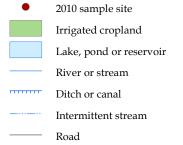
ND - Not Detected

Drinkin	g Water Second	ary Standards:	0.1 Ag	0.5 Al	250 CI	1 Cu	2 F	0.3 Fe	60;120;180 Hardnes	.05 Mn	6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	S	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10007	8/5/2010	ND	ND	107.1754	0.0214	ND	ND	240.9000	0.0020	7.8700	13.7321	22.7541	369.0000	0.0087
2	10008	8/5/2010	ND	ND	67.5000	0.0214	ND	ND	311.6000	0.0005	8.0000	22.4023	39.9478	469.0000	0.0242
3	10009	8/5/2010	ND	ND	67.6798	0.0087	ND	ND	303.1000	0.0003	8.0600	22.1049	39.3170	463.0000	0.0036
4	10010	8/5/2010	ND	ND	7.7453	0.2815	ND	ND	47.4000	0.0025	6.5400	5.1800	ND	71.0000	0.0914
5	10017	8/12/2010	ND	ND	596.6606	0.0130	ND	ND	622.2000	0.4034	7.5100	24.5370	43.0551	1187.0000	0.0118
6	10018	8/12/2010	0.0004	ND	641.7610	0.0090	ND	ND	668.1000	0.0193	7.4400	29.2583	52.3198	1278.0000	0.0049
7	10019	8/12/2010	ND	ND	1203.1410	0.0086	ND	ND	1264.8000	0.0138	7.4600	26.6485	297.4628	2590.0000	0.005
8	10020	8/12/2010	ND	ND	1562.9760	0.0082	ND	ND	1129.0000	0.0043	7.3400	30.5526	190.6381	3200.0000	0.004
9	10021	8/12/2010	ND	ND	2783.7370	0.0058	ND	0.3589	2087.6000	0.4348	6.0300	2.7364	210.4437	4839.0000	0.007
10	10022	8/12/2010	ND	ND	1544.8290	0.0247	ND	0.0130	369.0000	0.0012	7.6200	32.2740	147.7118	3032.0000	0.014
11	10023	8/12/2010	ND	ND	314.1191	0.0044	ND	ND	507.8000	0.0009	7.5300	25.4209	23.9696	685.0000	0.039
12	10024	8/12/2010	ND	ND	765.5518	0.0138	ND	ND	871.4000	0.0002	7.5500	25.8950	72.7102	1493.0000	0.013
13	10025	8/12/2010	ND	ND	382.0001	0.0084	ND	ND	544.9000	0.0006	7.4900	28.0091	30.0067	790.0000	0.003
14	10026	8/12/2010	ND	ND	778.4574	0.0098	ND	ND	959.1000	0.0022	7.5600	25.3816	67.6148	1497.0000	0.006
15	10027	8/12/2010	ND	ND	866.7985	0.0133	ND	ND	690.8000	0.0013	7.7000	24.2834	221.8177	1865.0000	0.012
16	10028	8/12/2010	ND	ND	1401.1760	0.0131	ND	ND	983.7000	0.0630	7.4200	25.1672	208.6194	2658.0000	0.010
17	10029	8/12/2010	ND	ND	163.5625	0.0140	ND	ND	249.9000	0.0013	8.5900	5.4858	56.3591	537.0000	ND
18	10030	8/12/2010	ND	ND	609.7564	0.0048	0.3027	ND	751.4000	0.0029	7.5400	20.2278	260.8726	1655.0000	0.014
19	10031	8/12/2010	ND	ND	382.6826	0.0145	0.4323	ND	380.9000	0.0006	7.7100	16.4588	68.6895	947.0000	0.030
20	10032	8/12/2010	ND	ND	823.7784	0.0159	2.0079	ND	213.4000	ND	7.7500	9.1711	63.7502	1691.0000	0.004
21	10062	9/7/2010	ND	ND	1.4838	0.0099	ND	ND	157.0000	0.0007	7.4600	3.0142	5.1185	163.0000	0.003
Test Co	unt that Exceeded	Standard:	0	0	15	0	1	1	20	3	2	0	2	19	0

Map 3. Northern Utah District - Snowville Area



Map Scale 1:82,368 (1 inch = 1.3 miles)

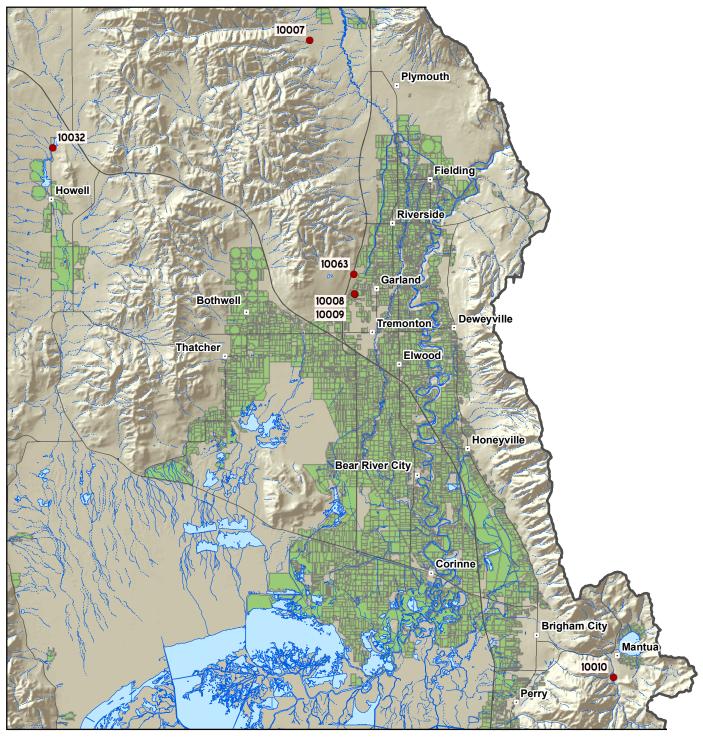




District Location



Map 4. Northern Utah District - Eastern Box Elder County



Map Scale 1:281,153 (1 inch = 4.4 miles)



Rich County District **General**:

Genera	Samp	le Inf	forma	tion
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Samp No	le Collected Date	Coliform	Ecoli	Temperature		TDS SAR Hard mg/L meq/Lmg/			Site Condition	Well Head	Material	Casing Condition	Culli- nary		Indust- rial	Lands- cape	Drai- nage	Other
1 100	61 8/31/201	0 ND	ND (68.0 F (20.0 C)	450	260.0 0.200 220	0.8 Well	С	Clean	Covered	Steel	Sealed	~	~				
Bacteria	Positive	0	0	ND - Not	Dete	cted												

Sample Count

Irrigation:

Irrigation	Standards		5 A I	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2 F	5 Fe	73.2;152.5 HCO3	10000 K	2.5 Li	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10061	9/7/2010	ND	0.0271	ND	56.8806	11.8154	ND	ND	ND	0.0076	ND	ND	259.2460	1.9388	0.0070	19.0747
Test Count	that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

ND - Not Detected

Irrigatio	n Standards	Continues	.2 M n	.01 Mo	70;230 Na	.2 Ni	5 Pb	10000 PO4	3;9 SAR	.02 Se	151;451;13 TDS	3 .1 V	2 Zn
	Sample No Tes		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	mg/L	mg/L	mg/L	mg/L
1	10061	9/7/2010	0.0723	0.0007	7.9869	ND	ND	ND	0.2000	ND	260.0000	ND	0.0036
Test Coun	Test Count that Exceeded Standard:			0	0	0	0	0	0	0	1	0	0

ND - Not Detected

Livestock:

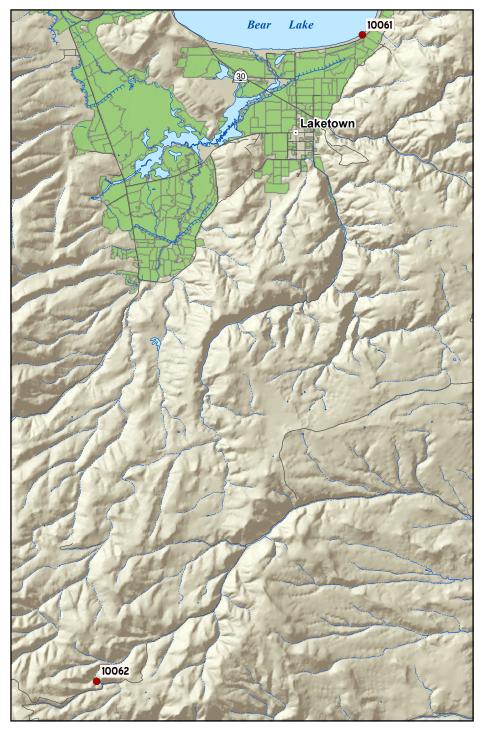
	Livestock S	tandards	5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample N	Tested Date			mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	1 10061	9/7/2010	ND	ND	0.0271	ND	ND	ND	ND	0.0076	ND	ND	ND	ND	7.9000	ND	22.7607	260.0000	0.0036
	Test Count tha	t Exceeded Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	ND - Not Det	ected																	

Culinary:

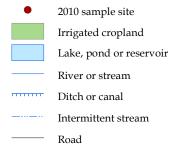
Drin	king Water Pr	imary Standards		2	0.004	0.005	25	0.1	1.3	4	2	10000	1000	44.3	.015	.05	500	2000
	Sample No	Tested Date	As mg/L	Ba mg/L	Be mg/L	Cd mg/L	CIO4 ug/L	Cr mg/L	mg/L	F mg/L	Hg ug/L	Ma mg/L	Ni mg/L	MO3 mg/L	Pb mg/L	Se mg/L	SO4 mg/L	mg/L
1	10061	9/7/2010	ND	0.1631	ND	ND	ND	ND	0.0076	ND	ND	7.9869	ND	ND	ND	ND	22.7607	260.0000
Test	Count that Exc	eeded Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ND - Not Detected

Drinking V	Vater Seconda	ary Standards:		0.5	250	1	2	0.3	60;120;180		6.5-8.5	1000	250	200	5
	Sample No Tested Date		Ag mg/L	Mg/L	mg/L	mg/L	mg/L	Fe mg/L	Hardnes s	mg/L	pH -	Si mg/L	SO4 mg/L	TDS mg/L	Zn mg/L
1	1 10061 9/7/2010			ND	11.8154	0.0076	ND	ND	220.8000	0.0723	7.9000	11.9967	22.7607	260.0000	0.0036
Test Count	Test Count that Exceeded Standard:		0	0	0	0	0	0	1	1	0	0	0	1	0



Map Scale 1:103,412 (1 inch = 1.6 miles)







UACD Zone 2 (Davis, Morgan, Grantsville, Salt Lake, and Weber counties and Shambip District)

Seven (7) sites were sampled in the Salt Lake and Morgan county Conservation Districts in Zone 2 during the spring, summer, and fall of 2010. Six (6) samples from Salt Lake County and one (1) from Morgan County.

The Statistical Report below shows a summary of the total number of chemical tests collected (Test Count) for each district in Zone 2. The next four columns summarize the number of tests which exceed the standards for either Primary Drinking Water (DW Primary), Secondary Drinking Water (DW Secondary), Irrigation, or Livestock.

Ground Water UACD Zone No 2 Statistical Report For the Samples Collected Between: 7/7/2010 And 11/22/2010

District Name	Sample Count	Test Count	Test Count DW Primary	Which Result I DW Secondary	Exceeded Irrigation	Standards Livestock
Morgan	1	40	0	3	3	0
Salt Lake	6	240	1	15	24	3
Zone Totals:	7	280	1	18	27	3

Detailed tables follow covering the above water quality categories - General, Irrigation. Livestock, and Culinary (which includes Primary Drinking Water Standards and Secondary Drinking Water Standards) for each district along with a map(s). For the Irrigation, Livestock, and Culinary tables the first row lists the explicit standard for each element or compound (column). The standards for irrigation and livestock originated from the Water quality for agriculture 29 Revision 1, published by the Food and Agriculture Organization of the United Nations. The drinking water primary and secondary standards are from the State of Utah's water quality standards. Below the standards are the column headings (expressed as the chemical abbreviation) for each element or compound tested. Units used in measuring the concentrations of each element or compound are found below each abbreviation. Each row of the table is a single sample identified with a sample number. This sample number shows the sampling location on the map(s) located after the chemistry tables. Highlighted sample results show samples that exceed a standard for that element or compound. Totals at the bottom of each table show how many samples in each column exceeded the standard for that column. The value "ND" indicates that a particular element or compound was "Not Detected" for a given sample.

Morgan County District

General:

General Sample Information

	Sample No	Collected Date	Coliform	Ecoli	Temperature		TDS SAR mg/L meq/		Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary	Irriga- tion	Indust- rial	Lands- cape	Natural	Drai- nage	Other
1	1000	8/3/2010	POS	ND :	78.1 F (25.6 C)	560	357.0 1.40	0 243.6	Well	Clean	Pit Masonry	Steel	Sealed	~	~					
1,000	acteria Po ample Co		1	0	ND - Not	Det	ected													

Irrigation:

Irrigation	Standards		5 Al	0.5;1.0;2.0; B	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2 F	5 Fe	73.2;152.5 HCO3	10000 K	2.5 Li	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10006	8/5/2010	ND	0.0567	ND	65.8326	35.6252	ND	ND	ND	0.0101	ND	ND	257.1090	3.6902	0.0177	19.1873
Test Count	that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

ND - Not Detected

Irrigatio	n Standards	Continues	.2 Mn	.01 Mo	70;230 Na	.2 Ni	5 Pb	10000 PO4	3;9 SAR	.02 Se	151;451;1: TDS	3 .1 V	2 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	mg/L	mg/L	mg/L	mg/L
1	10006	8/5/2010	0.5226	0.0040	50.9429	ND	ND	ND	1.4000	ND	357.0000	ND	0.0088
Test Coun	t that Exceeded	Standard:	1	0	0	0	0	0	0	0	1	0	0

Livestock:

Liv	estock Star	ndards	5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2 F	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	ug/L	mg/L	mg/L				mg/L	mg/L
1	10061	9/7/2010	ND	ND	0.0271	ND	ND	ND	ND	0.0076	ND	ND	ND	ND	7.9000	ND	22.7607	260.0000	0.0036
Tes	st Count that E	xceeded Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ND - Not Detected

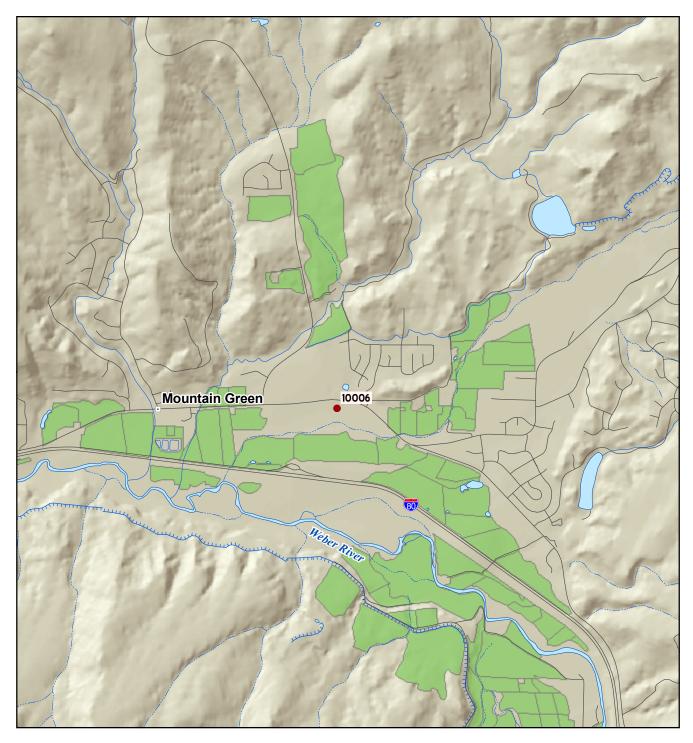
Culinary:

Drinking W	later Primary	Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4	2 Ha	10000 Na	1000 Ni	44.3 NO3	.015 Pb	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	Hg ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10011	8/5/2010	ND	0.0315	ND	ND	ND	0.0007	0.0187	ND	ND	46.3608	ND	14.2571	ND	ND	134.5331	592.0000
2	10012	8/5/2010	0.0226	0.0924	ND	ND	ND	0.0006	0.0273	ND	ND	354.1969	ND	ND	ND	0.0064	60.3117	918.0000
3	10013	8/5/2010	ND	0.0229	ND	ND	ND	0.0011	0.0280	ND	ND	50.1113	0.0009	16.9990	ND	ND	169.2485	671.0000
4	10014	8/5/2010	0.0048	0.0610	ND	ND	ND	ND	0.0143	ND	ND	123.0315	0.0007	17.9634	ND	ND	188.3091	973.0000
5	10015	8/5/2010	0.0045	0.0432	ND	ND	ND	0.0011	0.0144	ND	ND	73.7086	ND	14.1339	ND	ND	89.0349	577.0000
6	10016	8/5/2010	ND	0.0333	ND	ND	ND	ND	0.0092	ND	ND	80.3126	ND	ND	ND	ND	77.5426	461.0000
Test Count t	that Exceeded	Standard	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

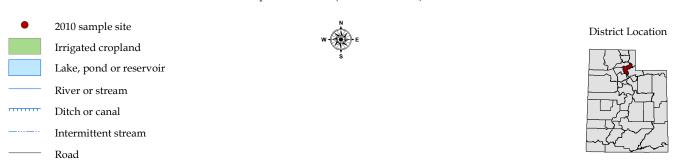
ND - Not Detected

Drinking W	ater Seconda	ary Standards:	0.1 Ag	0.5 Al	250 CI	1 Cu	2	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn
Sample No Tested Date			COVER NAME OF THE OWNER OWNER OF THE OWNER	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	-	mg/L	mg/L	mg/L	mg/L
1 10006 8/5/2010			ND	ND	35.6252	0.0101	ND	ND	243.6000	0.5226	8.1000	14.6660	40.2019	357.0000	0.0088
Test Count t	hat Exceeded	Standard:	0	0	0	0	0	0	1	1	0	0	0	1	0

Map 6. Morgan County District



Map Scale 1:31,680 (1 inch = 0.5 miles)



Salt Lake District

General:

General Sample Information

		Collected Date	Coliform	Ecoli	Temperature	EC	TDS SAR mg/L meq/		Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary	Irriga- tion	Indust- rial	Lands- cape	Drai- nage	Other
1	10011	8/3/2010	ND	ND	61.9 F (16.6 C)	886	592.0 0.90	0 477.1	Flowing Well	Vegetated	Covered	Steel	Sealed	~	~				
2	10012	8/3/2010	POS	ND	65.1 F (18.4 C)	150	918.0 18.3	0 70.90	Well	Vegetated	Soil	Steel	Sealed	~	~				
3	10013	8/3/2010	ND	ND	68.2 F (20.1 C)	999	671.0 1.00	0 502.9	Flowing Well	Clean	Inside Home	Steel	Sealed	~	~				
4	10014	8/3/2010	POS	ND	67.1 F (19.5 C)	142	973.0 2.30	0 565.7	Well	Clay Soil	Covered	Steel	Sealed	~	✓				
5	10015	8/3/2010	ND	ND	73.9 F (23.3 C)	927	577.0 1.70	0 357.3	Well	Clay Soil	Concrete Pad	PVC	Subsidence	~	~				
6	10016	8/3/2010	ND	ND	69.3 F (20.7 C)	737	461.0 2.30	0 227.5	Well	Chemicals	Well House	Steel	Sealed	~	~				
Ва	cteria Pos	itive	2	0	ND - Not	t Det	ected												

Bacteria Positive Sample Count

Irrigation:

Irrigation	Standards		5 A I	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2	5 Fe	73.2;152.5 HCO3	10000	2.5	100000
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Mg mg/L
1	10011	8/5/2010	ND	0.0701	ND	116.1785	95.5099	ND	ND	0.0007	0.0187	ND	ND	261.0730	2.8780	0.0240	45.3039
2	10012	8/5/2010	ND	0.3252	ND	18.2020	282.2440	ND	ND	0.0006	0.0273	ND	0.0205	380.6380	1.7049	0.0535	6.1654
3	10013	8/5/2010	ND	0.1287	ND	135.2659	117.6649	ND	ND	0.0011	0.0280	ND	ND	265.2270	3.8639	0.0299	39.9865
4	10014	8/5/2010	ND	0.2735	ND	121.0393	253.8559	ND	ND	ND	0.0143	ND	ND	335.9890	18.4244	0.1115	63.8555
5	10015	8/5/2010	ND	0.1288	ND	75.5677	157.8006	ND	ND	0.0011	0.0144	ND	ND	193.8190	11.6967	0.0759	40.8798
6	10016	8/5/2010	ND	0.1123	ND	52.8830	126.5050	ND	ND	ND	0.0092	ND	ND	168.2580	5.6398	0.0423	23.1343
Test Count	that Exceeded	Standard	0	0	0	0	6	0	0	0	0	0	0	6	0	0	0

ND - Not Detected

Irrigat	ion Standards	Continues	.2	.01 M O	70;230	.2 Ni	5 Pb	10000 PO4	3;9	.02 Se	151;451;13 TDS	.1 V	2 Zn
	Sample No	Tested Date	Mn mg/L	mg/L	Na mg/L	mg/L	mg/L	mg/L	SAR meq/L	mg/L	mg/L	mg/L	mg/L
1	10011	8/5/2010	0.0005	0.0014	46.3608	ND	ND	ND	0.9000	ND	592.0000	0.0030	0.0075
2	10012	8/5/2010	0.0011	0.0186	354.1969	ND	ND	ND	18.3000	0.0064	918.0000	0.0046	0.0953
3	10013	8/5/2010	0.0006	0.0005	50.1113	0.0009	ND	ND	1.0000	ND	671.0000	ND	0.0465
4	10014	8/5/2010	0.0019	0.0016	123.0315	0.0007	ND	ND	2.3000	ND	973.0000	0.0043	0.0192
5	10015	8/5/2010	0.0014	0.0021	73.7086	ND	ND	ND	1.7000	ND	577.0000	0.0037	0.0136
6	10016	8/5/2010	0.0524	0.0016	80.3126	ND	ND	ND	2.3000	ND	461.0000	ND	0.1079
Test Co	unt that Exceeded	Standard:	0	1	4	0	0	0	1	0	6	0	0

Livestock:

Liv	estock Stand	lards	5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10011	8/5/2010	ND	ND	0.0701	ND	ND	ND	0.0007	0.0187	ND	ND	14.2571	ND	7.9200	ND	134.5331	592.0000	0.0075
2	10012	8/5/2010	ND	0.0226	0.3252	ND	ND	ND	0.0006	0.0273	ND	ND	ND	ND	8.3600	0.0064	60.3117	918.0000	0.0953
3	10013	8/5/2010	ND	ND	0.1287	ND	ND	ND	0.0011	0.0280	ND	ND	16.9990	ND	7.9100	ND	169.2485	671.0000	0.0465
4	10014	8/5/2010	ND	0.0048	0.2735	ND	ND	ND	ND	0.0143	ND	ND	17.9634	ND	7.9400	ND	188.3091	973.0000	0.0192
5	10015	8/5/2010	ND	0.0045	0.1288	ND	ND	ND	0.0011	0.0144	ND	ND	14.1339	ND	7.9800	ND	89.0349	577.0000	0.0136
6	10016	8/5/2010	ND	ND	0.1123	ND	ND	ND	ND	0.0092	ND	ND	ND	ND	8.0200	ND	77.5426	461.0000	0.1079
Test	Count that Exc	eeded Standard	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0

ND - Not Detected

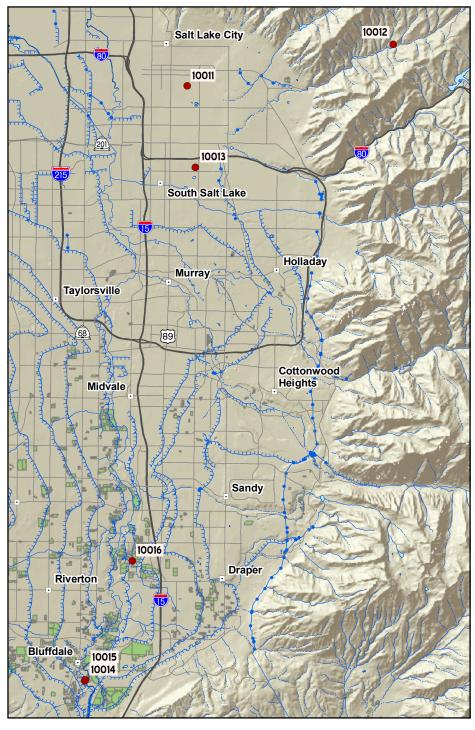
Culinary:

Drinking	Water Primary	Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015 Pb	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10011	8/5/2010	ND	0.0315	ND	ND	ND	0.0007	0.0187	ND	ND	46.3608	ND	14.2571	ND	ND	134.5331	592.0000
2	10012	8/5/2010	0.0226	0.0924	ND	ND	ND	0.0006	0.0273	ND	ND	354.1969	ND	ND	ND	0.0064	60.3117	918.0000
3	10013	8/5/2010	ND	0.0229	ND	ND	ND	0.0011	0.0280	ND	ND	50.1113	0.0009	16.9990	ND	ND	169.2485	671.0000
4	10014	8/5/2010	0.0048	0.0610	ND	ND	ND	ND	0.0143	ND	ND	123.0315	0.0007	17.9634	ND	ND	188.3091	973.0000
5	10015	8/5/2010	0.0045	0.0432	ND	ND	ND	0.0011	0.0144	ND	ND	73.7086	ND	14.1339	ND	ND	89.0349	577.0000
6	10016	8/5/2010	ND	0.0333	ND	ND	ND	ND	0.0092	ND	ND	80.3126	ND	ND	ND	ND	77.5426	461.0000
Test Coun	t that Exceeded	Standard	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

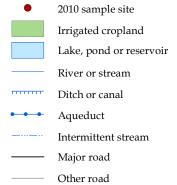
ND - Not Detected

Drinking V	Vater Seconda	ary Standards:	0.1 Ag	0.5 Al	250 CI	1 Cu	2	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	s	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10011	8/5/2010	ND	ND	95.5099	0.0187	ND	ND	477.1000	0.0005	7.9200	8.1143	134.5331	592.0000	0.0075
2	10012	8/5/2010	ND	ND	282.2440	0.0273	ND	0.0205	70.9000	0.0011	8.3600	4.3818	60.3117	918.0000	0.0953
3	10013	8/5/2010	ND	ND	117.6649	0.0280	ND	ND	502.9000	0.0006	7.9100	6.7373	169.2485	671.0000	0.0465
4	10014	8/5/2010	ND	ND	253.8559	0.0143	ND	ND	565.7000	0.0019	7.9400	20.7247	188.3091	973.0000	0.0192
5	10015	8/5/2010	ND	ND	157.8006	0.0144	ND	ND	357.3000	0.0014	7.9800	19.0704	89.0349	577.0000	0.0136
6	10015 8/5/2010 10016 8/5/2010		ND	ND	126.5050	0.0092	ND	ND	227.5000	0.0524	8.0200	11.4529	77.5426	461.0000	0.1079
Test Count	est Count that Exceeded Standard:		0	0	2	0	0	0	6	1	0	0	0	6	0

Map 7. Salt Lake County District



Map Scale 1:190,080 (1 inch = 3 miles)







UACD Zone 3 (Wasatch County and most of Summit and Utah counties)

Six (6) sites were sampled in three of the five Conservation Districts in Zone 3 during the spring, summer, and fall of 2010. These include the number of samples in the following districts: one (1) in Kamas Valley, one (1) in Summit, and four (4) in Timp-Nebo districts.

The Statistical Report below shows a summary of the total number of chemical tests collected (Test Count) for each district in Zone 3. The next four columns summarize the number of tests which exceed the standards for either Primary Drinking Water (Primary), Secondary Drinking Water (DW Secondary), Irrigation, or Livestock.

Ground Water UACD Zone No 3 Statistical Report For the Samples Collected Between: 7/7/2010 And 11/22/2010

District Name	Sample Count	Test Count	Test Count DW Primary	Which Result DW Secondary	Exceeded Irrigation	Standards Livestock
Kamas Valley	1	40	0	2	3	0
Summit	1	40	0	2	2	0
Timp-Nebo	4	160	0	9	8	0
Zone Totals:	6	240	0	13	13	0

Detailed tables follow covering the above water quality categories - General, Irrigation, Livestock, and Culinary (which includes Primary Drinking Water Standards and Secondary Drinking Water Standards) for each district along with a map(s). For the Irrigation, Livestock, and Culinary tables the first row lists the explicit standard for each element or compound (column). The standards for irrigation and livestock originated from the Water quality for agriculture 29 Revision 1, published by the Food and Agriculture Organization of the United Nations. The drinking water primary and secondary standards are from the State of Utah's water quality standards. Below the standards are the column headings (expressed as the chemical abbreviation) for each element or compound tested. Units used in measuring the concentrations of each element or compound are found below each abbreviation. Each row of the table is a single sample identified with a sample number. This sample number shows the sampling location on the map(s) located after the chemistry tables. Highlighted sample results show samples that exceed a standard for that element or compound. Totals at the bottom of each table show how many samples in each column exceeded the standard for that column. The value "ND" indicates that a particular element or compound was "Not Detected" for a given sample.

Kamas District General:

General Sample Information

	Sample No	Collected Date	Coliform	Ecoli	Temperature				Hardness .mg/L	Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary		Indust- rial	Lands- cape	Natural	Drai- nage	Other
1	1000	5 8/3/2010	POS	ND .	54.7 F (12.6 C)	104	649.0	1.400	475.4	Well	Vegetated	Soil	Steel	Sealed	~	~					
	cteria P imple C		1	0	ND - Not	Det	ected														

Irrigation:

Irrigation	Standards		5 A I	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2	5 Fe	73.2;152.5 HCO3	10000 K	2.5 Li	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10005	8/5/2010	ND	0.0809	ND	127.5828	202.7546	ND	ND	0.0007	0.0307	ND	ND	257.0230	1.4102	0.0264	37.9644
Test Count	Test Count that Exceeded Standard		0	0	0	0	1	0	0	0	0	0	0	1	0	0	0

ND - Not Detected

Irrigatio	on Standards	Continues	.2 Mn	.01 Mo	70;230 Na	.2 N i	5 Pb	10000 PO4	3;9 SAR	.02 Se	151;451;1; TDS	3 .1 V	2 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	mg/L	mg/L	mg/L	mg/L
1	10005	8/5/2010	0.0005	ND	69.3453	0.0017	ND	ND	1.4000	ND	649.0000	ND	0.0236
Test Cour	nt that Exceeded	Standard:	0	0	0	0	0	0	0	0	1	0	0

ND - Not Detected

Livestock:

Liv	estock Stan	dards	5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2 F	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10005	8/5/2010	ND	ND	0.0809	ND	ND	ND	0.0007	0.0307	ND	ND	11.1853	ND	7.8400	ND	65.2492	649.0000	0.0236
Te	st Count that Ex	ceeded Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

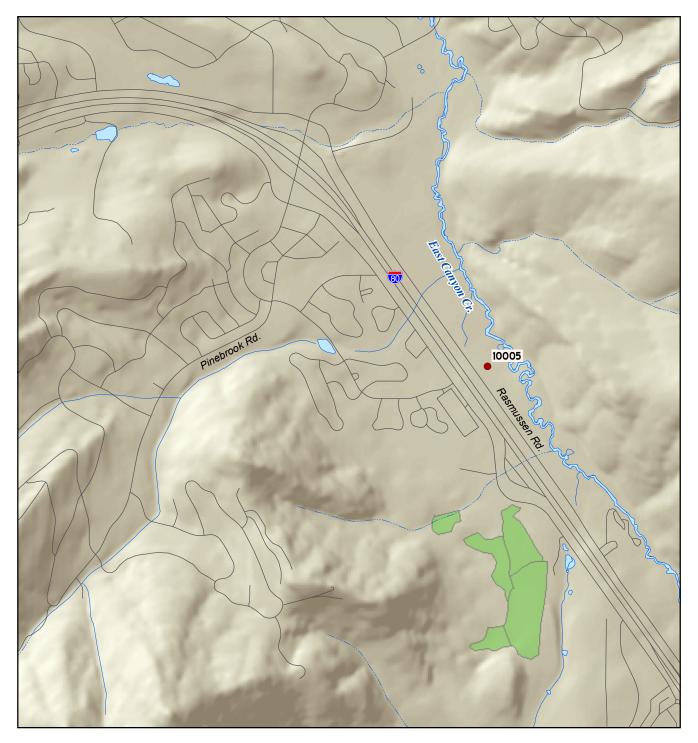
Culinary:

Drinking V	Vater Primary	Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4 F	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015 Pb	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10005	8/5/2010	ND	0.0680	ND	ND	ND	0.0007	0.0307	ND	ND	69.3453	0.0017	11.1853	ND	ND	65.2492	649.0000
Test Count	that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ND - Not Detected

Drinking \	Water Second	ary Standards:	0.1 Ag	0.5 Al	250 CI	1 Cu	2 F	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	S	mg/L		mg/L	mg/L		mg/L
1	1 10005 8/5/2010			ND	202.7546	0.0307	ND	ND	475.4000	0.0005	7.8400	6.3579	65.2492	649.0000	0.0236
Test Count	Test Count that Exceeded Standard:		0	0	0	0	0	0	1	0	0	0	0	1	0

Map 8. Kamas Valley District



Map Scale 1:18,168 (1 inch = 0.3 miles)



Summit District General:

Genera	Samp	le Inf	formation
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	Sam No		Collected Date	Coliform	Ecoli	Temperature			SAR Hardnes meq/Lmg/L	s Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary	Irriga- tion	Indust- rial	Lands- cape	Natural	Drai- nage	Other
1	100	004	8/3/2010	POS	ND 4	49.8 F (9.9 C)	391	244.0	0.200 249.4	Well	Clean	Soil	Steel	Sealed	~	~					
	acteria imple			1	0	ND - Not	Dete	ected													

Irrigation:

Irrigation	Standards		5 A I	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2 F	5 Fe	73.2;152.5 HCO3	10000 K	2.5 Li	100000 Mg
	Sample No Tested Date		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10004	8/5/2010	ND	0.0230	ND	64.7802	ND	ND	ND	0.0007	0.0191	ND	ND	224.6550	0.9621	0.0032	21.2200
Test Count	that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

ND - Not Detected

Irrigatio	n Standards	Continues	.2 Mn	.01 Mo	70;230 Na	.2 Ni	5 Ph	10000 PO4	3;9 SAR	.02 Se	151;451;13 TDS	3 .1 V	2 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	mg/L	mg/L	mg/L	mg/L
1	10004	8/5/2010	0.0004	ND	6.1803	ND	ND	ND	0.2000	ND	244.0000	ND	0.0634
Test Coun	Test Count that Exceeded Standard:			0	0	0	0	0	0	0	1	0	0

ND - Not Detected

Livestock:

L	ivestock Stand	lards	5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2 F	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	100	mg/L	mg/L	The second second second	mg/L
1	10004	8/5/2010	ND	ND	0.0230	ND	ND	ND	0.0007	0.0191	ND	ND	ND	ND	7.9800	ND	27.5144	244.0000	0.0634
Te	est Count that Exc	eeded Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

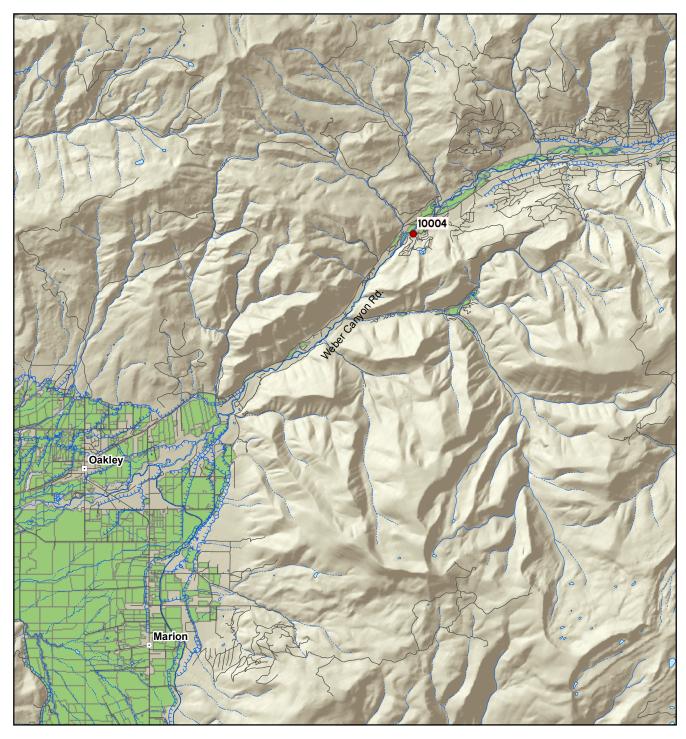
Culinary:

Drinking	Water Primary	Standards	0.01	2 Ba	0.004 Be	0.005	25 CIO4	0.1 Cr	1.3 Cu	4 F	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	100000000000000000000000000000000000000	mg/L
1	10004	8/5/2010	ND	0.0900	ND	ND	ND	0.0007	0.0191	ND	ND	6.1803	ND	ND	ND	ND	27.5144	244.0000
Test Coun	t that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

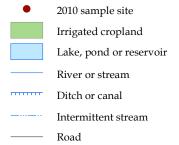
ND - Not Detected

Drinking	Water Second	ary Standards:	0.1 Ag	0.5 Al	250 CI	1 Cu	2 F	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	170	mg/L			mg/L
1	10004	8/5/2010	ND	ND	ND	0.0191	ND	ND	249.4000	0.0004	7.9800	4.8254	27.5144	244.0000	0.0634
Test Cour	nt that Exceeded	Standard:	0	0	0	0	0	0	1	0	0	0	0	1	0

Map 9. Summit County District



Map Scale 1:95,040 (1 inch = 1.5 miles)







District Location

Timp - Nebo District

General:

General Sample Information

		Collected Date	Coliform	Ecoli	Temperature	EC		AR Hardness neq/Lmg/L	Sample Site	Site Condition	Well Head	Material	Casing Condition		Irriga- tion	Indust- rial	Lands- cape	Natural	Drai- nage	Other
1	10001	8/3/2010	ND	ND	66.0 F (18.9 C)	509	439.0 0	0.200 325.7	Well	Clean	Soil	Steel	Sealed	~	~					
2	10002	8/3/2010	POS	ND	60.1 F (15.6 C)	395	247.0 0	0.500 213.1	Well	Vegetated	Covered			~	~					
3	10003	8/3/2010	ND	ND	59.0 F (15.0 C)	754	472.0 0	0.900 398.1	Well	Vegetated	Lawn	Steel	Sealed	~	~					
4	10100	9/7/2010	POS	ND	62.1 F (16.7 C)	790	413.0 1	1.200 315.8	Well	Clean	Pit Concrete	Steel	Sealed	~	~					
Ва	cteria Pos	itive	2	0	ND - Not	Det	ected													

Irrigation:

Sample Count

ND - Not Detected

Irrigation 9	Standards		5 Al	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2	5 Fe	73.2;152.5 HCO3	10000	2.5 Li	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	201220	mg/L	mg/L	The state of the s	mg/L
1	10001	8/5/2010	ND	0.0350	ND	85.3970	13.3459	ND	ND	0.0007	0.0328	ND	ND	514.7200	1.4437	0.0032	27.2319
2	10002	8/5/2010	ND	0.0232	ND	48.7823	24.0700	ND	ND	0.0015	0.0150	ND	ND	192.8330	3.0070	0.0068	22.1152
3	10003	8/5/2010	ND	0.1356	ND	93.9087	26.9005	ND	ND	0.0016	0.0254	ND	ND	400.7480	11.2806	0.0426	39.6537
4	10100	9/9/2010	ND	0.0654	ND	64.7208	32.7597	ND	ND	ND	0.0054	ND	0.0104	322.7440	1.7859	0.0365	37.3790
Test Count that Exceeded Standard			0	0	0	0	0	0	0	0	0	0	0	4	0	0	0

3 .1 2 V 7 n	i in
V Zn mg/L mg/L	
ND 0.011	0117
0.0023 0.012	0123
ND 0.033	0333
ND 0.003	0039
0 0	
	ND 0. 0.0023 0. ND 0. ND 0.

