



May 26, 2011

Joan Epperly
3015 Six Lazy K Road
Silt, Colorado 81652

RE: Water Well Sampling Results

Dear Ms. Epperly:

On April 4, 2011, LT Environmental (LTE), at the direction of Bill Barrett Corporation (BBC), sampled your domestic water well at 3015 Six Lazy K Road, Garfield County, Colorado. The purpose of this sampling event was to comply with the request from the Colorado Oil and Gas Conservation Commission (COGCC) to collect a follow-up sample of the water in your water well after the recent release from the water pipeline right-of-way. The COGCC previously collected samples of the water in your water well on November 3, 2010, with BBC conducting oversight of the sampling activities (Table 1).

Water Well Analytical Results

The water sample from your well was submitted to Accutest Mountain States Laboratories (Accutest) in Wheat Ridge, Colorado. The analytical report is attached to this letter. The analytical results indicate that concentrations of selenium, sulfate, and total dissolved solids (TDS) exceed the primary or secondary drinking water standards (Table 1). These public water system standards do not apply to private well water; however, they can be used for comparison purposes.

Selenium, which is a metal, exceeds the primary standard; however, it is common for this to occur in aquifers around the Silt area. Both sulfate and TDS are secondary analytes that are regulated in public water systems, not due to health concerns, but because they can affect the taste, color, and smell of the water. The two elevated results for these analytes are also common in aquifers surrounding the Silt area. The results from the sampling event on April 4, 2011, are consistent with the results reported from the November 2011 sampling event. Although there are small increases observed in some analytes, this is likely attributable to seasonal and/or natural background variations.

As indicated, the analytical results from the water sample collected from your water well can be compared to drinking water standards for public water systems at the following internet resource:

<http://www.cdphe.state.co.us/regulations/wqccregs/100301primarydrinkingwater.pdf>

Baseline sampling has been conducted by multiple consultants and agencies surrounding the town of Silt. The COGCC has completed and published baseline sampling studies in the Silt area online. Published data, provided by the COGCC, are available at the following web

address under the Library Section (left navigation menu) and in the Piceance Basin Category (<http://cogcc.state.co.us>). Refer specifically to the Mamm Creek study entitled, *Hydrogeologic Characterization of the Mamm Creek Field Area in Garfield County Phase II*.



LTE has included three figures from this report that visually depict the variation in selenium, sulfate, and TDS concentrations (Appendix A). LTE has added the approximate location of the Epperly Water Well to each figure for ease of reference. LTE has also provided historical results from your water well for additional comparison to the recent results (Appendix B). These results were previously reported by another consultant and were submitted to us by BBC.

Summary text in the report indicates that selenium was detected in all 50 sampled wells where it was analyzed. Ten of the wells exceeded the primary standard of 0.05 milligrams per liter (mg/L) at concentrations ranging up to 0.792 mg/L. Sulfate was detected in all 66 sampled wells. There were 31 wells that exceeded the secondary standard of 250 mg/L, with concentrations ranging up to 4,590 mg/l. Detections of TDS exceeded the standard in 56 of the 66 sampled wells. Concentrations of TDS in the area of your residence ranged up to 4,290 mg/L.

As evidenced by these results, the analytical results from your water well appear to be representative of the naturally occurring aquifer characteristics and slight changes to the chemical properties of the aquifer should be expected as depicted by the great spatial variation of the chemical concentrations in the attached figures.

Please call me at 303-433-9788 if you have any questions or comments regarding this report.

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in black ink, reading 'Brian Dodek'. The signature is fluid and cursive, with the first name 'Brian' and last name 'Dodek' clearly legible.

Brian Dodek, P.G.
Project Geologist/Client Manager

Attachments:

Table 1 – Epperly Water Well Analytical Results
Appendix A – Figures Taken from COGCC Baseline Groundwater Study
Appendix B – Historical Epperly Water Well Results (Provided by BBC)

