

DRAFT MEMO

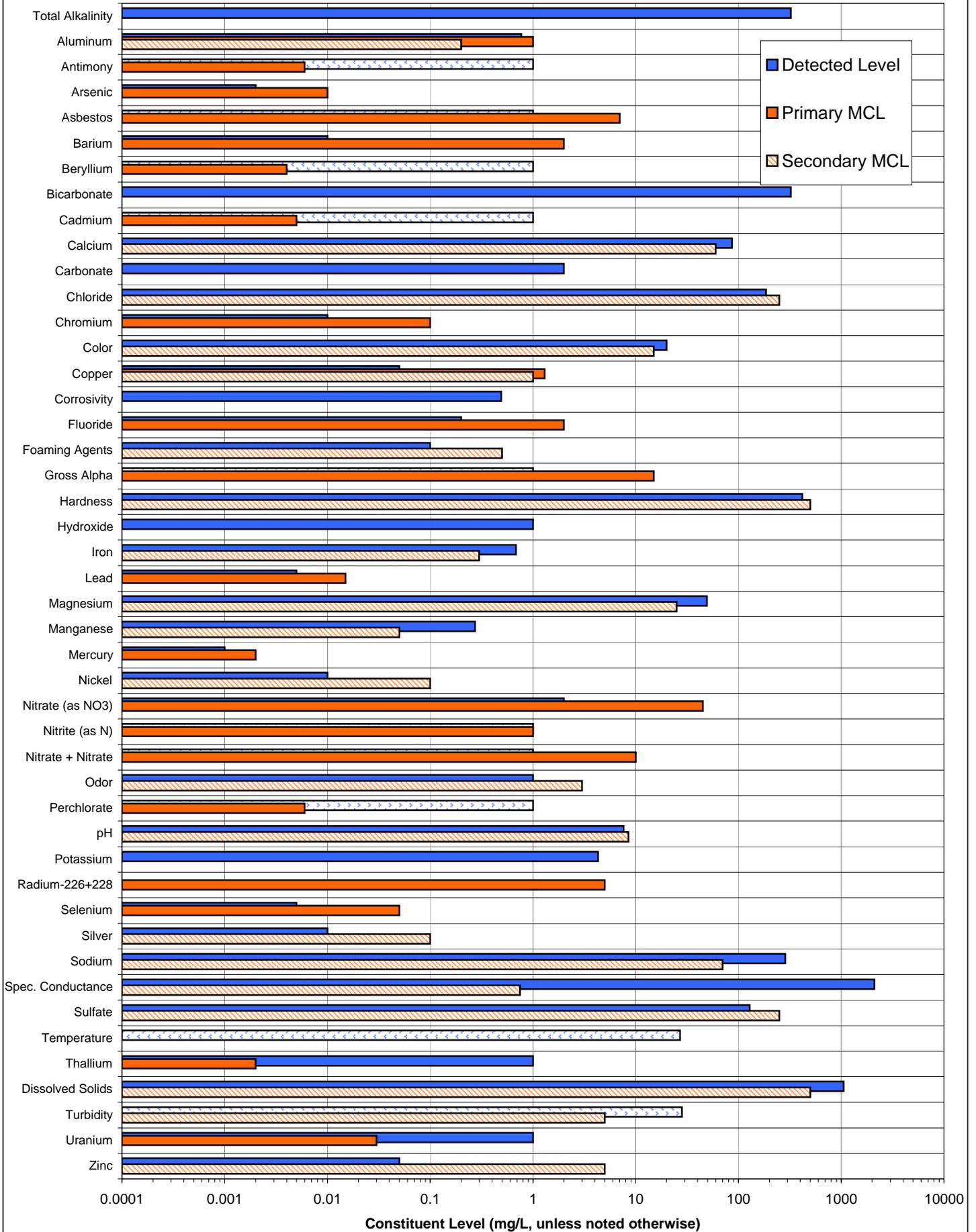
TO: File DATE: May 6, 2010
FROM: Charles Hardy, PE JOB #: SBPW.02.09
SUBJECT: Analysis of Stonegate Test Well Water Quality



A test well was constructed for the Stonegate Water Supply Project per agreement with the County of San Benito Public Works Department and Graniterock, the property owner. Water quality sampling was done during the test pumping of the well on April 8, 2010. Bolsa Analytical of Hollister has performed water quality testing on the samples for various constituents. Key points on the resulting water quality data (see attached) are as follows:

- The California Department of Public Health (CDPH) regulates the Stonegate Water System and has requested that various “Title 22” constituents be tested prior to the test well being permitted for potable water use per U.S. Environmental Protection Agency and CDPH standards.
- Not all of the constituents required by the Health Department for “Title 22” testing have been analyzed yet, but most of the regulated inorganic constituents were tested by Bolsa. In particular, volatile organic contaminants (VOCs) and secondary organic contaminants (SOCs) were not tested. These are planned to be tested in the near future for final analysis.
- Most of the constituents tested were found to be below their respective Maximum Contaminant Levels (MCLs). No Primary MCLs – those that must be mitigated for – would be violated based on the water quality testing to date.
- A few of the tested constituents, including color, iron, manganese, and turbidity, were found to exceed their respective Secondary MCLs – recommended aesthetic levels.
- Given the reported levels of iron and manganese, the potential effects of those levels to the distribution system, and potential aesthetic impacts (e.g., stained laundry, discolored water), some form of treatment is recommended for long-term potable use. A popular iron/manganese removal method, particularly for a small well, is oxidation and filtration.