Livestock:

Live	stock Stand	lards	5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	107	mg/L	mg/L	mg/L	mg/L
1	10001	8/5/2010	ND	ND	0.0350	ND	ND	ND	0.0007	0.0328	ND	ND	17.2862	ND	8.1400	ND	23.3745	439.0000	0.0117
2	10002	8/5/2010	ND	ND	0.0232	ND	ND	ND	0.0015	0.0150	ND	ND	ND	ND	7.9300	ND	22.4412	247.0000	0.0123
3	10003	8/5/2010	ND	ND	0.1356	ND	ND	ND	0.0016	0.0254	ND	ND	ND	ND	7.8100	ND	51.3262	472.0000	0.0333
4	10100	9/9/2010	ND	ND	0.0654	ND	ND	ND	ND	0.0054	ND	ND	ND	ND	7.7200	ND	60.9817	413.0000	0.0039
Test	Count that Exc	eeded Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

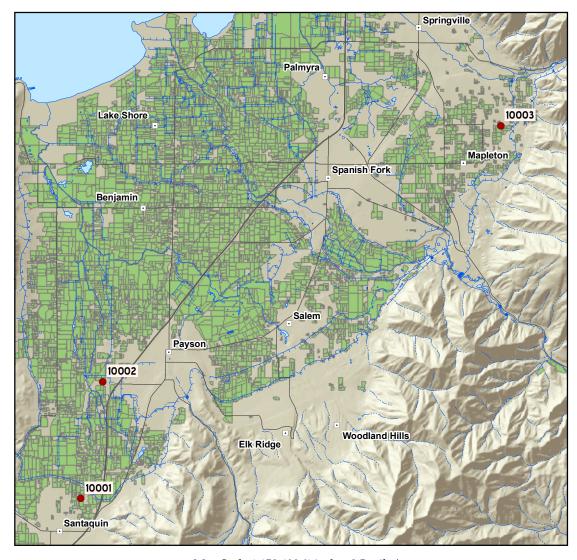
ND - Not Detected

Culinary:

Drinking W	ater Primary	Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4 E	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015 Pb	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10001	8/5/2010	ND	0.1809	ND	ND	ND	0.0007	0.0328	ND	ND	9.7441	0.0016	17.2862	ND	ND	23.3745	439.0000
2	10002	8/5/2010	ND	0.1522	ND	ND	ND	0.0015	0.0150	ND	ND	15.3829	ND	ND	ND	ND	22.4412	247.0000
3	10003	8/5/2010	ND	0.1879	ND	ND	ND	0.0016	0.0254	ND	ND	40.3363	0.0027	ND	ND	ND	51.3262	472.0000
4	10100	9/9/2010	ND	0.0246	ND	ND	ND	ND	0.0054	ND	ND	49.9253	ND	ND	ND	ND	60.9817	413.0000
Test Count t	hat Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

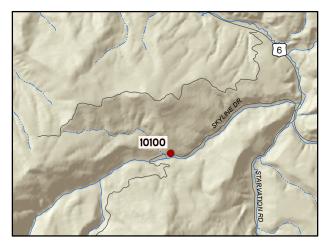
ND - Not Detected

Drinking Water Secondary Standards:				0.1 Ag	0.5 Al	250 CI	1 Cu	2	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn
		Sample No	Tested Date	The state of the s	mg/L	mg/L	mg/L	mg/L	mg/L	s	mg/L	-	mg/L	mg/L	mg/L	mg/L
	1	10001	8/5/2010	ND	ND	13.3459	0.0328	ND	ND	325.7000	0.0010	8.1400	7.3617	23.3745	439.0000	0.0117
	2	10002	8/5/2010	ND	ND	24.0700	0.0150	ND	ND	213.1000	0.0008	7.9300	11.8407	22.4412	247.0000	0.0123
	3	10003	8/5/2010	ND	ND	26.9005	0.0254	ND	ND	398.1000	0.0750	7.8100	6.7538	51.3262	472.0000	0.0333
	4	10100	9/9/2010	ND	ND	32.7597	0.0054	ND	0.0104	315.8000	ND	7.7200	3.4734	60.9817	413.0000	0.0039
Test Count that Exceeded Standard:				0	0	0	0	0	0	4	1	0	0	0	4	0



Map Scale 1:158,400 (1 inch = 2.5 miles)





Map Scale 1:63,360 (1 inch = 1 mile)

Ditch or canal

Aqueduct

Intermittent stream

Major road

District Location



UACD Zone 4 (Juab, Millard, and Wayne counties, most of Piute, Sanpete and Sevier counties, and a small part of Garfield County)

Fifty-three (53) sites were sampled in five (5) of the seven (7) Soil Conservation Districts in Zone 4 during the spring, summer, and fall of 2010. These include the number of samples in the following districts: Two (2) in Delta, two (2) in Fremont River, twenty-nine (29) in Millard, one (1) in Piute County, and nineteen (19) in Sanpete County.

The Statistical Report below shows a summary of the total number of chemical tests collected (Test Count) for each district in Zone 4. The next four columns summarize the number of tests which exceed the standards for either Primary Drinking Water (DW Primary), Secondary Drinking Water (DW Secondary), Irrigation, or Livestock.

Ground Water UACD Zone No 4 Statistical Report For the Samples Collected Between: 8/1/2010 And 4/18/2011

District	Sample	Test	Test Count Which Result Exceeded Standards					
Name	Count	Count	DW Primary	DW Secondary	Irrigation	Livestock		
D e Ita	2	80	1	4	6	0		
Fremont River	2	80	0	4	4	0		
M illard	29	1160	9	71	106	18		
Piute Co.	1	40	0	2	2	0		
Sanpete Co.	19	760	7	55	92	34		
Zone Totals:	53	2120	17	136	210	52		

Detailed tables follow covering the above water quality categories - General, Irrigation, Livestock, and Culinary (which includes Primary Drinking Water Standards and Secondary Drinking Water Standards) for each district along with a map(s). For the Irrigation, Livestock, and Culinary tables the first row lists the explicit standard for each element or compound (column). The standards for irrigation and livestock originated from the Water quality for agriculture 29 Revision 1, published by the Food and Agriculture Organization of the United Nations. The drinking water primary and secondary standards are from the State of Utah's water quality standards. Below the standards are the column headings (expressed as the chemical abbreviation) for each element or compound tested. Units used in measuring the concentrations of each element or compound are found below each abbreviation. Each row of the table is a single sample identified with a sample number. This sample number shows the sampling location on the map(s) located after the chemistry tables. Highlighted sample results show samples that exceed a standard for that element or compound. Totals at the bottom of each table show how many samples in each column exceeded the standard for that column. The value "ND" indicates that a particular element or compound was "Not Detected" for a given sample.

Delta District

General:

General Sample Information

		Collected (Date	Coliform	Ecoli	Temper	rature E		SAR . meq/L		ss Sample Site		Site Condition	Well He	ad Mat	terial	Casing Condition	Culli- nary	Irriga- tion	Indust- rial	Lands- cape	Natural	Drai- nage	Othe
1	10060	8/17/2010	ND	ND	65.7 F (1	18.7 C) 9	50 498.	.0 2.300	268.8	Well		Clean	Covere	d Ste	el	Sealed	•	1					T
2	10074	8/31/2010			68.0 F (2	20.0 C) 5	90 294.	.0 1.200	197.0	Spring		Livestock	Gravel	PV	C	Open		•					
tior		standards	3		5		1.5;1.0;2.			100000	71;355	1	1000	1	0.2	2	5	73.2;1		000	2.5		0000
		Sample No	Test	ed Date	e mg		3 ng/L	Be mg/		Ca mg/L	CI mg/L	Co mg/L	CO3 mg/L	Cr mg/L	Cu mg/L	F mg/L	Fe mg/L	HCO: mg/L		g/L	Li mg/L	m	g g/L
1		10060	8/19	/2010	ND) (.1940	ND	;	36.3225	80.4022	ND	ND	0.0018	0.0158	ND	0.0187	291.79	60 8.1	3336	0.1825	43	.2114
2		10074	9/7/	2010	ND) (.0666	ND	4	41.9028	49.1888	ND	ND	ND	0.0198	ND	ND	227.04	50 1.:	2891	0.0178	22	.3961
Te	st Count	that Exceed	d Stand	ard	0	(0	(0	1	0	0	0	0	0	0	2	0		0	0	

Irrigatio	n Standards	Continues	.2	.01	70;230	.2	5	10000	3;9	.02	151;451;1	3 .1	2
and the same of th	Sample No	Tested Date	Mn mg/L	Mo mg/L	Na mg/L	Ni mg/L	Pb mg/L	PO4 mg/L	SAR meq/L	Se mg/L	TDS mg/L	V mg/L	Zn mg/L
1	10060	8/19/2010	0.0289	0.0058	86.3081	ND	ND	ND	2.3000	ND	498.0000	0.0259	0.0084
2	10074	9 <i>/7/</i> 2010	0.0006	0.0007	37.3187	ND	ND	ND	1.2000	ND	294.0000	ND	0.0078
Test Coun	t that Exceeded	Standard:	0	0	1	0	0	0	0	0	2	0	0

Livestoc	k Standards		5 A1	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000;	25 Z n
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10060	8/19/2010	ND	0.0307	0.1940	ND	ND	ND	0.0018	0.0158	ND	ND	ND	ND	8.0200	ND	74.4751	498.0000	0.0084
2	10074	9/7/2010	ND	ND	0.0666	ND	ND	ND	ND	0.0198	ND	ND	ND	ND	7.9400	ND	24.3955	294.0000	0.0078
Test Coun	t that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ND - Not	Detected																		

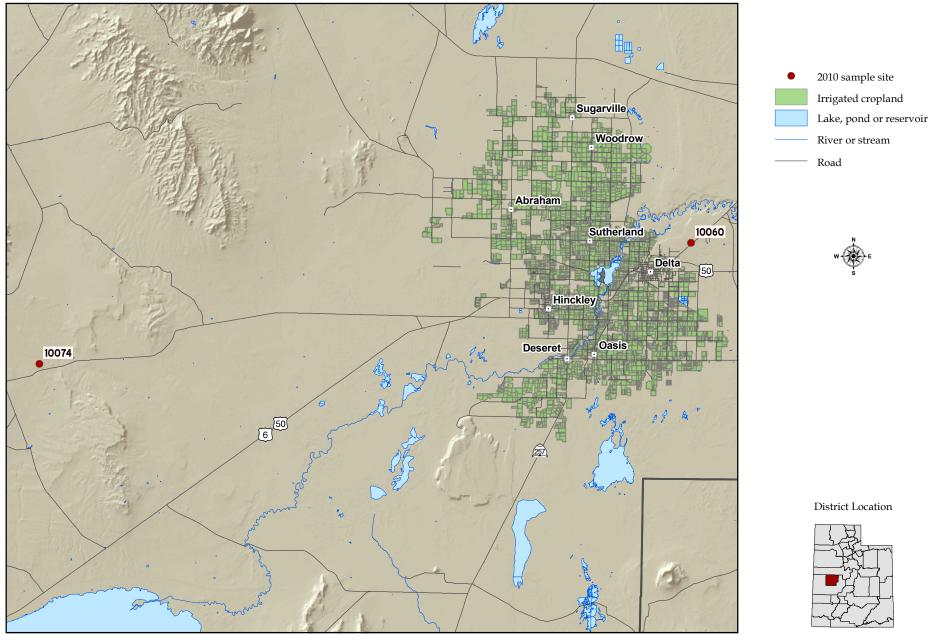
Culinary:

Drinking \	Water Primary	Standards	0.01	2	0.004	0.005	25	0.1	1.3	4	2	10000	1000	44.3	.015	.05	500	2000
2	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	MO3 mg/L	Pb mg/L	Se mg/L	SO4 mg/L	TDS mg/L
1	10060	8/19/2010	0.0307	0.0400	ND	ND	ND	0.0018	0.0158	ND	ND	86.3081	ND	ND	ND	ND	74.4751	498.0000
2	10074	9/7/2010	ND	0.0302	ND	ND	ND	ND	0.0198	ND	ND	37.3187	ND	ND	ND	ND	24.3955	294.0000
	that Exceeded		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ND - Not Detected

Drinking	Water Second	ary Standards:	0.1 Ag	0.5 Al	250	1 Cu	2	0.3 Fe	60;120;180 Hardnes	5200000	6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 7 n
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	S	mg/L		mg/L	mg/L	mg/L	mg/L
1	10060	8/19/2010	ND	ND	80.4022	0.0158	ND	0.0187	268.8000	0.0289	8.0200	24.0202	74.4751	498.0000	0.0084
2	10074	9 <i>/7/</i> 2010	ND	ND	49.1888	0.0198	ND	ND	197.0000	0.0006	7.9400	5.3493	24.3955	294.0000	0.0078
Test Coun	t that Exceeded	Standard:	0	0	0	0	0	0	2	0	0	0	0	2	0

Map 11. Delta District



Map Scale 1:310,000 (1 inch = 4.9 miles)

Fremont River District

General:

General Sample Information

		Collected Date	Coliform	Ecoli	Temperature	EC		AR Hardness eq/Lmg/L	Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary		Indust- rial	Lands- cape	Natural	Drai- nage	Other
1	10069	8/31/2010) ND	ND	68.0 F (20.0 C)	100	490.0 ().700 415.4	Well	Gravel	Well House	Steel	Sealed	~	~					
2	10070	8/31/2010) ND	ND	86.0 F (30.0 C)	102	496.0 (0.700 430.0	Well					~						
200	ncteria Pos Imple Cou	227.7.20	0	0	ND - Not	Det	ected													

Irrigation:

Irrigation	Standards		5	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355	1 Co	1000 CO3	1 Cr	0.2 Cu	2	5 Fe	73.2;152.5 HCO3	10000	2.5	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10069	9/7/2010	ND	0.0725	ND	137.6837	39.4322	ND	ND	0.0018	0.1677	ND	ND	179.3820	1.8098	0.0094	17.2884
2	10070	9/7/2010	ND	0.0586	ND	142.5544	39.6178	ND	ND	0.0013	0.0733	ND	ND	181.2780	1.6966	0.0093	17.8778
Test Count	that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0

ND - Not Detected

Irrigatio	n Standards	Continues	.2 Mn	.01 Mo	70;230 Na	.2	5 Pb	10000 PO4	3;9 SAR	.02 Se	151;451;1: TDS	3 .1	2 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	mg/L	mg/L	mg/L	mg/L
1	10069	9/7/2010	0.0057	0.0012	32.4185	0.0027	ND	ND	0.7000	0.0123	490.0000	ND	0.1307
2	10070	9/7/2010	0.0062	0.0005	31.3495	0.0027	ND	ND	0.7000	0.0119	496.0000	ND	0.0412
Test Coun	t that Exceeded	Standard:	0	0	0	0	0	0	0	0	2	0	0

Live	stock Standa	ards	5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10069	9/7/2010	ND	0.0029	0.0725	ND	ND	ND	0.0018	0.1677	ND	ND	ND	ND	7.4800	0.0123	164.3507	490.0000	0.1307
2	10070	9/7/2010	ND	0.0031	0.0586	ND	ND	ND	0.0013	0.0733	ND	ND	ND	ND	7.7300	0.0119	165.2501	496.0000	0.0412
Test (ount that Exce	eded Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ND -	Not Detected	I																	

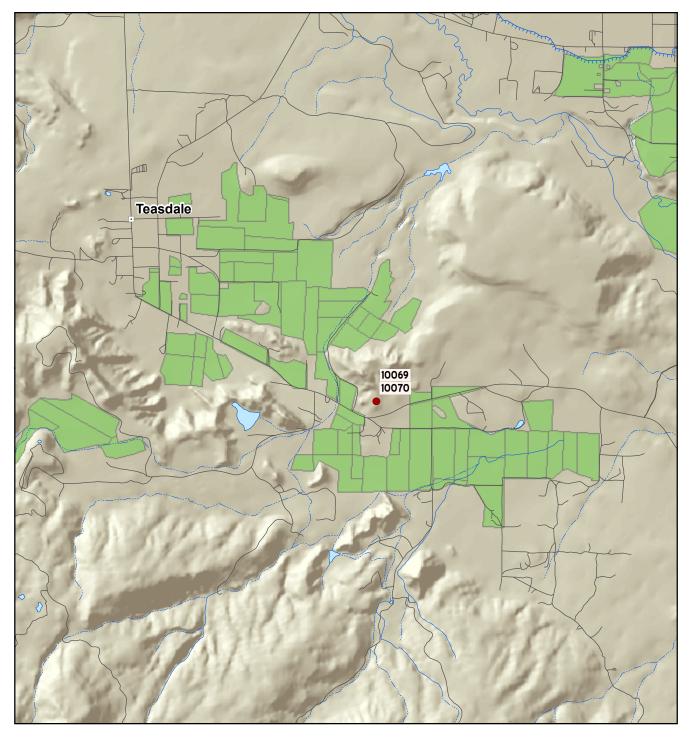
Culinary:

Drinking \	Water Primary	Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4 F	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015 Pb	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10069	9/7/2010	0.0029	0.0616	ND	ND	ND	0.0018	0.1677	ND	ND	32.4185	0.0027	ND	ND	0.0123	164.3507	490.0000
2	10070	9/7/2010	0.0031	0.0609	ND	ND	ND	0.0013	0.0733	ND	ND	31.3495	0.0027	ND	ND	0.0119	165.2501	496.0000
Test Count	that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

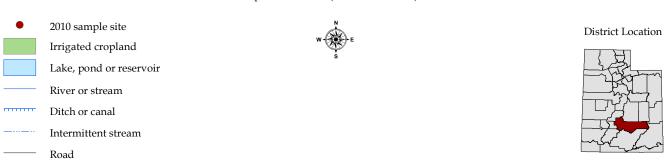
ND - Not Detected

Drinking	Water Second	ary Standards:	0.1 Ag	0.5 Al	250 CI	1 Cu	2	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10069	9/7/2010	ND	ND	39.4322	0.1677	ND	ND	415.4000	0.0057	7.4800	7.3062	164.3507	490.0000	0.1307
2	10070	9/7/2010	ND	ND	39.6178	0.0733	ND	ND	430.0000	0.0062	7.7300	7.4194	165.2501	496.0000	0.0412
Test Cour	t that Exceeded	Standard:	0	0	0	0	0	0	2	0	0	0	0	2	0

Map 12. Fremont River District



Map Scale 1:31,680 (1 inch = 0.5 miles)



Millard District General:

General Sample Information

G	eneral S	ample intol	matio	n															
	Sample No	Collected Date	Coliforn	n Ecoli	i Temperature	EC	TDS SAR Hardness mg/L meq/Lmg/L	Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary	Irriga- tion	Indust- rial	Lands- cape	Natural	Drai- nage	Other
1	10033	8/17/2010	ND	ND	60.4 F (15.8 C)	880	470.0 2.000 274.1	Well	Clean	Soil	Steel	Sealed	~	~					
2	10034	8/17/2010	POS	ND	60.4 F (15.8 C)	970	502.0 1.200 380.7	Well	Clean	Concrete Pad	Steel	Open		~					
3	10035	8/17/2010	ND	ND	62.6 F (17.0 C)	122	683.0 1.000 518.6	Well	Clean	Concrete Pad	Steel	Sealed		~					
4	10036	8/17/2010	ND	ND	63.3 F (17.4 C)	159	891.0 0.900 699.5	Well	Clean	Concrete	Steel	Sealed		~					
		0/47/0040								Pad									
5	10037	8/17/2010	POS	POS	62.8 F (17.1 C)	151	761.0 1.000 599.2	Well	Clean	Concrete Pad	Steel	Sealed		~					
6	10038	8/17/2010	ND	ND	59.0 F (15.0 C)	980	483.0 0.700 387.3	Well	Clean	Concrete Pad	Steel	Sealed		~					
7	10039	8/17/2010	POS	ND	63.0 F (17.2 C)	520	263.0 0.600 208.7	Well	Clean	Soil	Steel	Sealed	~						
8	10040	8/17/2010	POS	ND	71.1 F (21.7 C)	109	513.0 1.000 377.2	Well	Clean	Pit Masonry	Steel	Sealed	~	~					
9	10041	8/17/2010	ND	ND	66.9 F (19.4 C)	850	428.0 0.800 352.3	Well	Clean	Concrete Pad	Steel	Open		~					
10	10042	8/17/2010	POS	ND	64.4 F (18.0 C)	620	306.0 0.800 227.9	Well	Clean	Concrete Pad	Steel	Open		•					
11	10043	8/17/2010	POS	ND	65.7 F (18.7 C)	600	305.0 0.600 257.9	Well	Clean	Soil	Steel	Subsidence		~					
12		8/17/2010			81 5		1219. 1.100 873.8	Well	Clean	Concrete	Steel	Sealed		~	H	H		H	
										Pad									
13	10045	8/17/2010	POS	ND	64.8 F (18.2 C)	122	683.0 0.800 574.5	Well	Clean	Concrete Pad	Steel	Open		~				Ш	
14	10046	8/17/2010	ND	ND	57.0 F (13.9 C)	191	1103. 2.900 706.4	Well	Clean	Concrete Pad	Steel	Open		~					
15	10047	8/17/2010	ND	ND	65.5 F (18.6 C)	109	617.0 2.200 395.8	Well	Clean	Soil	Steel	Sealed	~	~					
16	10048	8/17/2010	POS	ND	60.4 F (15.8 C)	120	628.0 2.500 371.7	Well	Clean	Concrete Pad	Steel	Sealed		~					3
17	10049	8/17/2010	POS	ND	61.5 F (16.4 C)	138	714.0 2.600 422.0	Well	Clean	Soil	Steel	Sealed		~					
18	10050	8/17/2010	POS	ND	58.1 F (14.5 C)	112	561.0 1.200 407.1	Well	Clean	Concrete Pad	Steel	Sealed		~					
19	10051	8/17/2010			59.2 F (15.1 C)	111	591.0 1.100 459.8	Well	Clean	Concrete Pad	Steel	Sealed		~					
20	10053	8/17/2010			60.4 F (15.8 C)	690	361.0 0.700 306.6	Well	Clean	Soil	Steel	Sealed		~					
21		8/17/2010	o'			_	271.0 0.500 254.0	Well	Clean	Soil	Steel	Sealed		~	H			Ħ	
22		8/17/2010	ND	ND	TONGSTONEY MANUFACTURE CON		696.0 1.700 494.9	Well	Clean	Lawn	Steel	Sealed	~	v					
23		8/17/2010			- marina dhe mad		499.0 1.400 367.8	Well	Clean	Concrete	Steel	Sealed		v			H	H	H
										Pad									
24		8/17/2010					4755. 8.200 2641.	Well	Clean	Gravel	Steel	Sealed		~			Ш		
25		8/17/2010					3433. 5.200 2291.	Well	Clean	Gravel	Steel	Sealed		~			Ш		
26		8/17/2010			61.5 F (16.4 C)		4624. 6.000 2790.	Well	Clean	Concrete Pad	Steel	Open		~					
27		8/31/2010					63.00 0.600 41.50	Spring	Livestock	Natural	PVC	Open					~		
28	10073	8/31/2010			68.0 F (20.0 C)	760	3744. 25.70 509.8	Seep	Livestock	Natural	Earth	Open		~			✓		

Irrigation:

Irrigation	Standards		5 Al	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2 F	5 Fe	73.2;152.5 HCO3	10000 K	2.5 Li	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10033	8/18/2010	ND	0.1288	ND	58.3845	51.0491	ND	ND	0.0066	0.0257	ND	ND	377.5740	1.5889	0.0116	31.0929
2	10034	8/18/2010	ND	0.0836	ND	95.6132	64.8617	ND	ND	0.0052	0.0399	ND	ND	310.2280	2.7880	0.0298	34.3916
3	10035	8/18/2010	ND	0.0986	ND	136.5847	106.5085	ND	ND	0.0044	0.0231	ND	ND	284.1860	3.5760	0.0465	42.9848
4	10036	8/18/2010	ND	0.0943	ND	171.7296	181.4258	ND	ND	0.0049	0.0213	ND	ND	253.6180	3.6445	0.0426	65.5766
5	10037	8/18/2010	ND	0.0477	ND	130.5416	258.0973	ND	ND	0.0041	0.0221	ND	ND	225.3380	2.2381	0.0178	66.2339
6	10038	8/18/2010	ND	0.0533	ND	85.7779	123.1524	ND	ND	0.0046	0.0194	ND	ND	247.1310	1.4802	0.0144	41.9502
7	10039	8/18/2010	ND	0.0372	ND	36.6633	40.1513	ND	ND	0.0044	0.0049	ND	ND	200.3850	1.6757	0.0300	28.4140
8	10040	8/18/2010	ND	0.0626	ND	73.5518	228.3617	ND	ND	0.0027	0.0328	ND	ND	159.5660	2.0434	0.0324	46.9340
9	10041	8/18/2010	ND	0.0717	ND	66.8139	77.6382	ND	ND	0.0045	0.0217	ND	ND	297.1750	1.2572	0.0175	44.9737
10	10042	8/18/2010	ND	0.0475	ND	53.4524	78.5827	ND	ND	0.0032	0.0327	ND	ND	166.9390	1.4510	0.0176	22.8767
11	10043	8/18/2010	ND	0.0331	ND	51.8941	46.2660	ND	ND	0.0051	0.0243	ND	ND	240.0680	1.4152	0.0152	31.1012
12	10044	8/19/2010	ND	0.1713	ND	161.8115	279.2586	ND	ND	0.0021	0.0198	ND	ND	193.2900	4.6891	0.1011	113.8966
13	10045	8/18/2010	ND	0.0972	ND	92.7006	132.5358	ND	ND	0.0046	0.0082	ND	ND	207.1590	7.1281	0.1104	83.1921
14	10046	8/19/2010	ND	0.5270	ND	157.3689	220.3991	ND	ND	0.0030	0.0150	ND	ND	373.7660	6.2996	0.0466	75.9660
15	10047	8/18/2010	ND	0.4709	ND	93.6702	88.9934	ND	ND	0.0050	0.0105	ND	ND	286.4070	7.4210	0.1408	39.2367
16	10048	8/18/2010	ND	0.5901	ND	98.2053	168.3739	ND	ND	0.0046	0.0084	0.5782	ND	269.7280	17.0734	0.3033	30.6248
17	10049	8/18/2010	ND	0.5868	ND	109.5809	211.5923	ND	ND	0.0035	0.0173	0.2852	ND	220.9340	16.2850	0.3054	35.9441
18	10050	8/18/2010	ND	0.1496	ND	112.8858	144.5824	ND	ND	0.0038	0.0163	ND	ND	221.6940	3.1333	0.0407	30.3154
19	10051	8/18/2010	ND	0.1430	ND	122.5837	127.6235	ND	ND	0.0043	0.0124	ND	ND	277.6290	4.0971	0.0455	37.2271
20	10053	8/18/2010	ND	0.0886	ND	80.6337	37.0409	ND	ND	0.0039	0.0288	ND	ND	272.8590	1.9826	0.0150	25.4961
21	10054	8/18/2010	ND	0.0481	ND	61.5793	22.9677	ND	ND	0.0029	0.0100	ND	ND	223.0190	1.1302	0.0094	24.2873
22	10055	8/18/2010	ND	0.2443	ND	119.6284	223.1012	ND	ND	0.0042	0.0142	ND	ND	252.5190	4.8830	0.0651	47.5356
23	10056	8/18/2010	ND	0.2158	ND	85.8729	112.0840	ND	ND	0.0121	0.0145	ND	ND	236.2230	8.2636	0.1311	37.1597
24	10057	8/24/2010	ND	6.4900	ND	574.4571	1674.7270	0.0005	ND	0.0023	0.0110	0.4075	ND	291.0680	74.0002	3.9790	292.4855
25	10058	8/24/2010	ND	2.1910	ND	408.7208	1432.4480	0.0004	ND	0.0031	0.0129	ND	ND	191.2410	12.1206	1.0600	308.1786
26	10059	8/24/2010	ND	3.4530	ND	559.3414	1835.2290	0.0005	ND	0.0042	0.0273	ND	ND	252.8360	29.5942	1.4900	337.7681
27	10071	9/7/2010	ND	0.0245	ND	11.9696	4.3750	ND	ND	ND	0.0288	ND	0.0329	56.8564	1.2744	0.0097	2.8194
28	10073	9/7/2010	ND	0.7276	ND	133.2050	1759.6640	0.0004	ND	ND	0.0117	4.3974	ND	204.2430	13.1932	0.7057	42.9048
Test Count	that Exceeded	Standard	0	7	0	0	21	0	0	0	0	1	0	27	0	1	0

Irrigation	Standards (Continues	.2	.01	70;230	.2	5	10000	3;9	.02	151;451;13		2
	Sample No	Tested Date	Mn mg/L	Mo mg/L		Ni mg/L	Pb mg/L		SAR meq/L	Se mg/L	TDS mg/L	V mg/L	Zn mg/L
1	10033	8/18/2010	0.0005	ND	77.4314	ND	ND	ND	2.0000	ND	470.0000	0.0054	0.0290
2	10034	8/18/2010	0.0011	0.0007	53.2627	0.0007	ND	ND	1.2000	ND	502.0000	0.0022	0.0142
3	10035	8/18/2010	0.0003	0.0008	51.9760	0.0009	ND	ND	1.0000	ND	683.0000	0.0020	0.0061
4	10036	8/18/2010	0.0013	ND	55.3678	0.0010	ND	ND	0.9000	ND	891.0000	0.0039	0.0374
5	10037	8/18/2010	0.0005	ND	53.6056	0.0008	ND	ND	1.0000	ND	761.0000	0.0031	0.0199
6	10038	8/18/2010	0.0003	ND	32.8987	ND	ND	ND	0.7000	ND	483.0000	0.0030	0.0070
7	10039	8/18/2010	0.0004	ND	20.8537	ND	ND	ND	0.6000	ND	263.0000	0.0098	0.0067
8	10040	8/18/2010	0.0019	ND	44.1800	ND	ND	ND	1.0000	ND	513.0000	0.0054	0.0594
9	10041	8/18/2010	0.0010	ND	32.4393	ND	ND	ND	0.8000	ND	428.0000	0.0036	0.0077
10	10042	8/18/2010	0.0003	ND	27.2971	ND	ND	ND	0.8000	ND	306.0000	0.0032	0.0071
11	10043	8/18/2010	ND	ND	22.3388	ND	ND	ND	0.6000	ND	305.0000	0.0043	0.0037
12	10044	8/19/2010	0.0005	0.0014	73.7683	0.0012	ND	ND	1.1000	0.0055	1219.0000	0.0077	0.0079
13	10045	8/18/2010	ND	0.0011	45.1369	ND	ND	ND	0.8000	ND	683.0000	0.0087	0.0046
14	10046	8/19/2010	ND	0.0016	179.5021	0.0011	ND	ND	2.9000	ND	1103.0000	0.0076	0.0053
15	10047	8/18/2010	ND	ND	99.2941	ND	ND	ND	2.2000	ND	617.0000	0.0030	0.0036
16	10048	8/18/2010	0.0022	0.0012	111.0404	ND	ND	ND	2.5000	ND	628.0000	0.0021	0.0065
17	10049	8/18/2010	0.0008	0.0008	123.8870	ND	ND	ND	2.6000	ND	714.0000	0.0019	0.0336
18	10050	8/18/2010	ND	ND	56.1237	ND	ND	ND	1.2000	ND	561.0000	0.0023	0.0055
19	10051	8/18/2010	ND	ND	53.4267	ND	ND	ND	1.1000	ND	591.0000	0.0027	0.0051
20	10053	8/18/2010	0.0003	ND	28.5010	ND	ND	ND	0.7000	ND	361.0000	0.0034	0.0492
21	10054	8/18/2010	0.0013	ND	18.1817	0.0007	ND	ND	0.5000	ND	271.0000	0.0025	0.0076
22	10055	8/18/2010	0.0015	ND	86.2797	0.0014	ND	ND	1.7000	ND	696.0000	0.0027	0.0957
23	10056	8/18/2010	0.0012	0.0136	61.2178	0.0065	ND	ND	1.4000	ND	499.0000	0.0078	0.0041
24	10057	8/24/2010	0.0051	0.0013	971.7525	0.0037	ND	ND	8.2000	0.0258	4755.0000	0.0042	0.1413
25	10058	8/24/2010	0.0003	0.0005	571.9011	0.0027	ND	ND	5.2000	0.0174	3433.0000	0.0052	0.0112
26	10059	8/24/2010	0.0004	ND	724.1821	0.0045	ND	ND	6.0000	0.0305	4624.0000	0.0063	0.0158
27	10071	9/7/2010	0.0012	ND	8.2319	0.0007	ND	ND	0.6000	ND	63.0000	ND	0.2495
28	10073	9/7/2010	0.1440	0.0546	1331.0310	0.0011	ND	ND	25.7000	ND	3744.0000	ND	0.0074
Test Count th	nat Exceeded	Standard:	0	2	11	0	0	0	4	2	27	0	0

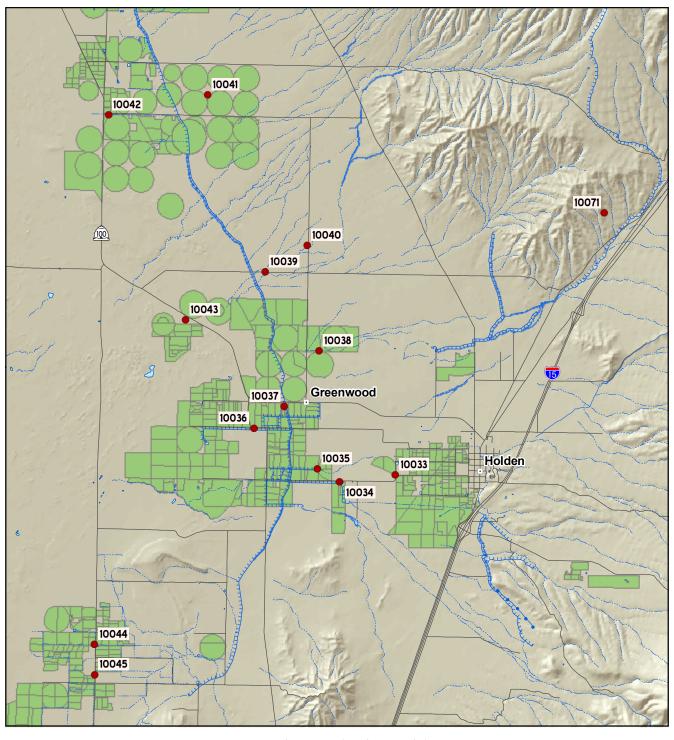
Live	stock Stand	ards	5 A I	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2 F	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	The state of the s	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10033	8/18/2010	ND	0.0027	0.1288	ND	ND	ND	0.0066	0.0257	ND	ND	16.2086	ND	7.7000	ND	38.8741	470.0000	0.0290
2	10034	8/18/2010	ND	0.0027	0.0836	ND	ND	ND	0.0052	0.0399	ND	ND	21.4053	ND	7.4700	ND	68.0199	502.0000	0.0142
3	10035	8/18/2010	ND	0.0029	0.0986	ND	ND	ND	0.0044	0.0231	ND	ND	23.5197	ND	7.5500	ND	170.2536	683.0000	0.0061
4	10036	8/18/2010	ND	0.0022	0.0943	ND	ND	ND	0.0049	0.0213	ND	ND	25.8688	ND	7.1800	ND	252.8076	891.0000	0.0374
5	10037	8/18/2010	ND	0.0021	0.0477	ND	ND	ND	0.0041	0.0221	ND	ND	27.6925	ND	7.3100	ND	102.3897	761.0000	0.0199
6	10038	8/18/2010	ND	0.0021	0.0533	ND	ND	ND	0.0046	0.0194	ND	ND	42.3437	ND	7.4700	ND	26.2068	483.0000	0.0070
7	10039	8/18/2010	ND	0.0072	0.0372	ND	ND	ND	0.0044	0.0049	ND	ND	6.9727	ND	7.6800	ND	15.3412	263.0000	0.0067
8	10040	8/18/2010	ND	0.0038	0.0626	ND	ND	ND	0.0027	0.0328	ND	ND	13.5557	ND	7.5100	ND	16.0474	513.0000	0.0594
9	10041	8/18/2010	ND	0.0024	0.0717	ND	ND	ND	0.0045	0.0217	ND	ND	9.7334	ND	7.6600	ND	40.3471	428.0000	0.0077
10	10042	8/18/2010	ND	0.0031	0.0475	ND	ND	ND	0.0032	0.0327	ND	ND	6.2239	ND	7.6900	ND	25.3476	306.0000	0.0071
11	10043	8/18/2010	ND	0.0033	0.0331	ND	ND	ND	0.0051	0.0243	ND	ND	8.2905	ND	7.7700	ND	15.3877	305.0000	0.0037
12	10044	8/19/2010	ND	0.0063	0.1713	ND	ND	ND	0.0021	0.0198	ND	ND	10.9678	ND	7.6100	0.0055	463.7590	1219.0000	0.0079
13	10045	8/18/2010	ND	0.0080	0.0972	ND	ND	ND	0.0046	0.0082	ND	ND	ND	ND	7.6400	ND	189.7576	683.0000	0.0046
14	10046	8/19/2010	ND	0.0048	0.5270	ND	ND	ND	0.0030	0.0150	ND	ND	19.6456	ND	7.5900	ND	244.1715	1103.0000	0.0053
15	10047	8/18/2010	ND	ND	0.4709	ND	ND	ND	0.0050	0.0105	ND	ND	17.1047	ND	7.6400	ND	119.5924	617.0000	0.0036
16	10048	8/18/2010	ND	ND	0.5901	ND	ND	ND	0.0046	0.0084	0.5782	ND	8.1237	ND	7.6900	ND	55.2891	628.0000	0.0065
17	10049	8/18/2010	ND	ND	0.5868	ND	ND	ND	0.0035	0.0173	0.2852	ND	14.7026	ND	7.7200	ND	86.3071	714.0000	0.0336
18	10050	8/18/2010	ND	ND	0.1496	ND	ND	ND	0.0038	0.0163	ND	ND	14.5657	ND	7.5600	ND	82.1609	561.0000	0.0055
19	10051	8/18/2010	ND	ND	0.1430	ND	ND	ND	0.0043	0.0124	ND	ND	21.2912	ND	7.5700	ND	78.1042	591.0000	0.0051
20	10053	8/18/2010	ND	0.0032	0.0886	ND	ND	ND	0.0039	0.0288	ND	ND	11.3360	ND	7.9300	ND	31.7278	361.0000	0.0492
21	10054	8/18/2010	ND	0.0021	0.0481	ND	ND	ND	0.0029	0.0100	ND	ND	ND	ND	8.3400	ND	24.5238	271.0000	0.0076
22	10055	8/18/2010	ND	0.0026	0.2443	ND	ND	ND	0.0042	0.0142	ND	ND	15.4005	ND	7.6300	ND	62.7447	696.0000	0.0957
23	10056	8/18/2010	ND	0.0043	0.2158	ND	ND	ND	0.0121	0.0145	ND	ND	12.8692	ND	7.8000	ND	50.7520	499.0000	0.0041
24	10057	8/24/2010	ND	0.0035	6.4900	ND	ND	0.0005	0.0023	0.0110	0.4075	ND	ND	ND	7.4400	0.0258	998.6542	4755.0000	0.1413
25	10058	8/24/2010	ND	0.0039	2.1910	ND	ND	0.0004	0.0031	0.0129	ND	ND	ND	ND	7.4400	0.0174	591.3485	3433.0000	0.0112
26	10059	8/24/2010	ND	0.0061	3.4530	ND	ND	0.0005	0.0042	0.0273	ND	ND	10.7962	ND	7.3500	0.0305	984.3481	4624.0000	0.0158
27	10071	9/7/2010	ND	ND	0.0245	ND	ND	ND	ND	0.0288	ND	ND	ND	ND	6.3400	ND	2.9917	63.0000	0.2495
28	10073	9/7/2010	ND	0.0145	0.7276	ND	ND	0.0004	ND	0.0117	4.3974	ND	ND	ND	7.6800	ND	340.5183	3744.0000	0.0074
Test	Count that Exc	eeded Standard	0 1	0	1	0	0	0	0	0	1	0	0	0	1	0	9	6	0