cc: Linda Spry O'Rourke; COGCC, BBC

TABLE

TABLE 1

**EPPERLY WATER WELL ANALYTICAL RESULTS
EPPERLY R-O-W
GARFIELD COUNTY, COLORADO**

BILL BARRETT CORPORATION

PARAMETER	Primary Drinking Water Standards	Secondary Drinking Water Standards	UNITS	Project: NOAV 200278693 Epperly Well Sample ID: Epperly Well	Project: BBC Pipeline- Epperly Sample ID: Epperly Water Well
Sample Date				11/3/2010	4/4/2011
Sample Type				Groundwater	Groundwater
Antimony	0.006	--	mg/L	0.0011	<0.00080
Arsenic	0.010	--	mg/L	<0.002	0.0022
Barium	2	--	mg/L	0.012	0.0126
Boron	--	--	mg/L	0.12	0.153
Calcium	--	--	mg/L	29	39.3
Copper	1.3	1.0	mg/L	<0.01	0.0113
Lithium	--	--	mg/L	0.063	0.0666
Magnesium	--	--	mg/L	4.6	71.60
Molybdenum	--	--	mg/L	0.019	0.0171
Potassium	--	--	mg/L	5.6	3.3
Selenium	0.05	--	mg/L	0.049	0.0903
Silicon	--	--	mg/L	2.7	3.3
Sodium	--	--	mg/L	600	755
Strontium	--	--	mg/L	1.4	1.870
Uranium	0.030	--	mg/L	0.013	0.0174
Bromide	--	--	mg/L	1	1.4
Chloride	--	250	mg/L	110	127
Fluoride	4.0	2.0	mg/L	1.5	2.5
Nitrate as N	10	--	mg/L	1.1	1.4
Sulfate	--	250	mg/L	1,200	1,370
Total Alkalinity as CaCO ₃	--	--	mg/L	250	253
Bicarbonate	--	--	mg/L	250	253
TOC	--	--	mg/L	4.3	6.3
EC	--	--	mmhos/cm	3.360	3.430
Sodium Adsorption Ratio	--	--	unitless	27	30.5
pH	--	6.5-8.5	SU	8.28	8.05
TDS	--	500	mg/L	2,300	2,500
Acetone	--	--	mg/L	<0.010	<0.010

NOTES:

mg/L - milligrams per liter

EC - electrical conductivity

mmhos/cm - millimhos per cm

SU - standard unit

< - less than the stated laboratory reporting limit

-- - no standard

NA - not analyzed

BOLD - indicates result is above the Colorado Department of Public Health and Environment

Water Quality Control Commission Regulation 41 - Basic Standards for Groundwater

TOC - Total organic carbon

TDS - Total dissolved solids

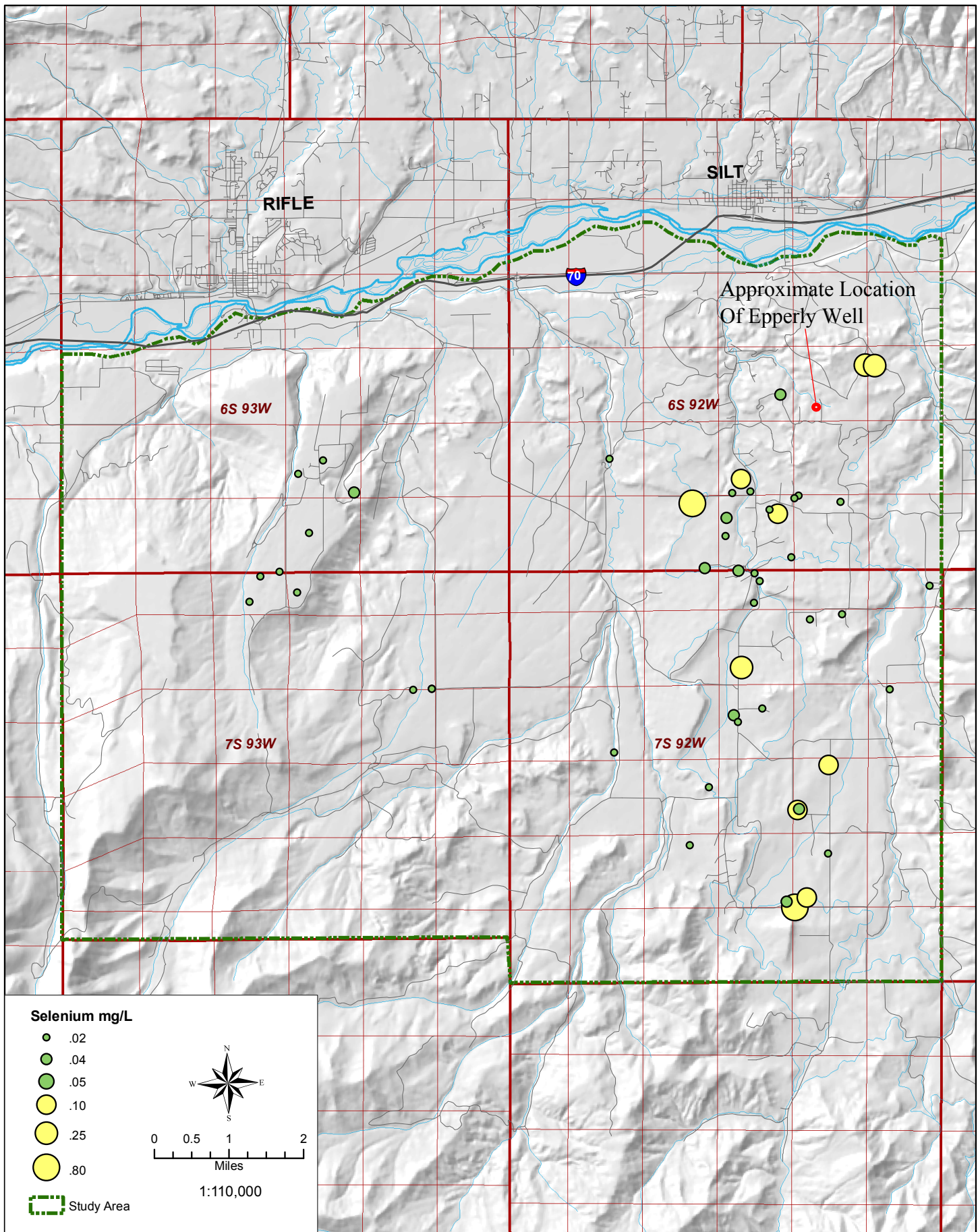
Only analytes which exceeded the laboratory reporting limit in at least one sample are shown on the table.



