

CITY OF GUADALUPE
2008 ANNUAL WATER QUALITY REPORT

Please see back side for key to abbreviations.

| PARAMETER | UNITS | STATE MCL | PHG (MCLG) | STATE DLR | RANGE | | TREATED STATE WATER | TOG 2A WELL (STANDBY) | 5TH ST WELL | OBISPO WELL | MAJOR SOURCES IN DRINKING WATER |
|---|-------|--|------------|-----------|---------|-------------|---------------------|-----------------------|-------------|--|---------------------------------|
| | | | | | AVERAGE | | | | | | |
| PRIMARY STANDARDS—Mandatory Health-Related Standards | | | | | | | | | | | |
| CLARITY | | | | | | | | | | | |
| Combined Filter Effluent Turbidity (a) | NTU | TT=1 NTU every 4 hours TT=95% of samples <0.3 NTU | | | Range | 0.04 - 0.12 | N/A | N/A | N/A | Soil runoff | |
| | | | | | Average | 100% | N/A | N/A | N/A | | |
| MICROBIOLOGICAL (b) | | | | | | | | | | | |
| Total Coliform Bacteria (Distribution system-wide) | -- | 5% of monthly samples pos. | 0 | -- | Range | 0% | NC | 0 Pos | 0 Pos | Naturally present in the environment | |
| | | | | | Average | | | | | | |
| | | | | | Highest | | | | | | |
| Fecal Coliform and E-coli (Distribution system-wide) | -- | -- | 0 | -- | Range | 0% | NC | 0 Pos | 0 Pos | Human and animal fecal waste | |
| | | | | | Average | | | | | | |
| | | | | | Highest | | | | | | |
| ORGANIC CHEMICALS | | | | | | | | | | | |
| Total Trihalomethanes (Distribution System) (b) | ppb | 80 | N/A | 0.5 | Range | 44 - 75 | ND ^(x) | 16.9 - 29.3 | 16.9 - 29.3 | By-product of drinking water chlorination | |
| | | | | | Average | 58 | ND ^(x) | 22.0 | 22.0 | | |
| Haloacetic Acids (Distribution System) (b) | ppb | 60 | N/A | 1.0 | Range | 7 - 18 | NC | 4.2 - 6.5 | 4.2 - 6.5 | By-product of drinking water chlorination | |
| | | | | | Average | 11.6 | NC | 5.2 | 5.2 | | |
| Methyl-tert-butyl-ether (MTBE) (d) | ppb | 13 | 13 | 3 | Range | ND | ND ^(x) | ND ^(x) | ND | Leaking from underground gasoline storage tanks & pipelines; discharge from petroleum and chemical factories | |
| | | | | | Average | ND | ND ^(x) | ND ^(x) | ND | | |
| Atrazine | ppb | 1 | 0.15 | 1 | Range | ND | ND ^(x) | ND ^(x) | ND | Runoff from herbicide used on row crops and along railroad and highway right-of-ways | |
| | | | | | Average | ND | ND ^(x) | ND ^(x) | ND | | |
| Simazine | ppb | 4 | 4 | 1 | Range | ND | ND ^(x) | ND ^(x) | ND | Herbicide runoff | |
| | | | | | Average | ND | ND ^(x) | ND ^(x) | ND | | |
| INORGANIC CHEMICALS | | | | | | | | | | | |
| Aluminum (d) | ppb | 1000 | 600 | 50 | Range | ND - 220 | NC | ND ^(x) | ND | Erosion of natural deposits; residue from some surface water treatment processes | |
| | | | | | Average | 93 | NC | ND ^(x) | ND | | |
| Arsenic | ppb | 10 | 0.004 | 2 | Range | ND | NC | ND ^(x) | 2.1 | Erosion of natural deposits; runoff from orchards; glass & electronics production wastes | |
| | | | | | Average | ND | NC | ND ^(x) | 2.1 | | |
| Asbestos | MFL | 7 | 7 | 0.2 | Range | ND | NC | NC | NC | Internal corrosion of asbestos cement water mains; erosion of natural deposits | |
| | | | | | Average | ND | NC | NC | NC | | |
| Copper (d) | ppb | AL= 1300 | 170 | 50 | Range | 3.7 | NC | ND - 9.7 | ND | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives | |
| | | | | | Average | 3.7 | NC | 0.87 | ND | | |
| Fluoride | ppm | 2 | 1 | 0.1 | Range | 0.08 | NC | 0.33 ^(x) | 0.29 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories | |
| | | | | | Average | 0.08 | NC | 0.33 ^(x) | 0.29 | | |
| Nitrate (as NO3) (e) | ppm | 45 | 45 | 2 | Range | 2.3 | 2.2 | 31 -72 | 2.0 - 2.2 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits | |
| | | | | | Average | 2.3 | 2.2 | 45.4 | 2.1 | | |
| Nitrate and Nitrite as N (e) | ppm | 10 | 10 | 0.4 | Range | 0.53 | NC | 0.59 ^(x) | 0.45 - 0.50 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits | |
| | | | | | Average | 0.53 | NC | 0.59 ^(x) | 0.48 | | |
| Total Chlorine Residual-Distribution system (k) | ppm | MRDL = 4.0 | MRDLG= 4.0 | -- | Range | 1.7 - 3.5 | NC | 1.49 - 1.66 | 1.49 - 1.66 | Drinking water disinfectant added for treatment | |
| | | | | | Average | 2.3 | NC | 1.58 | 1.58 | | |
| RADIONUCLIDES | | | | | | | | | | | |
| Gross Alpha Particle Activity | pCi/L | 15 | (0) | 3.0 | Range | ND | NC | NC | 3.5 | Erosion of natural deposits | |
| | | | | | Average | ND | NC | NC | 3.5 | | |
| Gross Beta Particle Activity | pCi/L | 50 | (0) | 4.0 | Range | NC | NC | NC | NC | Decay of natural and manmade deposits | |
| | | | | | Average | NC | NC | NC | NC | | |