Culinary:

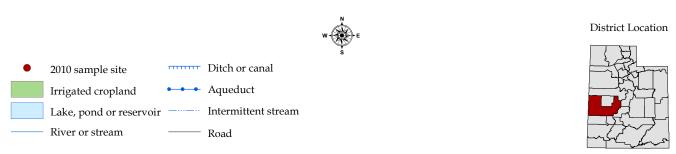
Dr	inking Water Pr	COAL PARTIES ON	As	Ba	0.004 Be	0.005 Cd	25 CIO4		1.3 Cu	4 F	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015 Pb	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	ug/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10033	8/18/2010	0.0027		ND	ND	ND	0.0066	0.0257	ND	ND	77.4314	ND	16.2086	ND	ND	38.8741	470.0000
2	10034	8/18/2010	0.0027	0.0385	ND	ND	ND	0.0052	0.0399	ND	ND	53.2627	0.0007	21.4053	ND	ND	68.0199	502.0000
3	10035	8/18/2010	0.0029	0.0263	ND	ND	ND	0.0044	0.0231	ND	ND	51.9760	0.0009	23.5197	ND	ND	170.2536	683.0000
4	10036	8/18/2010	0.0022	0.0216	ND	ND	ND	0.0049	0.0213	ND	ND	55.3678	0.0010	25.8688	ND	ND	252.8076	891.0000
5	10037	8/18/2010	0.0021	0.0738	ND	ND	ND	0.0041	0.0221	ND	ND	53.6056	0.0008	27.6925	ND	ND	102.3897	761.0000
6	10038	8/18/2010	0.0021	0.1362	ND	ND	ND	0.0046	0.0194	ND	ND	32.8987	ND	42.3437	ND	ND	26.2068	483.0000
7	10039	8/18/2010	0.0072	0.1470	ND	ND	ND	0.0044	0.0049	ND	ND	20.8537	ND	6.9727	ND	ND	15.3412	263.0000
8	10040	8/18/2010	0.0038	0.3489	ND	ND	ND	0.0027	0.0328	ND	ND	44.1800	ND	13.5557	ND	ND	16.0474	513.0000
9	10041	8/18/2010	0.0024	0.1461	ND	ND	ND	0.0045	0.0217	ND	ND	32.4393	ND	9.7334	ND	ND	40.3471	428.0000
10	10042	8/18/2010	0.0031	0.0916	ND	ND	ND	0.0032	0.0327	ND	ND	27.2971	ND	6.2239	ND	ND	25.3476	306.0000
11	10043	8/18/2010	0.0033	0.1186	ND	ND	ND	0.0051	0.0243	ND	ND	22.3388	ND	8.2905	ND	ND	15.3877	305.0000
12	10044	8/19/2010	0.0063	0.0187	ND	ND	ND	0.0021	0.0198	ND	ND	73.7683	0.0012	10.9678	ND	0.0055	463.7590	1219.0000
13	10045	8/18/2010	0.0080	0.0357	ND	ND	ND	0.0046	0.0082	ND	ND	45.1369	ND	ND	ND	ND	189.7576	683.0000
14	10046	8/19/2010	0.0048	0.0320	ND	ND	ND	0.0030	0.0150	ND	ND	179.5021	0.0011	19.6456	ND	ND	244.1715	1103.0000
15	10047	8/18/2010	ND	0.0251	ND	ND	ND	0.0050	0.0105	ND	ND	99.2941	ND	17.1047	ND	ND	119.5924	617.0000
16	10048	8/18/2010	ND	0.0612	ND	ND	ND	0.0046	0.0084	0.5782	ND	111.0404	ND	8.1237	ND	ND	55.2891	628.0000
17	10049	8/18/2010	ND	0.0630	ND	ND	ND	0.0035	0.0173	0.2852	ND	123.8870	ND	14.7026	ND	ND	86.3071	714.0000
18	10050	8/18/2010	ND	0.0996	ND	ND	ND	0.0038	0.0163	ND	ND	56.1237	ND	14.5657	ND	ND	82.1609	561.0000
19	10051	8/18/2010	ND	0.0726	ND	ND	ND	0.0043	0.0124	ND	ND	53.4267	ND	21.2912	ND	ND	78.1042	591.0000
20	10053	8/18/2010	0.0032	0.1340	ND	ND	ND	0.0039	0.0288	ND	ND	28.5010	ND	11.3360	ND	ND	31.7278	361.0000
21	10054	8/18/2010	0.0021	0.1225	ND	ND	ND	0.0029	0.0100	ND	ND	18.1817	0.0007	ND	ND	ND	24.5238	271.0000
22	10055	8/18/2010	0.0026	0.0883	ND	ND	ND	0.0042	0.0142	ND	ND	86.2797	0.0014	15.4005	ND	ND	62.7447	696.0000
23	10056	8/18/2010	0.0043	0.0916	ND	ND	ND	0.0121	0.0145	ND	ND	61.2178	0.0065	12.8692	ND	ND	50.7520	499.0000
24	10057	8/24/2010	0.0035	0.0593	ND	ND	ND	0.0023	0.0110	0.4075	ND	971.7525	0.0037	ND	ND	0.0258	998.6542	4755.0000
25	10058	8/24/2010	0.0039	0.0414	ND	ND	ND	0.0031	0.0129	ND	ND	571.9011	0.0027	ND	ND	0.0174	591.3485	3433.0000
26	10059	8/24/2010	0.0061	0.0487	ND	ND	ND	0.0042	0.0273	ND	ND	724.1821	0.0045	10 7962	ND	0.0305	984.3481	4624.0000
27	10071	9/7/2010	ND	0.1003	ND	ND	ND	ND	0.0288	ND	ND	8.2319	0.0007	ND	ND	ND	2.9917	63.0000
28	10073	9/7/2010	0.0145	0.0386	ND	ND	ND	ND	0.0117	4.3974	ND	1331.0310	0.0011	ND	ND	ND	340.5183	3744.0000
Те	st Count that Exc	eeded Standard	1	0	0	0	0	0	0	1	0	0	0	0	0	0	3	4

Drinking	g Water Seconda	ary Standards:	0.1 Ag	0.5 Al	250 CI	1 Cu	2 F	0.3 Fe	60;120;180 Hardnes	.05 Mn	6.5-8.5 pH	1000 Si	250 SQ4	200 TDS	5 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	S	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10033	8/18/2010	ND	ND	51.0491	0.0257	ND	ND	274.1000	0.0005	7.7000	9.1038	38.8741	470.0000	0.0290
2	10034	8/18/2010	ND	ND	64.8617	0.0399	ND	ND	380.7000	0.0011	7.4700	8.1568	68.0199	502.0000	0.0142
3	10035	8/18/2010	ND	ND	106.5085	0.0231	ND	ND	518.6000	0.0003	7.5500	7.4671	170.2536	683.0000	0.0061
4	10036	8/18/2010	ND	ND	181.4258	0.0213	ND	ND	699.5000	0.0013	7.1800	9.9847	252.8076	891.0000	0.0374
5	10037	8/18/2010	ND	ND	258.0973	0.0221	ND	ND	599.2000	0.0005	7.3100	9.5853	102.3897	761.0000	0.0199
6	10038	8/18/2010	ND	ND	123.1524	0.0194	ND	ND	387.3000	0.0003	7.4700	7.6709	26.2068	483.0000	0.0070
7	10039	8/18/2010	ND	ND	40.1513	0.0049	ND	ND	208.7000	0.0004	7.6800	14.0181	15.3412	263.0000	0.0067
8	10040	8/18/2010	ND	ND	228.3617	0.0328	ND	ND	377.2000	0.0019	7.5100	10.2069	16.0474	513.0000	0.0594
9	10041	8/18/2010	ND	ND	77.6382	0.0217	ND	ND	352.3000	0.0010	7.6600	8.0022	40.3471	428.0000	0.0077
10	10042	8/18/2010	ND	ND	78.5827	0.0327	ND	ND	227.9000	0.0003	7.6900	8.2002	25.3476	306.0000	0.007
11	10043	8/18/2010	ND	ND	46.2660	0.0243	ND	ND	257.9000	ND	7.7700	9.9027	15.3877	305.0000	0.0037
12	10044	8/19/2010	ND	ND	279.2586	0.0198	ND	ND	873.8000	0.0005	7.6100	15.3100	463.7590	1219.0000	0.007
13	10045	8/18/2010	ND	ND	132.5358	0.0082	ND	ND	574.5000	ND	7.6400	25.4325	189.7576	683.0000	0.0046
14	10046	8/19/2010	ND	ND	220.3991	0.0150	ND	ND	706.4000	ND	7.5900	15.2604	244.1715	1103.0000	0.0053
15	10047	8/18/2010	ND	ND	88.9934	0.0105	ND	ND	395.8000	ND	7.6400	9.9309	119.5924	617.0000	0.0036
16	10048	8/18/2010	ND	ND	168.3739	0.0084	0.5782	ND	371.7000	0.0022	7.6900	6.7169	55.2891	628.0000	0.006
17	10049	8/18/2010	ND	ND	211.5923	0.0173	0.2852	ND	422.0000	0.0008	7.7200	6.6433	86.3071	714.0000	0.033
18	10050	8/18/2010	ND	ND	144.5824	0.0163	ND	ND	407.1000	ND	7.5600	7.8781	82.1609	561.0000	0.0055
19	10051	8/18/2010	ND	ND	127.6235	0.0124	ND	ND	459.8000	ND	7.5700	9.6575	78.1042	591.0000	0.005
20	10053	8/18/2010	ND	ND	37.0409	0.0288	ND	ND	306.6000	0.0003	7.9300	9.9224	31.7278	361.0000	0.0492
21	10054	8/18/2010	ND	ND	22.9677	0.0100	ND	ND	254.0000	0.0013	8.3400	6.9885	24.5238	271.0000	0.007
22	10055	8/18/2010	ND	ND	223.1012	0.0142	ND	ND	494.9000	0.0015	7.6300	12.1834	62.7447	696.0000	0.095
23	10056	8/18/2010	ND	ND	112.0840	0.0145	ND	ND	367.8000	0.0012	7.8000	13.8991	50.7520	499.0000	0.004
24	10057	8/24/2010	ND	ND	1674.7270	0.0110	0.4075	ND	2641.2000	0.0051	7.4400	19.7164	998.6542	4755.0000	0.141
25	10058	8/24/2010	0.0006	ND	1432.4480	0.0129	ND	ND	2291.5000	0.0003	7.4400	13.6610	591.3485	3433.0000	0.011
26	10059	8/24/2010	ND	ND	1835.2290	0.0273	ND	ND	2790.0000	0.0004	7.3500	18.0713	984.3481	4624.0000	0.015
27	10071	9/7/2010	ND	ND	4.3750	0.0288	ND	0.0329	41.5000	0.0012	6.3400	3.9466	2.9917	63.0000	0.249
28	10073	9/7/2010	ND	ND	1759.6640	0.0117	4.3974	ND	509.8000	0.1440	7.6800	23.1074	340.5183	3744.0000	0.007
Test Cou	int that Exceeded	Standard:	0	0	6	0	1	0	27	1	1	0	6	27	0

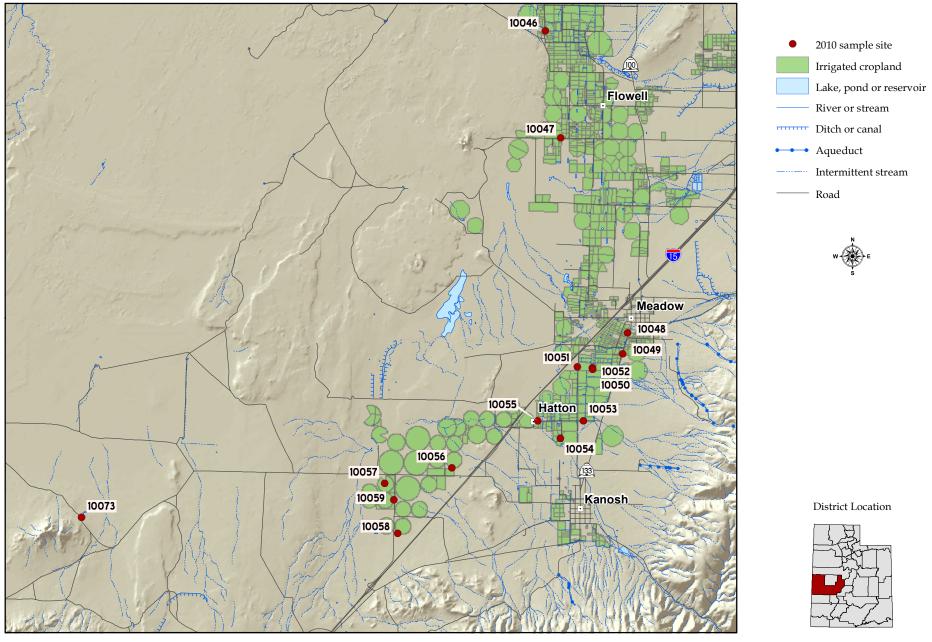
Map 13. Millard County District - Pahvant Valley North



Map Scale 1:119,000 (1 inch = 1.9 miles)



Map 14. Millard County District - Pahvant Valley South



Map Scale 1:185,000 (1 inch = 2.9 miles)

Piute County District

General:

General Sample Information

13	Sampl No	e Collecte Date	d Co	oliform	Ecoli	Temperature		TDS SAR mg/L meq/L		Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary	Irriga- tion	Indust- rial	Lands- cape	Natural	Drai- nage	Other
1		2 8/31/20			(68.0 F (20.0 C)	320	174.0 0.300	135.1	Spring	Livestock	Natural	PVC	Open		•					
Ва	cteria P mple C	LEVELEZ-STATE		0	0	ND - Not	Det	ected													

Irrigation:

Irrigation	Standards		5 A I	0.5;1.0;2.0 B	; .1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2 F	5 Fe	73.2;152.5 HCO3	10000 K	2.5 Li	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10072	9/7/2010	ND	0.0264	ND	40.1270	12.1404	ND	ND	ND	0.0209	ND	0.4393	153.3780	1.2650	0.0040	8.4370
	that Exceeded		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

Irrigat	ion Standards	Continues	.2	.01	70;230	.2	5	10000	3;9	.02	151;451;1	3 .1	2
	Sample No	Tested Date	Mn mg/L	Mo mg/L	Na mg/L	Ni mg/L	Pb mg/L	PO4 mg/L	SAR meq/L	Se mg/L	mg/L	mg/L	Zn mg/L
1	10072	9/7/2010	0.0004	0.0012	7.9776	ND	ND	ND	0.3000	ND	174.0000	0.0050	0.0071
Test Co	unt that Exceeded	Standard:	0	0	0	0	0	0	0	0	1	0	0
ND - N	ot Detected												

Livesto	ck Standards		5 Δ I	0.2 As	5 B	.1 Be	0.05	1 Co	1 Cr	.5 Cu	2	10 Ha	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L
1	10072	9 <i>/7/</i> 2010	ND	ND	0.0264	ND	ND	ND	ND	0.0209	ND	ND	ND	ND	7.7600	ND	6.7333	174.0000	0.0071
7/8/8/5/5/5/5/5/5/5/5/5/	nt that Exceeded		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ND - Not Detected

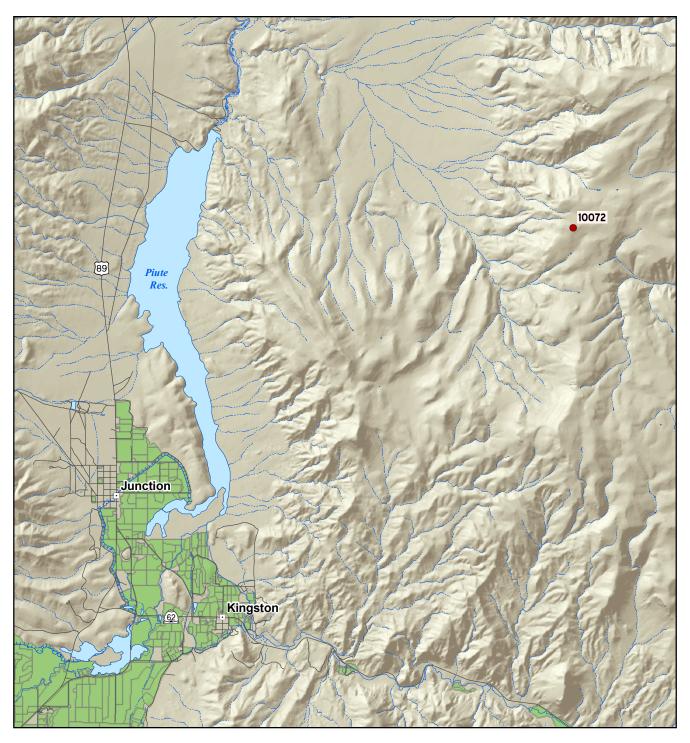
Culinary:

Drinking	Water Primary	Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4 F	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10072	9/7/2010	ND	0.0104	ND	ND	ND	ND	0.0209	ND	ND	7.9776	ND	ND	ND	ND	6.7333	174.0000
	t that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

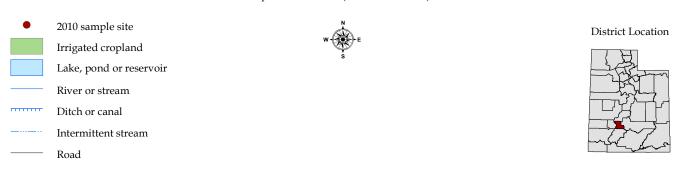
ND - Not Detected

Drinking	Water Second	ary Standards:	0.1 Ag	0.5	250	1 Cu	2	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	S	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10072	9/7/2010	ND	ND	12.1404	0.0209	ND	0.4393	135.1000	0.0004	7.7600	20.7062	6.7333	174.0000	
	nt that Exceeded	Standard:	0	O .	0	0	0	1	1	0	0	0	0	0	0

Map 15. Piute County District



Map Scale 1:100,000 (1 inch = 1.6 miles)



Sanpete County District **General**:

General Sample Information

	Sample No	Collected Date	Coliform	Ecol	Temperature				Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary	Irriga- tion	Indust- rial	Lands- cape	Natural	Drai- nage	Othe
1	10081	9/7/2010	ND	ND	58.6 F (14.8 C)	136	1133. 2	2.500 495.1	Well	Clean	Soil	PVC	Sealed	~	~					
2	10082	9/7/2010	ND	ND	61.7 F (16.5 C)	930	476.0	15.70 27.00	Well	Clean	Soil	Steel	Sealed	~	~					
3	10083	9/7/2010	POS	ND	64.0 F (17.8 C)	154	1115. 7	7.400 198.5	Well	Clean	Soil	PVC	Sealed	~	~					
4	10084	9/7/2010	ND	ND	67.6 F (19.8 C)	172	1175. 7	79.50 4.000	Well	Clean	Soil	Steel	Sealed	~	~					
5	10085	9/7/2010	ND	ND	54.3 F (12.4 C)	184	1271. 8	34.90 4.300	Well	Clean	Soil	Steel	Sealed	~	~					
6	10086	9/7/2010	ND	ND	56.5 F (13.6 C)	186	1367.	19.00 57.10	Well	Clean	Soil	Steel	Sealed	~	~					
7	10087	9/7/2010	ND	ND	58.6 F (14.8 C)	195	1337. 3	3.300 546.9	Well	Clean	Well House	Steel	Sealed	~	~					
8	10088	9/7/2010	ND	ND	62.1 F (16.7 C)	147	1099. 3	3.400 391.7	Well	Clean	Soil	Steel	Sealed	~	~					
9	10089	9/7/2010	POS	ND	76.1 F (24.5 C)	165	1302. 3	3.400 487.7	Well	Clean	Lawn	PVC	Sealed	~	~					
10	10090	9/7/2010	POS	ND	64.6 F (18.1 C)	890	436.0 (0.800 392.5	Well	Clean	Well House	Steel	Sealed	~	~					
11	10091	9/7/2010	ND	ND	61.3 F (16.3 C)	114	571.0 2	2.100 393.1	Well	Clean	Soil	Steel	Sealed	~	~					
12	10092	9/7/2010	ND	ND	61.5 F (16.4 C)	181	1419. 3	3.100 574.3	Well	Clean	Soil	Steel	Sealed	~	~					
13	10093	9/7/2010	POS	ND	61.7 F (16.5 C)	167	1454. 2	2.800 649.3	Well	Clean	Soil	Steel	Sealed	~	~					
14	10094	9/7/2010			60.4 F (15.8 C)	155	1101. 3	38.90 12.90	Well	Clean	Soil	Steel	Sealed	~	~					
15	10095	9/7/2010	ND	ND	57.0 F (13.9 C)	144	1071. 1	19.00 45.70	Well	Clean	Soil	Steel	Sealed	~	~					
16	10096	9/7/2010			59.9 F (15.5 C)	165	1269. (0.900 780.9	Well	Clean	Well House	Steel	Sealed	~	~					
17	10097	9/7/2010			56.5 F (13.6 C)	120	621.0 3	36.70 8.200	Well	Clean	Covered	Steel	Sealed	~	~					
18	10098	9/7/2010			57.0 F (13.9 C)	870	465.0	5.200 107.8	Well	Livestock	Soil	Steel	Sealed	~	~					
19	10099	9/7/2010			64.6 F (18.1 C)	118	573.0 2	2.500 342.5	Well	Clean	Soil	Steel	Sealed	~	~					