APPENDIX A

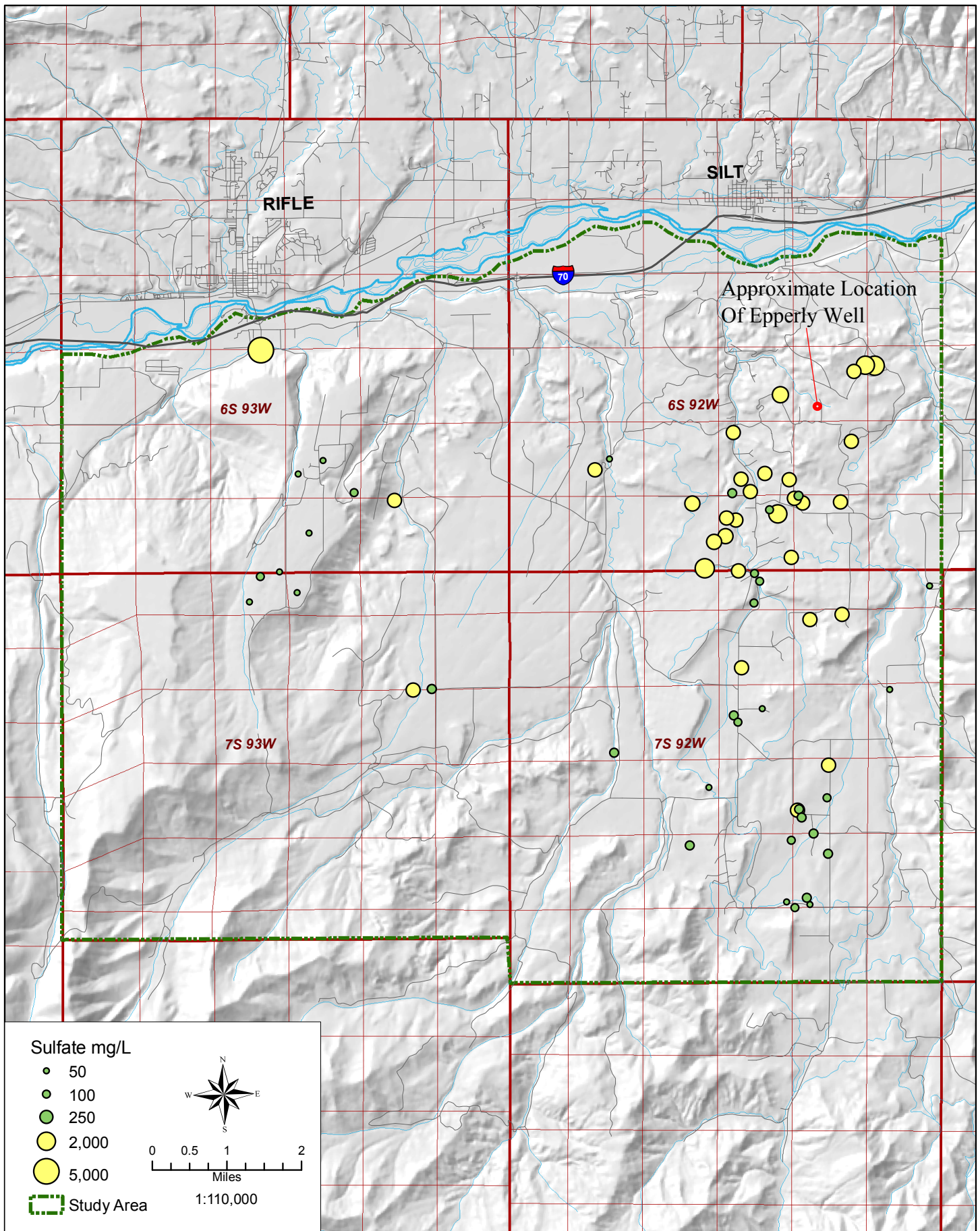
FIGURES TAKEN FROM COGCC BASELINE GROUNDWATER STUDY