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|------------|-------|-----------|------------|-----------|---------|---------------------|-----------------------|-------------|-------------|---------------------------------|
| | | | | | AVERAGE | | | | | |
| Uranium | pCi/L | 20 | 0.43 | 1.0 | Range | -- | NC | NC | 3.7 | Erosion of natural deposits |
| | | | | | Average | -- | NC | NC | 3.7 | |
| Radium 228 | pCi/L | -- | -- | 1.0 | Range | -- | NC | ND | NC | |
| | | | | | Average | -- | NC | ND | NC | |

SECONDARY STANDARDS—Aesthetic Standards

| | | | | | | | | | | |
|---------------------------------------|--------|---------------|-----|----|---------|---------------|---------------|--------------------|---------------|---|
| Chloride | ppm | 500 (u) | N/A | -- | Range | 57 - 138 | NC | 56 ^(X) | 20 | Runoff/leaching from natural deposits; seawater influence |
| | | | | | Average | 106 | NC | 56 ^(X) | 20 | |
| Color (ACU) | Units | 15 | N/A | -- | Range | 3 | NC | ND ^(X) | 5 | Naturally-occurring organic materials |
| | | | | | Average | 3 | NC | ND ^(X) | 5 | |
| Corrosivity | SI | Non-Corrosive | N/A | -- | Range | Non-Corrosive | Non-Corrosive | Non-Corrosive | Non-Corrosive | Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors |
| | | | | | Average | Non-Corrosive | Non-Corrosive | Non-Corrosive | Non-Corrosive | |
| Hardness (Total) as CaCO ₃ | ppm | N/A | N/A | -- | Range | 96 - 150 | NC | 550 ^(X) | 420 | Leaching from natural deposits |
| | | | | | Average | 120 | NC | 550 ^(X) | 420 | |
| Heterotrophic Plate Count (p) | CFU/mL | TT | N/A | -- | Range | <1 - 2 | NC | NC | 184 - 389 | Naturally present in the environment |
| | | | | | Average | 1 | NC | NC | 306 | |