Bacteria Positive 4 0 ND - Not Detected Sample Count

Irrigation:

Irrigatio	on Standards		5 A I	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2	5 Fe	73.2;152.5 HCO3	10000 K	2.5 Li	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10081	9/9/2010	ND	0.2062	ND	147.2314	237.4287	ND	ND	0.0007	0.0170	ND	0.0119	481.1730	4.2984	0.0760	30.8423
2	10082	9/9/2010	ND	0.3057	ND	5.1241	89.5310	ND	5.5561	ND	0.0023	1.2128	0.0459	240.2250	1.3190	0.1184	3.4521
3	10083	9/9/2010	ND	0.5130	ND	28.5569	493.5846	ND	ND	0.0006	0.0063	0.8288	ND	308.4960	1.2838	0.0817	30.8444
4	10084	9/9/2010	ND	1.2400	ND	0.8278	196.5986	ND	137.8330	0.0009	0.0142	4.8014	ND	519.5200	0.7989	0.1297	0.4598
5	10085	9/9/2010	ND	1.0160	ND	0.9369	229.2486	ND	99.5643	0.0010	0.0206	3.6587	ND	592.7110	0.8440	0.1365	0.4809
6	10086	9/9/2010	ND	0.7204	ND	7.8448	473.6710	ND	47.3152	0.0006	0.0038	1.3240	0.0172	340.4750	1.1721	0.1067	9.1016
7	10087	9/9/2010	ND	0.2537	ND	98.9270	507.3251	0.0018	ND	0.0007	0.0234	ND	ND	453.8260	1.6358	0.0453	72.7202
8	10088	9/9/2010	ND	0.2039	ND	63.4213	443.8790	ND	ND	ND	0.0335	ND	ND	326.1960	1.1173	0.0428	56.5886
9	10089	9/9/2010	ND	0.1516	ND	80.3086	435.3926	ND	ND	0.0005	0.0130	ND	ND	340.2990	2.1211	0.0898	69.6509
10	10090	9/9/2010	ND	0.0932	ND	56.4817	82.7041	ND	ND	ND	0.0131	0.6992	ND	291.2760	2.8578	0.0527	60.9842
11	10091	9/9/2010	ND	0.1572	ND	54.1745	95.5615	ND	ND	ND	0.0012	0.9160	ND	391.3020	2.6659	0.0833	62.5332
12	10092	9/9/2010	ND	0.1299	ND	72.7982	480.0098	ND	ND	0.0006	0.0023	ND	0.4268	376.2890	3.1686	0.1218	95.2183
13	10093	9/9/2010	ND	0.1170	ND	110.9009	437.6970	ND	ND	ND	0.0035	ND	0.3316	440.8520	2.0247	0.0775	90.3131
14	10094	9/9/2010	ND	0.2944	ND	2.1749	238.9663	ND	58.0421	0.0008	0.0141	0.6408	0.0272	474.1920	0.7675	0.1131	1.8160
15	10095	9/9/2010	ND	0.3174	ND	6.5836	241.6467	ND	22.4519	0.0008	0.0199	0.6183	ND	393.5800	0.6834	0.0862	7.1037
16	10096	9/9/2010	ND	0.1337	ND	110.8504	175.4327	ND	ND	0.0010	0.0173	0.4302	0.0711	480.2950	5.2033	0.1958	122.2759
17	10097	9/9/2010	ND	0.4966	ND	1.6517	87.5495	ND	56.3072	0.0007	0.0094	1.0574	0.0356	307.1540	0.3980	0.0800	0.9968
18	10098	9/9/2010	ND	0.0720	ND	19.0219	42.4445	ND	ND	ND	0.0162	ND	ND	373.7590	0.7703	0.0507	14.6285
19	10099	9/9/2010	ND	0.0828	ND	70.8037	120.4865	ND	ND	ND	0.0143	ND	ND	291.2440	1.2160	0.0316	40.1636
Test Cou	int that Exceeded	Standard	0	4	0	0	18	0	0	0	0	2	0	19	0	0	0

Irrigation	Standards (Continues	.2 Mn	.01 Mo	70;230 Na	.2 Ni	5 Pb	10000 PO4	3;9 SAR	.02 Se	151;451;13 TDS	.1 V	2 Zn
	Sample No	Tested Date	mg/L		mg/L	mg/L	mg/L	mg/L	meq/L	mg/L		mg/L	mg/L
1	10081	9/9/2010	0.0047	0.0023	129.0418	0.0013	ND	ND	2.5000	ND	1133.0000	ND	0.1718
2	10082	9/9/2010	0.0042	0.0025	187.0666	ND	ND	ND	15.7000	ND	476.0000	ND	ND
3	10083	9/9/2010	0.0003	0.0034	240.2637	0.0009	ND	ND	7.4000	ND	1115.0000	0.0070	0.1413
4	10084	9/9/2010	0.0005	0.0077	363.6121	ND	ND	ND	79.5000	ND	1175.0000	ND	0.0027
5	10085	9/9/2010	8000.0	0.0064	405.8612	0.0008	0.0020	ND	84.9000	ND	1271.0000	ND	0.0043
6	10086	9/9/2010	0.0025	0.0047	329.8438	ND	ND	ND	19.0000	0.0185	1367.0000	0.0036	ND
7	10087	9/9/2010	0.0041	0.0011	177.0022	0.0056	ND	ND	3.3000	0.0051	1337.0000	0.0053	0.0129
8	10088	9/9/2010	ND	0.0021	155.5571	0.0009	ND	ND	3.4000	0.0043	1099.0000	ND	0.0264
9	10089	9/9/2010	0.0030	0.0021	173.3304	0.0015	ND	ND	3.4000	0.0043	1302.0000	ND	0.0051
10	10090	9/9/2010	0.0012	0.0069	36.3597	0.0009	ND	ND	0.8000	ND	436.0000	ND	0.0090
11	10091	9/9/2010	0.0019	0.0013	96.7250	ND	ND	ND	2.1000	ND	571.0000	ND	0.0028
12	10092	9/9/2010	0.0394	0.0018	169.6367	ND	ND	ND	3.1000	ND	1419.0000	ND	0.1199
13	10093	9/9/2010	0.0064	0.0036	166.3280	0.0007	ND	ND	2.8000	ND	1454.0000	ND	0.1317
14	10094	9/9/2010	0.0009	0.0033	320.8945	0.0007	0.0014	ND	38.9000	ND	1101.0000	ND	0.0134
15	10095	9/9/2010	0.0016	0.0053	295.4020	ND	ND	ND	19.0000	ND	1071.0000	ND	0.0034
16	10096	9/9/2010	0.0098	0.0009	60.1737	0.0009	ND	ND	0.9000	ND	1269.0000	ND	0.0236
17	10097	9/9/2010	0.0048	0.0029	242.0172	ND	ND	ND	36.7000	0.0041	621.0000	0.0027	0.0023
18	10098	9/9/2010	0.0003	0.0013	146.9181	ND	ND	ND	6.2000	ND	465.0000	0.0049	0.0057
19	10099	9/9/2010	0.0039	0.0020	108.0422	ND	ND	ND	2.5000	0.0054	573.0000	0.0037	0.0415
Test Count th	hat Exceeded	Standard:	0	0	17	0	0	0	13	0	19	0	0

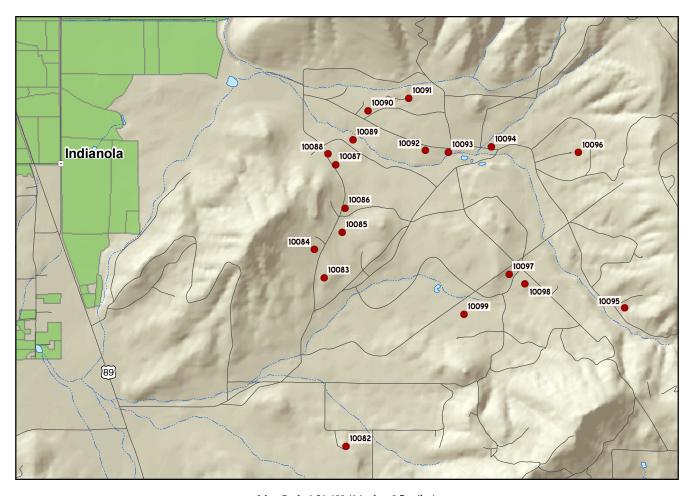
Liv	estock Stan	dards	5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2 F	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	17	mg/L	mg/L	mg/L	mg/L
1	10081	9/9/2010	ND	ND	0.2062	ND	ND	ND	0.0007	0.0170	ND	ND	ND	ND	7.3100	ND	330.6280	1133.0000	0.1718
2	10082	9/9/2010	ND	0.0111	0.3057	ND	ND	ND	ND	0.0023	1.2128	ND	ND	ND	8.3800	ND	58.2450	476.0000	ND
3	10083	9/9/2010	ND	0.0063	0.5130	ND	ND	ND	0.0006	0.0063	0.8288	ND	ND	ND	7.7200	ND	156.4509	1115.0000	0.1413
4	10084	9/9/2010	ND	0.0074	1.2400	ND	ND	ND	0.0009	0.0142	4.8014	ND	ND	ND	9.0900	ND	212.3314	1175.0000	0.0027
5	10085	9/9/2010	ND	0.0104	1.0160	ND	ND	ND	0.0010	0.0206	3.6587	ND	ND	0.0020	8.9100	ND	231.6918	1271.0000	0.0043
6	10086	9/9/2010	ND	0.0210	0.7204	ND	ND	ND	0.0006	0.0038	1.3240	ND	13.0379	ND	8.7700	0.0185	310.0119	1367.0000	ND
7	10087	9/9/2010	ND	0.0072	0.2537	ND	ND	0.0018	0.0007	0.0234	ND	ND	34.1407	ND	7.4800	0.0051	205.0168	1337.0000	0.0129
8	10088	9/9/2010	ND	0.0083	0.2039	ND	ND	ND	ND	0.0335	ND	ND	ND	ND	7.6200	0.0043	200.3857	1099.0000	0.0264
9	10089	9/9/2010	ND	0.0024	0.1516	ND	ND	ND	0.0005	0.0130	ND	ND	ND	ND	7.4700	0.0043	360.7487	1302.0000	0.0051
10	10090	9/9/2010	ND	ND	0.0932	ND	ND	ND	ND	0.0131	0.6992	ND	ND	ND	7.6900	ND	47.9421	436.0000	0.0090
11	10091	9/9/2010	ND	ND	0.1572	ND	ND	ND	ND	0.0012	0.9160	ND	ND	ND	7.5400	ND	59.7963	571.0000	0.0028
12	10092	9/9/2010	ND	ND	0.1299	ND	ND	ND	0.0006	0.0023	ND	ND	ND	ND	7.5900	ND	404.6211	1419.0000	0.1199
13	10093	9/9/2010	ND	ND	0.1170	ND	ND	ND	ND	0.0035	ND	ND	ND	ND	7.4100	ND	415.2898	1454.0000	0.1317
14	10094	9/9/2010	ND	ND	0.2944	ND	ND	ND	0.0008	0.0141	0.6408	ND	ND	0.0014	8.8000	ND	237.7914	1101.0000	0.0134
15	10095	9/9/2010	ND	0.0105	0.3174	ND	ND	ND	0.0008	0.0199	0.6183	ND	ND	ND	8.5300	ND	295.7729	1071.0000	0.0034
16	10096	9/9/2010	ND	ND	0.1337	ND	ND	ND	0.0010	0.0173	0.4302	ND	ND	ND	7.4100	ND	553.1751	1269.0000	0.0236
17	10097	9/9/2010	ND	0.0139	0.4966	ND	ND	ND	0.0007	0.0094	1.0574	ND	ND	ND	8.9800	0.0041	74.4515	621.0000	0.0023
18	10098	9/9/2010	ND	0.0054	0.0720	ND	ND	ND	ND	0.0162	ND	ND	ND	ND	7.9900	ND	39.7036	465.0000	0.0057
19	10099	9/9/2010	ND	0.0051	0.0828	ND	ND	ND	ND	0.0143	ND	ND	ND	ND	7.6900	0.0054	71.4675	573.0000	0.0415
Tes	Count that Ex	ceeded Standard	0	0	0	0	0	0	0	0	2	0	0	0	7	0	12	13	0

Culinary:

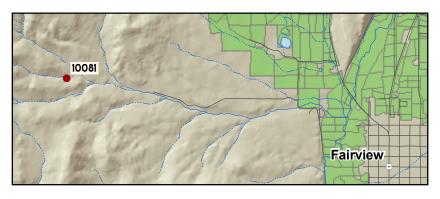
Drinking	Water Primary	Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4 F	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015	.05 Se	500 SQ4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10081	9/9/2010	ND	0.0273	ND	ND	ND	0.0007	0.0170	ND	ND	129.0418	0.0013	ND	ND	ND	330.6280	1133.0000
2	10082	9/9/2010	0.0111	0.0607	ND	ND	ND	ND	0.0023	1.2128	ND	187.0666	ND	ND	ND	ND	58.2450	476.0000
3	10083	9/9/2010	0.0063	0.1112	ND	ND	ND	0.0006	0.0063	0.8288	ND	240.2637	0.0009	ND	ND	ND	156.4509	1115.0000
4	10084	9/9/2010	0.0074	0.0201	ND	ND	ND	0.0009	0.0142	4.8014	ND	363.6121	ND	ND	ND	ND	212.3314	1175.0000
5	10085	9/9/2010	0.0104	0.0234	ND	ND	ND	0.0010	0.0206	3.6587	ND	405.8612	0.0008	ND	0.0020	ND	231.6918	1271.0000
6	10086	9/9/2010	0.0210	0.0389	ND	ND	ND	0.0006	0.0038	1.3240	ND	329.8438	ND	13.0379	ND	0.0185	310.0119	1367.0000
7	10087	9/9/2010	0.0072	0.0852	ND	ND	ND	0.0007	0.0234	ND	ND	177.0022	0.0056	34.1407	ND	0.0051	205.0168	1337.0000
8	10088	9/9/2010	0.0083	0.1544	ND	ND	ND	ND	0.0335	ND	ND	155.5571	0.0009	ND	ND	0.0043	200.3857	1099.0000
9	10089	9/9/2010	0.0024	0.0274	ND	ND	ND	0.0005	0.0130	ND	ND	173.3304	0.0015	ND	ND	0.0043	360.7487	1302.0000
10	10090	9/9/2010	ND	0.0776	ND	ND	ND	ND	0.0131	0.6992	ND	36.3597	0.0009	ND	ND	ND	47.9421	436.0000
11	10091	9/9/2010	ND	0.1150	ND	ND	ND	ND	0.0012	0.9160	ND	96.7250	ND	ND	ND	ND	59.7963	571.0000
12	10092	9/9/2010	ND	0.0306	ND	ND	ND	0.0006	0.0023	ND	ND	169.6367	ND	ND	ND	ND	404.6211	1419.0000
13	10093	9/9/2010	ND	0.0278	ND	ND	ND	ND	0.0035	ND	ND	166.3280	0.0007	ND	ND	ND	415.2898	1454.0000
14	10094	9/9/2010	ND	0.0399	ND	ND	ND	0.0008	0.0141	0.6408	ND	320.8945	0.0007	ND	0.0014	ND	237.7914	1101.0000
15	10095	9/9/2010	0.0105	0.0335	ND	ND	ND	0.0008	0.0199	0.6183	ND	295.4020	ND	ND	ND	ND	295.7729	1071.0000
16	10096	9/9/2010	ND	0.0182	ND	ND	ND	0.0010	0.0173	0.4302	ND	60.1737	0.0009	ND	ND	ND	553.1751	1269.0000
17	10097	9/9/2010	0.0139	0.0232	ND	ND	ND	0.0007	0.0094	1.0574	ND	242.0172	ND	ND	ND	0.0041	74.4515	621.0000
18	10098	9/9/2010	0.0054	0.1365	ND	ND	ND	ND	0.0162	ND	ND	146.9181	ND	ND	ND	ND	39.7036	465.0000
19	10099	9/9/2010	0.0051	0.0641	ND	ND	ND	ND	0.0143	ND	ND	108.0422	ND	ND	ND	0.0054	71.4675	573.0000
Test Cou	nt that Exceeded	Standard	5	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0

Drinkin	g Water Second	ary Standards:	0.1 Ag	0.5	250 CI	1 Cu	2 F	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SQ4	200 TDS	5 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	S	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10081	9/9/2010	ND	ND	237.4287	0.0170	ND	0.0119	495.1000	0.0047	7.3100	12.4333	330.6280	1133.0000	0.1718
2	10082	9/9/2010	ND	ND	89.5310	0.0023	1.2128	0.0459	27.0000	0.0042	8.3800	7.4602	58.2450	476.0000	ND
3	10083	9/9/2010	ND	ND	493.5846	0.0063	0.8288	ND	198.5000	0.0003	7.7200	8.6676	156.4509	1115.0000	0.1413
4	10084	9/9/2010	ND	ND	196.5986	0.0142	4.8014	ND	4.0000	0.0005	9.0900	5.3688	212.3314	1175.0000	0.0027
5	10085	9/9/2010	ND	ND	229.2486	0.0206	3.6587	ND	4.3000	0.0008	8.9100	5.6467	231.6918	1271.0000	0.0043
6	10086	9/9/2010	ND	ND	473.6710	0.0038	1.3240	0.0172	57.1000	0.0025	8.7700	6.4812	310.0119	1367.0000	ND
7	10087	9/9/2010	ND	ND	507.3251	0.0234	ND	ND	546.9000	0.0041	7.4800	15.7415	205.0168	1337.0000	0.0129
8	10088	9/9/2010	ND	ND	443.8790	0.0335	ND	ND	391.7000	ND	7.6200	14.1961	200.3857	1099.0000	0.0264
9	10089	9/9/2010	ND	ND	435.3926	0.0130	ND	ND	487.7000	0.0030	7.4700	8.8881	360.7487	1302.0000	0.0051
10	10090	9/9/2010	ND	ND	82.7041	0.0131	0.6992	ND	392.5000	0.0012	7.6900	4.4847	47.9421	436.0000	0.0090
11	10091	9/9/2010	ND	ND	95.5615	0.0012	0.9160	ND	393.1000	0.0019	7.5400	5.8570	59.7963	571.0000	0.0028
12	10092	9/9/2010	ND	ND	480.0098	0.0023	ND	0.4268	574.3000	0.0394	7.5900	8.2476	404.6211	1419.0000	0.1199
13	10093	9/9/2010	ND	ND	437.6970	0.0035	ND	0.3316	649.3000	0.0064	7.4100	11.0856	415.2898	1454.0000	0.1317
14	10094	9/9/2010	ND	ND	238.9663	0.0141	0.6408	0.0272	12.9000	0.0009	8.8000	6.1122	237.7914	1101.0000	0.0134
15	10095	9/9/2010	ND	ND	241.6467	0.0199	0.6183	ND	45.7000	0.0016	8.5300	6.6898	295.7729	1071.0000	0.0034
16	10096	9/9/2010	ND	ND	175.4327	0.0173	0.4302	0.0711	780.9000	0.0098	7.4100	4.7153	553.1751	1269.0000	0.0236
17	10097	9/9/2010	ND	ND	87.5495	0.0094	1.0574	0.0356	8.2000	0.0048	8.9800	3.5670	74.4515	621.0000	0.0023
18	10098	9/9/2010	ND	ND	42.4445	0.0162	ND	ND	107.8000	0.0003	7.9900	13.4289	39.7036	465.0000	0.0057
19			ND	ND	120.4865	0.0143	ND	ND	342.5000	0.0039	7.6900	14.2105	71.4675	573.0000	0.0415
Test Co	unt that Exceeded	Standard:	0	0	7	0	2	2	12	0	6	0	7	19	0

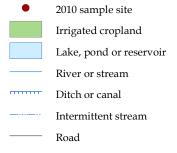
Map 16. Sanpete County District



Map Scale 1:31,680 (1 inch = 0.5 miles)



Map Scale 1:63,360 (1 inch = 1 mile)







UACD Zone 5 (Beaver, Iron, Kane, and Washington counties and most of Garfield County)

One (1) site each was sampled in Canyonlands and E and I Conservation District in Zone 5 during 2010. The Statistical Report below shows a summary of the total number of chemical tests collected (Test Count) for each district in Zone 5. The next four columns summarize the number of tests which exceeded the standard for either Primary Drinking Water (DW Primary), Secondary Drinking Water (DW Secondary), Irrigation, or Livestock.