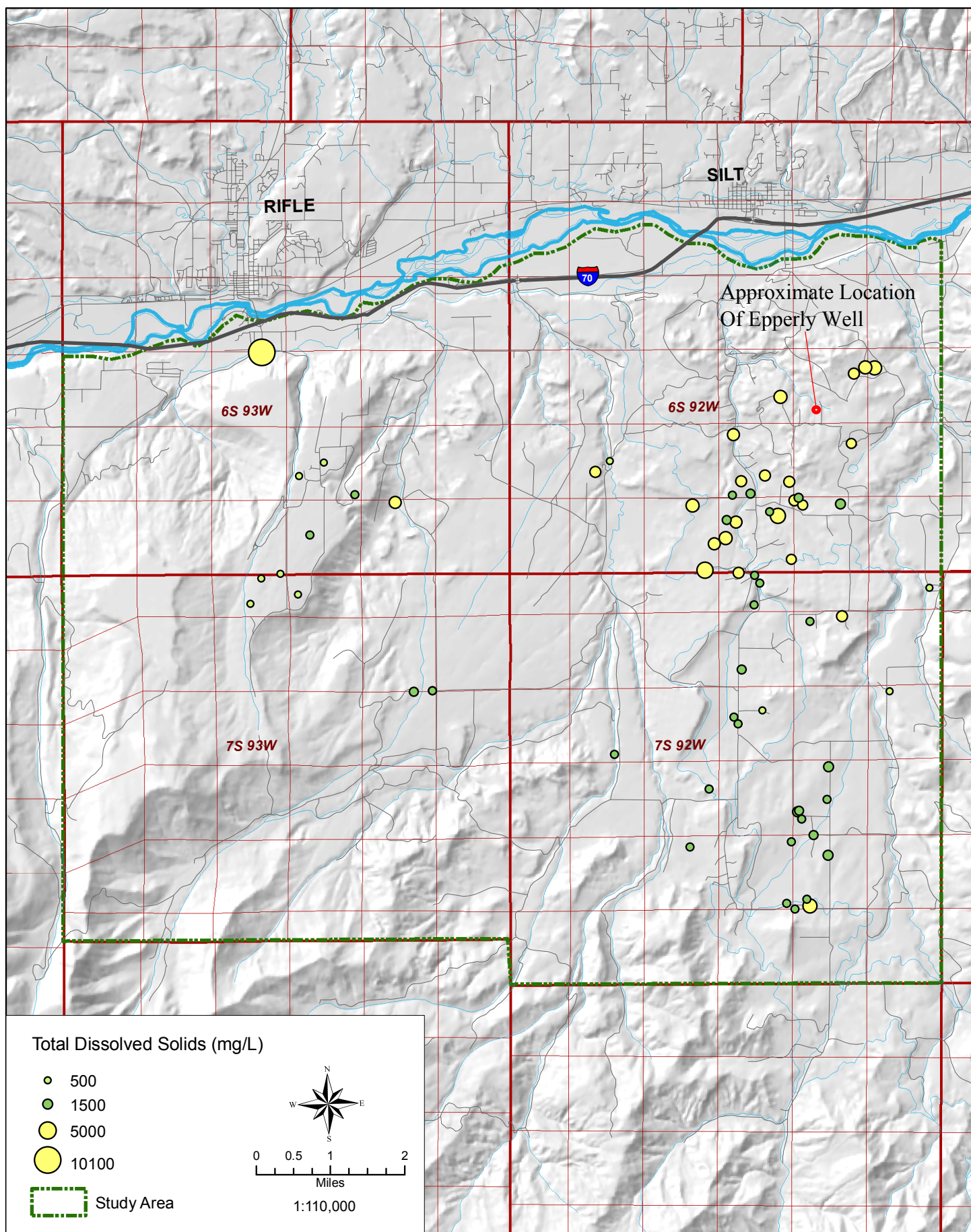
Note: Values > CBGWS standard of 0.05 mg/L are highlighted in yellow.