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|------------------------------|---------|-----------|------------|-----------|---------|---------------------|-----------------------|---------------------|-------------|---|
| | | | | | AVERAGE | | | | | |
| Iron | ppb | 300 | N/A | 100 | Range | ND | NC | ND ^(x) | 170 | Leaching from natural deposits; industrial wastes |
| | | | | | Average | ND | NC | ND ^(x) | 170 | |
| Manganese | ppb | 50 | N/A | 20 | Range | ND | NC | ND ^(x) | ND | Leaching from natural deposits |
| | | | | | Average | ND | NC | ND ^(x) | ND | |
| Odor Threshold | Units | 3 | N/A | 1 | Range | 1 - 3 | NC | 1 ^(x) | 1 | Naturally-occurring organic materials |
| | | | | | Average | 1 | NC | 1 ^(x) | 1 | |
| Specific Conductance | µmho/cm | 1600 | N/A | -- | Range | 489 - 720 | NC | 1200 ^(x) | 920 | Substances that form ions when in water; seawater influence |
| | | | | | Average | 595 | NC | 1200 ^(x) | 920 | |
| Sodium | ppm | N/A | N/A | -- | Range | 62 | NC | 72 ^(x) | 48 | Runoff/leaching from natural deposits; seawater influence |
| | | | | | Average | 62 | NC | 72 ^(x) | 48 | |
| Sulfate | ppm | 500 | N/A | 0.5 | Range | 58 | NC | 390 ^(x) | 280 | Runoff/leaching from natural deposits; industrial wastes |
| | | | | | Average | 58 | NC | 390 ^(x) | 280 | |
| Total Dissolved Solids (TDS) | ppm | 1000 | N/A | -- | Range | 294 - 432 | NC | 840 ^(x) | 650 | Runoff/leaching from natural deposits |
| | | | | | Average | 357 | NC | 840 ^(x) | 650 | |
| Turbidity (Monthly) | NTU | 5 | N/A | -- | Range | 0.04 - 0.17 | NC | 0.1 ^(x) | 0.40 | Soil runoff |
| | | | | | Average | 0.06 | NC | 0.1 ^(x) | 0.40 | |

ADDITIONAL PARAMETERS (UNREGULATED)

| | | | | | | | | | | |
|---|----------|-----|-----|------|---------|-----------|----------------------|----------------------|---------|---|
| Aggressiveness Index | -- | -- | -- | -- | Range | -- | 12.46 ^(x) | 12.46 ^(x) | NC | -- |
| | | | | | Average | -- | 12.46 ^(x) | 12.46 ^(x) | NC | |
| Alkalinity (Total) as CaCO ₃ equivalents | ppm | N/A | N/A | -- | Range | 64 - 90 | NC | 210 ^(x) | 210 | Runoff/leaching from natural deposits; seawater influence |
| | | | | | Average | 78 | NC | 210 ^(x) | 210 | |
| Bicarbonate HCO ₃ | ppm | N/A | N/A | -- | Range | -- | NC | 260 ^(x) | 260 | -- |
| | | | | | Average | -- | NC | 260 ^(x) | 260 | |
| Calcium | ppm | N/A | N/A | -- | Range | 46 - 76 | NC | 140 ^(x) | 95 | Runoff/leaching from natural deposits; seawater influence |
| | | | | | Average | 58 | NC | 140 ^(x) | 95 | |
| Methylene Blue Active Substances (MBAS) | ppb | 500 | -- | -- | Range | -- | NC | 0.040 ^(x) | 0.00049 | Municipal and industrial waste discharges |
| | | | | | Average | -- | NC | 0.040 ^(x) | 0.00049 | |
| Magnesium | ppm | N/A | N/A | -- | Range | 14 | NC | 59 ^(x) | 42 | Runoff/leaching from natural deposits; seawater influence |
| | | | | | Average | 14 | NC | 59 ^(x) | 42 | |
| pH | pH Units | N/A | N/A | -- | Range | 7.3 - 9.0 | 7.7 ^(x) | 7.6 ^(x) | 7.6 | Runoff/leaching from natural deposits; seawater influence |
| | | | | | Average | 8.2 | 7.7 ^(x) | 7.6 ^(x) | 7.6 | |
| Potassium | ppm | N/A | N/A | -- | Range | 3.1 | NC | 2.8 ^(x) | ND | Runoff/leaching from natural deposits; seawater influence |
| | | | | | Average | 3.1 | NC | 2.8 ^(x) | ND | |
| Total Organic Carbon (o) TOC | ppm | TT | N/A | 0.30 | Range | 1.3 - 3.5 | NC | NC | NC | -- |
| | | | | | Average | 2.3 | NC | NC | NC | |