Ground Water UACD Zone No 5 Statistical Report For the Samples Collected Between: 7/7/2010 And 11/22/2010

District Name	Sample Count	Test Count	Test Count DW Primary	Which Result I DW Secondary	Exceeded Irrigation	Standards Livestock
Canyonlands	1	40	0	3	6	1
E and I	1	40	0	2	2	0
Zone Totals:	2	80	0	5	8	1

Detailed tables follow covering the above water quality categories - General, Irrigation, Livestock, and Culinary (which includes Primary Drinking Water Standards and Secondary Drinking Water Standards) for each district along with a map(s). For the Irrigation, Livestock, and Culinary tables the first row lists the explicit standard for each element or compound (column). The standards for irrigation and livestock originated from the Water quality for agriculture 29 Revision 1, published by the Food and Agriculture Organization of the United Nations. The drinking water primary and secondary standards are from the State of Utah's water quality standards. Below the standards are the column headings (expressed as the chemical abbreviation) for each element or compound tested. Units used in measuring the concentrations of each element or compound are found below each abbreviation. Each row of the table is a single sample identified with a sample number. This sample number shows the sampling location on the map(s) located after the chemistry tables. Highlighted sample results show samples that exceed a standard for that element or compound. Totals at the bottom of each table show how many samples in each column exceeded the standard for that column. The value "ND" indicates that a particular element or compound was "Not Detected" for a given sample.

Canyonlands District

General:

General Sample Information

	Sample No	Collected Date	Coliform	Ecoli	Temperature			SAR meq/L	Hardness mg/L	Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary	Irriga- tion	Indust- rial	Lands- cape	Natural	Drai- nage	Other
1	1008	0 8/31/201	0 ND	ND	68.0 F (20.0 C)	157	815.0	8.100	162.0	Well	Clean	Covered	Steel	Sealed		~					
1505	cteria P	3533555	0	0	ND - Not	Det	ected														

Irrigation:

Irrigation	Standards		5 A I	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2 F	5 Fe	73.2;152.5 HCO3	10000 K	2.5 Li	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10080	9/7/2010	ND	0.4012	ND	35.1398	71.4466	ND	ND	ND	0.0097	0.6715	ND	206.5040	3.4126	0.1041	18.0005
Test Count	that Exceeded	Standard	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0

ND - Not Detected

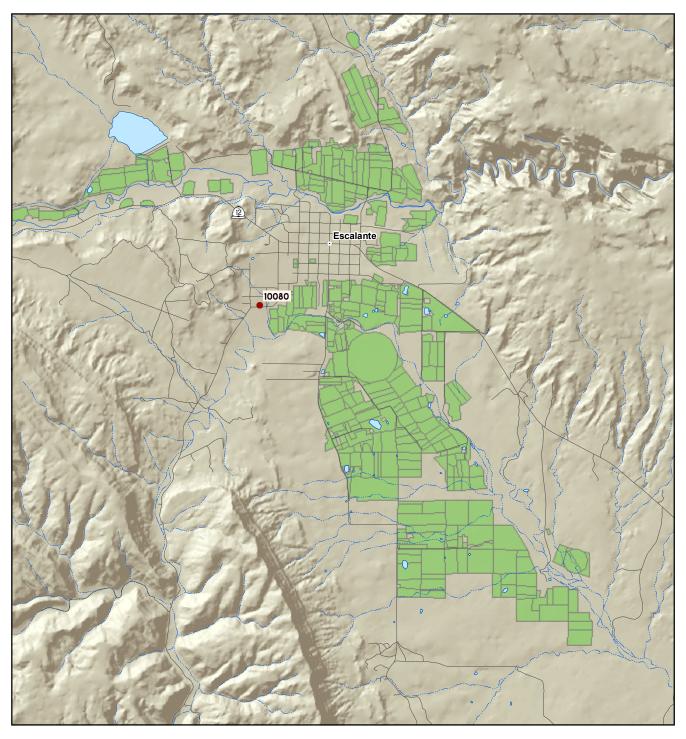
Irrigation	n Standards	Continues	.2	.01	70;230	.2	5	10000	3;9	.02	151;451;13	3 .1	2
	Sample No	Tested Date	Mn mg/L	Mo mg/L	Na mg/L	mg/L	Pb mg/L	PO4 mg/L	SAR meq/L	Se mg/L	mg/L	mg/L	mg/L
1	10080	9/7/2010	0.0013	0.0152	237.1218	0.0007	ND	ND	8.1000	0.0116	815.0000	ND	0.0252
Test Count	that Exceeded	Standard:	0	1	1	0	0	0	1	0	1	0	0

Livestoc	k Standards		5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2 F	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	(12)	mg/L	mg/L	mg/L	mg/L
1	10080	9/7/2010	ND	ND	0.4012	ND	ND	ND	ND	0.0097	0.6715	ND	17.2672	ND	8.0700	0.0116	326.8279	815.0000	0.0252
Test Count	that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
ND - Not I	Detected																		

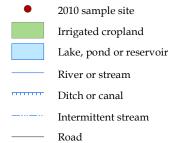
Culinary:

Drinking	Water Primar	y Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015 Pb	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Da		mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10080	9/7/2010	ND	0.0127	ND	ND	ND	ND	0.0097	0.6715	ND	237.1218	0.0007	17.2672	ND	0.0116	326.8279	815.0000
Test Cou	nt that Exceede	d Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ND - No	D - Not Detected																	
	Drinking Water Secondary Stand			0.1 Ag	0.5 Al	250 CI	1 Cu	2 F	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn		
		Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	s	mg/L		mg/L	mg/L	mg/L	mg/L		
	1	10080	9/7/2010	ND	ND	71.4466	0.0097	0.6715	ND	162.0000	0.0013	8.0700	3.5779	326.8279	815.0000	0.0252		
	Test Count that Exceeded Stan			0	0	0	0	0	0	1	0	0	0	1	1	0		
	ND - Not De	tected																

Map 17. Canyonlands District



Map Scale 1:63,360 (1 inch = 1 mile)







District Location

E and I District

General:

General Sample Information

	Samp No		Collected Date	Coliform	Ecoli	Temperature	EC	TDS SA mg/L me	R Hardness q/Lmg/L	Sample Site	Site Condition	Well Head	Material	Casing Condition			Indust- rial	Lands- cape	Drai- nage	Other
1	100	79	8/31/2010	ND	ND	68.0 F (20.0 C)	370	208.0 0.4	100 151.7	Well	Clean	Covered	Steel	Sealed	~	~				
	cteria mple			0	0	ND - Not	Det	ected												

Irrigation:

Irrigation	Standards		5 A I	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2 F	5 Fe	73.2;152.5 HCO3	10000 K	2.5 Li	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10079	9/7/2010	ND	0.0441	ND	43.3376	25.9857	ND	ND	0.0115	0.0146	ND	ND	154.2720	3.5158	0.0137	10.5156
Test Count	1 10079 9/7/2010 Test Count that Exceeded Standard		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

ND - Not Detected

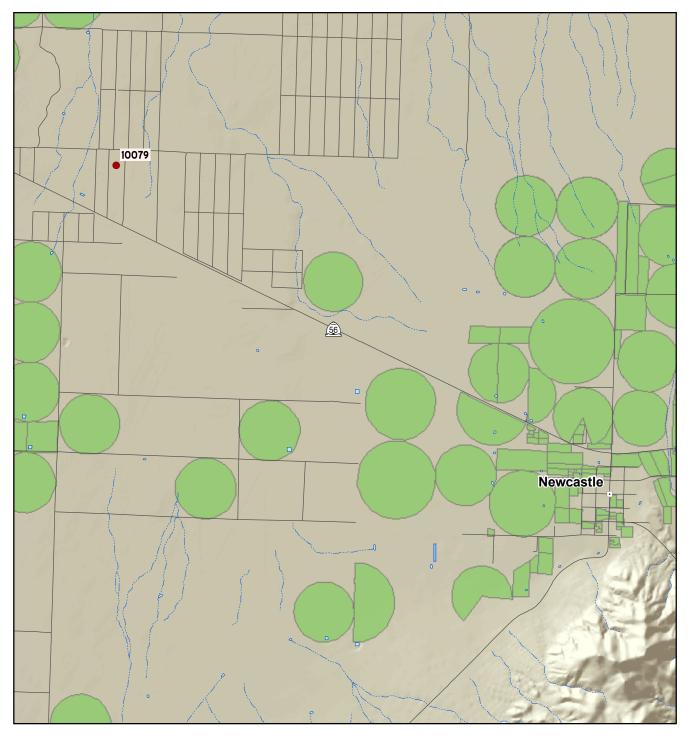
Irrigation	n Standards	Continues	.2 Mn	.01 Mo	70;230 Na	.2	5 Pb	10000 PO4	3;9 SAR	.02 Se	151;451;13 TDS	3 .1	2 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	mg/L	mg/L	mg/L	mg/L
1	10079	9/7/2010	ND	0.0007	11.0546	ND	ND	ND	0.4000	ND	208.0000	0.0081	0.0142
Test Count	that Exceeded	Standard:	0	0	0	0	0	0	0	0	1	0	0

Livestoc	k Standards		5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2 F	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	74	mg/L	mg/L	mg/L	mg/L
1	10079	9/7/2010	ND	0.0043	0.0441	ND	ND	ND	0.0115	0.0146	ND	ND	ND	ND	7.9000	ND	13.2096	208.0000	0.0142
Test Count	Test Count that Exceeded Standard			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ND - Not	Detected																		

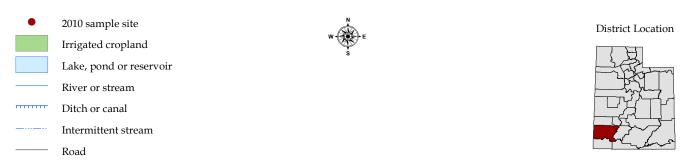
Culinary:

Drinking \	Water Primary	Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10079	9/7/2010	0.0043	0.0479	ND	ND	ND	0.0115	0.0146	ND	ND	11.0546	ND	ND	ND	ND	13.2096	208.0000
Test Count	that Exceeded	I Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ND - Not	Detected																	
	Drinking Water Se			Standards:	0.1 Ag	0.5 Al	250 CI	1 Cu	2 F	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn	
		Samp	le No Te	sted Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	-	mg/L	mg/L	mg/L	mg/L	
	1	1007	9 9/	7/2010	ND	ND	25.9857	0.0146	ND	ND	151.7000	ND	7.9000	23.6377	13.2096	208.0000	0.0142	
	Test Count that Excee			ndard:	0	0	0	0	0	0	1	0	0	0	0	1	0	
	NE	- Not Detecte	d															

Map 18. E and I District



Map Scale 1:50,870 (1 inch = 0.8 miles)



UACD Zone 6 (Daggett and Uintah counties, most of Duchesne County, and northwest Grand, and east Summit counties)

A
②[ˇ ├ÁC Dsites were sampled in Duchesne County C-DÉs) åÁNA ææ®Ô[ˇ ՚ ♂ÁFDÉsistrict•
¾ÁZ[՚ ^ Áduring the spring, • ˇ { { ^ ├Êss) åÁæ|Á ÁGEF€EÁÐ [Áæ[] |^• Á ^ ' ^Æ[||^&c^å
in the Daggett County district.

The Statistical Report below shows a summary of the total number of chemical tests collected (Test Count) for each district in Zone 6. The next four columns summarize the number of tests which exceeded the standard for either Primary Drinking Water (DW Primary), Secondary Drinking Water (DW Secondary), Irrigation, or Livestock.

Ground Water UACD Zone No 6 Statistical Report For the Samples Collected Between: 8/1/2010 And 4/4/2011

		Test	rost Count	Which Result I	Lxceeded	Stanuarus
Name	Count	Count	DW Primary	DW Secondary	Irrigation	Livestock
Duchesne Co.	3	120	0	6	6	0
Uintah Co.	1	40	0	2	2	0

Detailed tables follow covering the above water quality categories - General, Irrigation, Livestock, and Culinary (which includes Primary Drinking Water Standards and Secondary Drinking Water Standards) for each district along with a map(s). For the Irrigation, Livestock, and Culinary tables the first row lists the explicit standard for each element or compound (column). The standards for irrigation and livestock originated from the Water quality for agriculture 29 Revision 1, published by the Food and Agriculture Organization of the United Nations. The drinking water primary and secondary standards are from the State of Utah's water quality standards. Below the standards are the column headings (expressed as the chemical abbreviation) for each element or compound tested. Units used in measuring the concentrations of each element or compound are found below each abbreviation. Each row of the table is a single sample identified with a sample number. This sample number shows the sampling location on the map(s) located after the chemistry tables. Highlighted sample results show samples that exceed a standard for that element or compound. Totals at the bottom of each table show how many samples in each column exceeded the standard for that column. The value "ND" indicates that a particular element or compound was "Not Detected" for a given sample.

Duchesne County District

General:

General Sample Information

	Sam		Collected Date	Coliform	Ecoli	Temperature	EC		SAR Hardnes meq/Lmg/L	s Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary	Irriga- tion	Indust- rial	Lands- cape	Natural	Drai- nage	Other
1	10	075	8/31/2010	ND	ND	68.0 F (20.0 C)	960	481.0	0.200 483.5	Well	Clean	Covered	Steel	Sealed	~	~					
2	10	076	8/31/2010			68.0 F (20.0 C)	730	368.0	0.600 312.5	Well	Clean	Covered		Sealed	~	~					
3	10	078	8/31/2010			68.0 F (20.0 C)	520	266.0	0.100 268.1	Well	Clean	Covered		Sealed	~						
		a Posi Cour		0	0	ND - Not	Det	ected													

Irrigation:

Irrigation	Standards		5 Al	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2	5 Fe	73.2;152.5 HCO3	10000	2.5	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10075	9/7/2010	ND	0.0390	ND	104.7191	29.6489	ND	ND	ND	0.0216	ND	ND	318.0790	3.3920	0.0229	53.8190
2	10076	9/7/2010	ND	0.0531	ND	69.9599	14.1462	ND	ND	ND	0.0070	ND	ND	232.4090	4.3842	0.0468	33.4006
3	10078	9/7/2010	ND	0.0405	ND	69.4304	ND	ND	ND	ND	0.0267	ND	0.0105	274.0410	0.7056	0.0192	22.9452
Test Count	that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0

ND - Not Detected

Irrigatio	n Standards	Continues	.2 M n	.01 Mo	70;230 Na	.2 N i	5 Pb	10000 PO4	3;9 SAR	.02 Se	151;451;13 TDS	3 .1	2 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	mg/L	mg/L	mg/L	mg/L
1	10075	9/7/2010	0.0103	0.0006	11.7191	0.0009	ND	ND	0.2000	ND	481.0000	ND	0.0317
2	10076	9/7/2010	0.0119	0.0007	25.6258	ND	ND	ND	0.6000	ND	368.0000	ND	0.0131
3	10078	9/7/2010	0.0004	0.0011	2.8508	0.0007	ND	ND	0.1000	ND	266.0000	ND	0.0124
Test Coun	t that Exceeded	Standard:	0	0	0	0	0	0	0	0	3	0	0

Live	estock Stand	lards	5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2 F	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10075	9/7/2010	ND	ND	0.0390	ND	ND	ND	ND	0.0216	ND	ND	ND	ND	7.6500	ND	116.6074	481.0000	0.0317
2	10076	9/7/2010	ND	ND	0.0531	ND	ND	ND	ND	0.0070	ND	ND	ND	ND	7.6800	ND	102.5290	368.0000	0.0131
3	10078	9/7/2010	ND	ND	0.0405	ND	ND	ND	ND	0.0267	ND	ND	ND	ND	7.8500	ND	28.0464	266.0000	0.0124
Test	Count that Exc	eeded Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ND - Not Detected

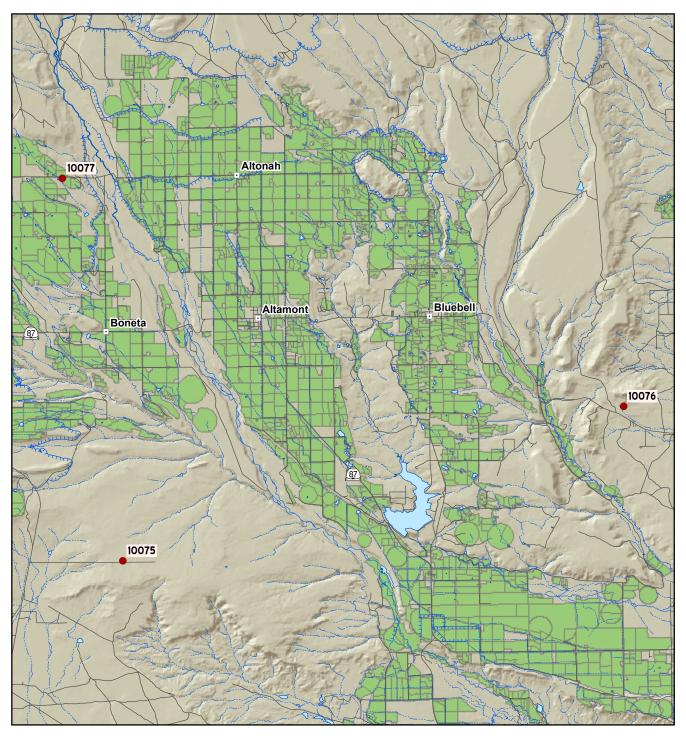
Culinary:

Drinking V	Vater Primary	Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4 F	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10075	9/7/2010	ND	0.0197	ND	ND	ND	ND	0.0216	ND	ND	11.7191	0.0009	ND	ND	ND	116.6074	481.0000
2	10076	9/7/2010	ND	0.0260	ND	ND	ND	ND	0.0070	ND	ND	25.6258	ND	ND	ND	ND	102.5290	368.0000
3	10078	9/7/2010	ND	0.1729	ND	ND	ND	ND	0.0267	ND	ND	2.8508	0.0007	ND	ND	ND	28.0464	266.0000
Test Count	that Exceeded	Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