Figure 4.5. Selenium Concentration Distribution in Domestic Wells



Note: Values > CBGWS standard of 250 mg/L are highlighted in yellow.

Figure 4.6. Sulfate Concentration Distribution in Domestic Wells



Note: Local CBGWS standard for TDS is 500 mg/L. Wells with TDS > 1500 mg/L are highlighted in yellow.

Figure 4.8. Total Dissolved Solids Concentration Distribution in Domestic Wells

APPENDIX B

HISTORICAL EPPERLY WATER WELL RESULTS (PROVIDED BY BBC)



TABLE 1
EPPERLY WATER WELL RESULTS

ANALYSIS	Collected by Date	Results		units
		Cordilleran 4/20/2005	Cordilleran 4/25/2006	
WATER QUALITY				
PH		8.3	8.1	pH
SPECIFIC CONDUCTIVITY		2400	2300	µmhos/cm
TOTAL DISSOLVED SOLIDS		1500	1500	mg/L
BICARBONATE AS CaCO ₃		NR	NR	mg/L
CARBONATE AS CaCO ₃		NR	NR	mg/L
TOTAL ALKALINITY AS CaCO ₃		NR	NR	mg/L
ANION				
BROMIDE		ND	ND	mg/L
CHLORIDE		78	64	mg/L
FLUORIDE		1.8	1.9	mg/L
NITRATE AS N		3.8	2.4	mg/L
NITRITE AS N		ND	ND	mg/L
SULFATE		740	720	mg/L
METALS				
ALUMINUM		NR	NR	mg/L
ANTIMONY		NR	NR	mg/L
ARSENIC		NR	NR	mg/L
BARIUM		NR	NR	mg/L
BERYLLIUM		NR	NR	mg/L
BORON		NR	NR	mg/L
CADMIUM		NR	NR	mg/L
CALCIUM		21	14	mg/L
CHROMIUM		NR	NR	mg/L
COBALT		NR	NR	mg/L
COPPER		NR	NR	mg/L
IRON		ND	ND	mg/L
LEAD		NR	NR	mg/L
LITHIUM		NR	NR	mg/L
MAGNESIUM		3.9	2.6	mg/L
MANGANESE		ND	ND	mg/L
MOLYBDENUM		NR	NR	mg/L
NICKEL		NR	NR	mg/L
POTASSIUM		2.8	2.2	mg/L
SELENIUM		0.22	0.086	mg/L
SILICON		NR	NR	mg/L
SILVER		NR	NR	mg/L
SODIUM		570	480	mg/L
SODIUM ADSORPTION RATIO		NR	NR	me/L
STRONTIUM		NR	NR	mg/L
THALLIUM		NR	NR	mg/L
URANIUM		NR	NR	mg/L
VANADIUM		NR	NR	mg/L
ZINC		NR	NR	mg/L
ORGANICS *				
METHANE		ND	ND	µg/L
ETHANE		NR	NR	µg/L
ETHENE		NR	NR	µg/L
BENZENE		ND	ND	µg/L
TOLUENE		ND	ND	µg/L
ETHYLBENZENE		ND	ND	µg/L
M+P-XYLENE		NR	NR	µg/L
O-XYLENE		NR	NR	µg/L
TOTAL XYLENE		ND	ND	µg/L
OIL & GREASE		ND	NR	mg/L
DIESEL RANGE ORGANICS		NR	NR	mg/L
GASOLINE RANGE ORGANICS		NR	NR	mg/L
TOTAL ORGANIC CARBON		NR	NR	mg/L

NR - Analysis not requested

ND - Not detected

µmhos/cm - micromhos per centimeter

mg/L - milligrams per liter

µg/L - micrograms per liter