Inorganic Water Quality



2337 Technology Pkwy., Suite K
Hollister, CA 95023

BOLSA ANALYTICAL
State Certified Laboratory #1326

Tel: (831) 637-4590
Fax: (831) 634-1854

Guardino Well Drilling, Inc.
4825 Croy Road
Morgan Hill, CA 95037

ACCOUNT No. 295
DATE COMPLETED: 04/09/10
COLLECTED BY: Guardino Well Drilling, Inc.

ANALYSIS REPORT

LABORATORY No.	DATE SAMPLED	SAMPLE SITE	Total Coliform	<u>E. coli</u>
100923	4/8/10 12:05	Stonegate Water Company Southside Rd., Hollister, CA 95023	Present	Absent

PRESENT = UNSAFE, ABSENT = SAFE

Type: Special

Method: Colilert, 100 ml

Tomas Moreno, M.S.
Lab. Director

GENERAL MINERAL, PHYSICAL , & INORGANIC ANALYSIS

Account No. 295 **Sample ID No.** 100923
Date of Report: 04/23/10 **Signature Lab**
Laboratory Name: Bolsa Analytical **Director:** _____
Name of Sampler: T. Moreno **Tomas Moreno, M.S.**
Date/Time Sample Collected: 4/8/2010 12:05
Date/Time Sample Received: 4/8/2010 12:30
Date Analyses Completed: 4/20/2010

SYSTEM NAME: Stonegate Water Company
SAMPLE SOURCE: Southside Rd.,
Hollister, CA 95023

ANALYTE	ANALYSES RESULTS	REPORTING UNITS	DLR	MCL
Total Hardness (as CaCO3)	419	mg/L	1	
Calcium (Ca)	86.5	mg/L	0.5	
Magnesium (Mg)	49.4	mg/L	0.5	
Sodium (Na)	285	mg/L	0.5	
Potassium (K)	4.3	mg/L	0.5	
Total Alkalinity (as CaCO3)	323	mg/L	1	
Hydroxide (OH)	< 1	mg/L	1	
Carbonate (CO3)	< 2	mg/L	2	
Bicarbonate (HCO3)	323	mg/L	1	
Sulfate (SO4)	129	mg/L +	1	*
Chloride (Cl)	185	mg/L +	1	*
Nitrate (NO3)	2	mg/L	1	45
Fluoride (F)	0.2	mg/L	0.1	1.4 - 2.4
pH (Laboratory)	7.60	Units +	0.01	
Specific Conductance (E.C.)	2110	umhos/cm +	2	**
Total Filterable Residue (TDS)	1057	mg/L +	2	***
Anionic Surfactants as MBAS	ND	mg/L +	0.1	0.5
Apparent Color (Unfiltered)	20	Units	5	15
Odor Threshold at 60°C	ND	TON	1	3
Turbidity (Lab)	28.20	NTU	0.1	5

* 250-500-600

** 900-1600-2200

*** 500-1000-1500

SYSTEM NAME: Stonegate Water Company **Sample ID No.** 100923 Page 2 of 2
SAMPLE SOURCE: Southside Rd.,
Hollister, CA 95023

ANALYTE	ANALYSES RESULTS	REPORTING UNITS	DLR	MCL
Aluminum (Al)	771	ug/L	50	1000
Arsenic (As)	< 2	ug/L	2	10
Barium (Ba)	< 100	ug/L	100	1000
Cadmium (Cd)	< 1	ug/L	1	5
Chromium (Total Cr)	< 10	ug/L	10	50
Copper (Cu)	< 50	ug/L +	50	1000
Iron (Fe)	683	ug/L +	100	300
Lead (Pb)	< 5	ug/L	5	50
Manganese (Mn)	273	ug/L +	20	50
Mercury (Hg)	< 1	ug/L	1	2
Nickel (Ni)	< 10	ug/L	10	100
Selenium (Se)	< 5	ug/L	5	50
Silver (Ag)	< 10	ug/L +	10	100
Zinc (Zn)	< 50	ug/L	50	5000

DLR, Detection limit for reporting purposes

ND, None detected at or above DLR

MCL, Maximum contaminant levels

+ Indicates Secondary Drinking Water Standards

< = Less than

mg/L = milligrams per liter

ug/L = micrograms per liter