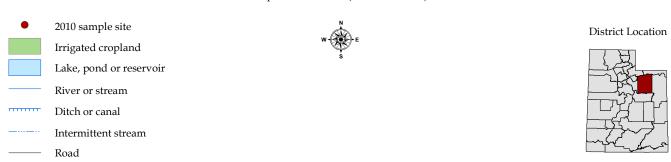
ND - Not Detected

Drinking W	later Seconda	ary Standards:	0.1 Ag	0.5 Al	250 CI	1 Cu	2	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10075	9/7/2010	ND	ND	29.6489	0.0216	ND	ND	483.5000	0.0103	7.6500	3.6604	116.6074	481.0000	0.0317
2	10076	9/7/2010	ND	ND	14.1462	0.0070	ND	ND	312.5000	0.0119	7.6800	3.4246	102.5290	368.0000	0.0131
3	10078	9/7/2010	ND	ND	ND	0.0267	ND	0.0105	268.1000	0.0004	7.8500	7.5372	28.0464	266.0000	0.0124
Test Count	that Exceeded	Standard:	0	0	0	0	0	0	3	0	0	0	0	3	0

Map 19. Duchesne County District



Map Scale 1:126,720 (1 inch = 2 miles)



Uintah County District

General:

General Sample Information

	Sample No	Collected Date	Coliform	Ecoli	Temperature	EC	TDS SAF	R Hardness I/Lmg/L	Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary	Irriga- tion	Indust- rial	Lands- cape	Natural	Drai- nage	Other
1	10078	8/31/2010)	6	88.0 F (20.0 C)	520	266.0 0.1	00 268.1	Well	Clean	Covered		Sealed	✓						
	cteria Po mple Co		0	0	ND - Not	Dete	ected													

Irrigation:

Irrigation	Standards		5 A I	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2 F	5 Fe	73.2;152.5 HCO3	10000 K	2.5	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	1 10078 9/7 <i>/</i> 2010		ND	0.0405	ND	69.4304	ND	ND	ND	ND	0.0267	ND	0.0105	274.0410	0.7056	0.0192	22.9452
	est Count that Exceeded Standard		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

Irrigati	on Standards	Continues	.2 Mn	.01 Mo	70;230	.2 Ni	5 Pb	10000 PO4	3;9 SAR	.02 Se	151;451;1: TDS	3 .1	2
	Sample No	Tested Date	mg/L	mg/L	Na mg/L	mg/L	mg/L	mg/L	meq/L	mg/L	mg/L	mg/L	Zn mg/L
1	10078	9/7/2010	0.0004	0.0011	2.8508	0.0007	ND	ND	0.1000	ND	266.0000	ND	0.0124
Test Cou	nt that Exceeded	Standard:	0	0	0	0	0	0	0	0	1	0	0
ND - No	t Detected												

Livestoc	k Standards		5 A I	0.2	5 B	.1 Be	0.05	1 Co	1 Cr	.5 Cu	2	10 Hg	440 NO3	.1 Ph	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Z n
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	4	mg/L	mg/L	mg/L	mg/L
1	10078	9/7/2010	ND	ND	0.0405	ND	ND	ND	ND	0.0267	ND	ND	ND	ND	7.8500	ND	28.0464	266.0000	0.0124
	that Exceeded		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ND - Not Detected

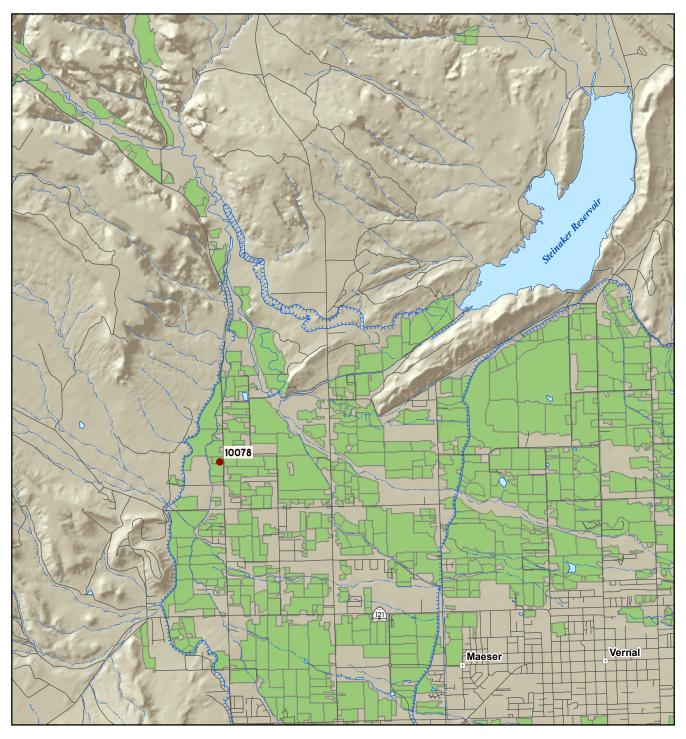
Culinary:

Drinking	g Water Primary	/ Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4 F	2 Ha	10000 Na	1000 Ni	44.3 NO3	.015	.05 Se	500 SO4
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10078	9/7/2010	ND	0.1729	ND	ND	ND	ND	0.0267	ND	ND	2.8508	0.0007	ND	ND	ND	28.0464
Test Cou	ınt that Exceeded	l Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

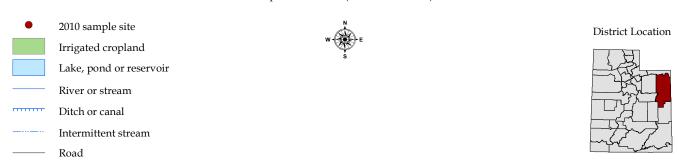
ND - Not Detected

Drir	nking Water Second	ary Standards:	0.1	0.5	250	1	2	0.3	60;120;180	.05	6.5-8.5	1000	250	200	5	2000
			Ag	Al	CI	Cu	F	Fe	Hardnes	Mn	pH	Si	SO4	TDS	Zn	TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	S	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L
1	10078	9 <i>/7/</i> 2010	ND	ND	ND	0.0267	ND	0.0105	268.1000	0.0004	7.8500	7.5372	28.0464	266.0000	0.0124	266.0000
	t Count that Exceeded	Standard:	0	0	0	0	0	0	1	0	0	0	0	1	0	0

Map 20. Uintah County District



Map Scale 1:57,024 (1 inch = 0.9 miles)



UACD Zone 7 (Carbon, Emery, Grand, and San Juan counties, and parts of Duchesne, Sanpete, Sevier, and Utah counties)

Five (5) sites were sampled in two (2) of the five (5) Conservation Districts in Zone 7 during the spring, summer and fall of 2010. These include the number of samples in the following districts: four (4) in San Juan County and one (1) in San Rafael districts.

The Statistical Report below shows a summary of the total number of chemical tests performed (Test Count) for each district in Zone 7. The next four columns summarize the number of tests which exceeded the standard for either Primary Drinking Water (DW Primary), Secondary Drinking Water (DW Secondary), Irrigation, or Livestock.

Ground Water UACD Zone No 7 Statistical Report For the Samples Collected Between: 8/1/2010 And 4/18/2011

District	Sample	Test	Test Count	Which Result	Exceeded	Standards
Name	Count	Count	DW Primary	DW Secondary	Irrigation	Livestock
San Juan Co.	4	160	4	9	17	6
San Rafael	1	40	2	4	5	2
Zone Totals:	5	200	6	13	2 2	8

Detailed tables follow covering the above water quality categories - General, Irrigation, Livestock, and Culinary (which includes Primary Drinking Water Standards and Secondary Drinking Water Standards) for each district along with a map(s). For the Irrigation, Livestock, and Culinary tables the first row lists the explicit standard for each element or compound (column). The standards for irrigation and livestock originated from the Water quality for agriculture 29 Revision 1, published by the Food and Agriculture Organization of the United Nations. The drinking water primary and secondary standards are from the State of Utah's water quality standards. Below the standards are the column headings (expressed as the chemical abbreviation) for each element or compound tested. Units used in measuring the concentrations of each element or compound are found below each abbreviation. Each row of the table is a single sample identified with a sample number. This sample number shows the sampling location on the map(s) located after the chemistry tables. Highlighted sample results show samples that exceed a standard for that element or compound. Totals at the bottom of each table show how many samples in each column exceeded the standard for that column. The value "ND" indicates that a particular element or compound was "Not Detected" for a given sample.

San Juan County District **General**:

General Sample Information

		Collected Date	Coliform	Ecoli	Temperature	EC	TDS mg/L		Hardness mg/L	Sample Site	Site Condition	Well Head	Material	Casing Condition	Culli- nary	-	Indust- rial	Lands- cape	Natural	Drai- nage	Other
1	10064	8/31/2010	POS	ND	68.0 F (20.0 C)	410	2731.	3.200	1927.	Well					~						
2	10065	8/31/2010	POS	ND	68.0 F (20.0 C)	500	2875.	25.70	289.8	Well					~						
3	10066	8/31/2010	POS	POS	68.0 F (20.0 C)	860	447.0	2.100	297.4	Pond						~					
4	10067	8/31/2010	POS	ND	68.0 F (20.0 C)	194	1083.	29.60	40.50						~						
0.00	cteria Pos mple Cou		4	1	ND - Not	Det	ected														

Irrigation:

Irrigation S	Standards		5 A I	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2	5 Fe	73.2;152.5 HCO3	10000	2.5	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10064	9/7/2010	ND	0.2399	ND	430.5547	62.7259	0.0004	ND	ND	0.0349	ND	ND	480.3100	12.0292	0.2519	206.5382
2	10065	9/7/2010	ND	0.2268	ND	65.9998	62.1927	ND	ND	ND	0.0450	ND	ND	479.7710	5.3694	0.1518	30.2813
3	10066	9/7/2010	ND	0.0784	ND	40.3441	13.8953	ND	ND	ND	0.0196	ND	0.0125	349.6680	1.8760	0.0347	47.6933
4	10067	9/7/2010	ND	0.6387	ND	9.3486	159.2191	ND	ND	ND	0.0150	0.6472	ND	545.9500	8.0407	0.2738	4.1677
Test Count th	est Count that Exceeded Standard			1	0	0	1	0	0	0	0	0	0	4	0	0	0

ND - Not Detected

Irrigation	Standards	Continues	.2 Mn	.01 M O	70;230 Na	.2 Ni	5 Pb	10000 PO4	3;9 SAR	.02 Se	151;451;13 TDS	.1	2 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	mg/L	mg/L	mg/L	mg/L
1	10064	9/7/2010	0.0178	0.0006	318.5461	0.0064	ND	ND	3.2000	ND	2731.0000	ND	0.2746
2	10065	9/7/2010	0.0032	0.0007	1006.8180	0.0011	ND	ND	25.7000	ND	2875.0000	ND	0.0659
3	10066	9/7/2010	0.0373	0.0052	81.6939	0.0007	ND	ND	2.1000	ND	447.0000	ND	0.0041
4	10067	9/7/2010	0.0104	0.0076	433.3363	ND	ND	ND	29.6000	ND	1083.0000	ND	0.0367
Test Count	that Exceeded	Standard:	0	0	4	0	0	0	3	0	4	0	0

Li	vestock Stan	ndards	5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10064	9/7/2010	ND	0.0037	0.2399	ND	ND	0.0004	ND	0.0349	ND	ND	ND	ND	7.3500	ND	1458.0070	2731.0000	0.2746
2	10065	9/7/2010	ND	ND	0.2268	ND	ND	ND	ND	0.0450	ND	ND	ND	ND	7.2700	ND	1460.8480	2875.0000	0.0659
3	10066	9/7/2010	ND	0.0073	0.0784	ND	ND	ND	ND	0.0196	ND	ND	ND	ND	7.8900	ND	81.9287	447.0000	0.0041
4	10067	9/7/2010	ND	ND	0.6387	ND	ND	ND	ND	0.0150	0.6472	ND	ND	ND	8.1200	ND	195.5340	1083.0000	0.0367
Te	st Count that Ex	xceeded Standard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0

ND - Not Detected

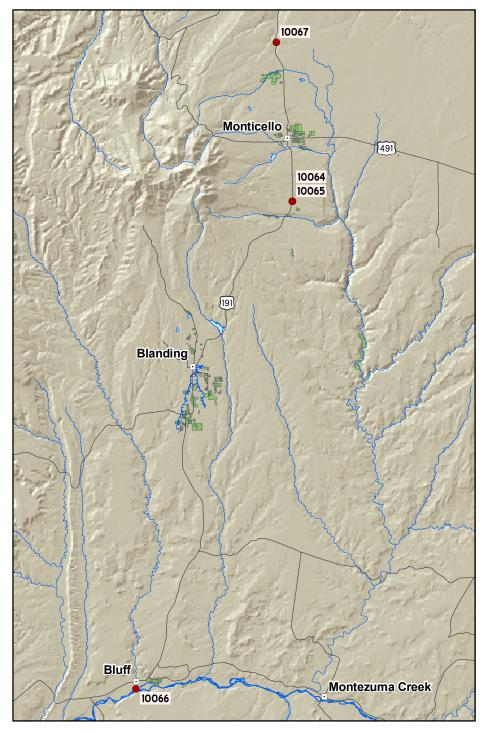
Culinary:

Drinking \	Water Primary	Standards	0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4	2 Hg	10000 Na	1000 Ni	44.3 NO3	.015	.05 Se	500 SO4	2000 TDS
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10064	9/7/2010	0.0037	0.0088	ND	ND	ND	ND	0.0349	ND	ND	318.5461	0.0064	ND	ND	ND	1458.0070	2731.0000
2	10065	9/7/2010	ND	0.0036	ND	ND	ND	ND	0.0450	ND	ND	1006.8180	0.0011	ND	ND	ND	1460.8480	2875.0000
3	10066	9/7/2010	0.0073	0.0969	ND	ND	ND	ND	0.0196	ND	ND	81.6939	0.0007	ND	ND	ND	81.9287	447.0000
4	10067	9/7/2010	ND	0.0509	ND	ND	ND	ND	0.0150	0.6472	ND	433.3363	ND	ND	ND	ND	195.5340	1083.0000
Test Count	Test Count that Exceeded Standard		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2

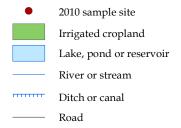
ND - Not Detected

Drinking Wa	ater Seconda	ary Standards:	0.1 Ag	0.5 Al	250 CI	1 Cu	2 F	0.3 Fe	60;120;180 Hardnes		6.5-8.5 pH	1000 Si	250 SO4	200 TDS	5 Zn
	Sample No	Tested Date	mg/L	mg/L	100	mg/L	mg/L	mg/L	s	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10064	9/7/2010	ND	ND	62.7259	0.0349	ND	ND	1927.3000	0.0178	7.3500	4.8183	1458.0070	2731.0000	0.2746
2	10065	9/7/2010	ND	ND	62.1927	0.0450	ND	ND	289.8000	0.0032	7.2700	5.1660	1460.8480	2875.0000	0.0659
3	3 10066 9/7/2010		ND	ND	13.8953	0.0196	ND	0.0125	297.4000	0.0373	7.8900	6.4970	81.9287	447.0000	0.0041
4	4 10067 9/7/2010			ND	159.2191	0.0150	0.6472	ND	40.5000	0.0104	8.1200	4.4228	195.5340	1083.0000	0.0367
Test Count ti	hat Exceeded	Standard:	0	0	0	0	0	0	3	0	0	0	2	4	0

Map 21. San Juan County District



Map Scale 1:458,281 (1 inch = 7.2 miles)







San Rafael District

General:

General Sample Information

	Sa		Collected Date	Coliform	Ecoli	Temperature	EC		SAR meq/L	Hardness mg/L	Sample Site	Site Condition	Well Head	Material	Casing Condition		Irriga- tion	Lands- cape	Natural	Drai- nage	Other
3	1	10068	8/31/2010	POS	ND (68.0 F (20.0 C)	550	3512	. 2.500	2668.	Well					~	~				
	7.7	ria Pos le Cou		1	0	ND - Not	Det	ected													

Irrigation:

Irrigation Standards			5 Al	0.5;1.0;2.0;	.1 Be	100000 Ca	71;355 CI	1 Co	1000 CO3	1 Cr	0.2 Cu	2 F	5 Fe	73.2;152.5 HCO3	10000 K	2.5 Li	100000 Mg
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	10068	9/7/2010	ND	1.4120	ND	588.4236	525.9825	0.0007	ND	ND	0.0176	ND	ND	105.0760	10.2214	0.0817	290.6968
Test Count	that Exceeded	Standard	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0
ND - Not [Detected																

Irrigation	Standards	Continues	.2 Mn	.01 M O	70;230 Na	.2 Ni	5 Pb	10000 PO4	3;9 SAR	.02 Se	151;451;13 TDS	.1 V	2 Zn
	Sample No	Tested Date	mg/L	mg/L		mg/L	mg/L	mg/L	meq/L	mg/L	mg/L	mg/L	mg/L
1	10068	9/7/2010	0.0195	0.0075	298.1703	0.0047	ND	ND	2.5000	ND	3512.0000	ND	0.0139
Test Count	that Exceeded	Standard:	0	0	1	0	0	0	0	0	1	0	0

Livestock Standards		5 Al	0.2 As	5 B	.1 Be	0.05 Cd	1 Co	1 Cr	.5 Cu	2 F	10 Hg	440 NO3	.1 Pb	5.5-8.3 pH	.05 Se	167;333 SO4	1000;3000; TDS	25 Zn	
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10068	9/7/2010	ND	ND	1.4120	ND	ND	0.0007	ND	0.0176	ND	ND	ND	ND	7.8100	ND	1741.9350	3512.0000	0.0139
Test Count that Exceeded Standard			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0

ND - Not Detected

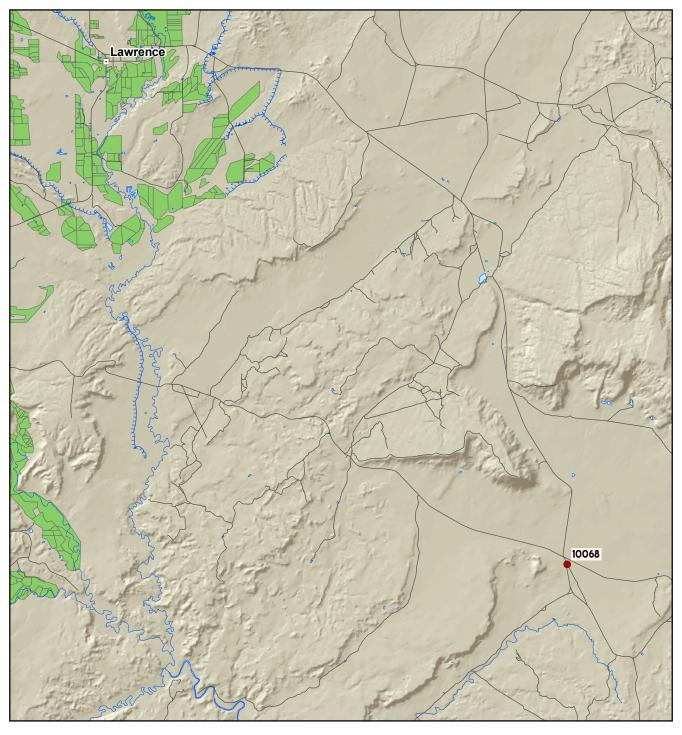
Culinary:

Drinking Water Primary Standards			0.01 As	2 Ba	0.004 Be	0.005 Cd	25 CIO4	0.1 Cr	1.3 Cu	4 F	2 Ha	10000 Na	1000 Ni	44.3 NO3	.015 Pb	.05 Se	500 SO4	2000 TDS
Sample No Tested Date		mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L		mg/L	
1	10068	9/7/2010	ND	0.0118	ND	ND	ND	ND	0.0176	ND	ND	298.1703	0.0047	ND	ND	ND	1741.9350	3512.0000
Test Count that Exceeded Standard			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1

ND - Not Detected

Drinking V	Vater Second	0.1	0.5	250	1	2	0.3	60;120;180	.05	6.5-8.5	1000	250	200	5	
The State of the State of		and the second of the second	Ag	Al	CI	Cu	F	Fe	Hardnes	Mn	pH	Si	SO4	TDS	Zn
	Sample No	Tested Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	S	mg/L	-	mg/L	mg/L	mg/L	mg/L
1	10068	9/7/2010	ND	ND	525.9825	0.0176	ND	ND	2668.7000	0.0195	7.8100	5.3890	1741.9350	3512.0000	0.0139
Test Count	that Exceeded	0	0	1	0	0	0	1	0	0	0	1	1	0	

Map 22. San Rafael District



Map Scale 1:100,000 (1 inch = 1.6 miles)