CONSTITUANTS OF CONCERN

| | | | | | | | | | | |
|--------------|-----|-----|----------|-----|---------|----|----|--------------------|-----|---|
| Boron (q) | ppb | N/A | AL= 1000 | 100 | Range | -- | NC | 190 ^(x) | 130 | -- |
| | | | | | Average | -- | NC | 190 ^(x) | 130 | |
| Chromium VI | ppb | N/A | N/A | 1 | Range | -- | NC | 1.0 ^(m) | NC | -- |
| | | | | | Average | -- | NC | 1.0 ^(m) | NC | |
| Perchlorate | ppb | 6 | 6 | 4 | Range | ND | NC | ND | NC | Environmental contamination from aerospace or other industrial operations |
| | | | | | Average | ND | NC | ND | NC | |
| Vanadium (q) | ppb | N/A | AL = 50 | 3 | Range | -- | NC | 3.4 ^(x) | 6.0 | -- |
| | | | | | Average | -- | NC | 3.4 ^(x) | 6.0 | |

LEAD AND COPPER RULE

| Samples taken at 20 different households within the City of Guadalupe | #samples collected | DLR | MCLG | #sites >AL | MCL | 90th% Level Detected | MAJOR SOURCES IN DRINKING WATER | |
|---|--------------------|-----|------|------------|-----|----------------------|---------------------------------|---|
| LEAD ^(s) | (ppb) | 20 | 5 | 2 | 0 | 15 | ND | Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| COPPER ^(s) | (ppb) | 20 | 50 | 170 | 0 | 1300 | 360 | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

Este Informe contiene informacion muy importante sobre su agua de beber. Traduzcalo, o habla con alguien que lo entienda bien

n/a = not applicable
 NS = No Standard
 NC = Not Collected
 ND = None Detected. Detection Limits for the purposes of reporting (DLRs) available on request.

California DHS Abbreviations
 AL =Regulatory Action Level
 ACU = Apparent Color Units
 MCL= Maximum Contaminant Level

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|-----------|-------|-----------|------------|-----------|---------|---------------------|-----------------------|-------------|-------------|---------------------------------|
| | | | | | AVERAGE | | | | | |

$\mu\text{mho/cm}$ = micromhos per centimeter

- (a) The turbidity level of the filtered water shall be less than or equal to 0.5 NTU in 95% of the measurements taken each month and shall not exceed 5.0 NTU at any time. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Monthly turbidity values are listed in the *Secondary Standards* section.
- (b) Total coliform MCL: No more than 1 positive sample
Fecal Coliform and E.coli MCL: A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E.coli positive
- (d) Aluminum, Copper & MTBE have secondary MCL's of 200ppb, 1 ppm and 5ppb respectively
- (e) State MCL is 45 mg/L as Nitrate, which equals 10.16 mg/L as N.
- (h) TOTAL OF 4 samples for 4 quarters out of the year taken at Distribution sampling sites
- (k) an average of the monthly averages from January thru December. Samples taken from the distribution facility
- (m) Results from 2005 testing
- (n) CCWA has developed a flavor-profile analysis method that can more accurately detect odor occurrences
- (o) TOCs are taken at the treatment plant's combined filter effluent.
- (p) Pour plate technique--monthly averages
- (q) 8/15/02 CCQA has completed the UCMR requirements.
No further sampling is required until notified by DHS
- (s) Results from 2008 testing
- (t) 1 Positive sample due to sampling protocol procedure error. Follow up samples showed no Coliform bacteria present in the City's Distribution System
- (u) This MCL is a secondary water standard.
- (X) Results from 2006 testing

PHG = Public Health Goal
MCLG = Maximum Contaminant Level Goal
MFL = million fibers per liter
NTU = Nephelometric Turbidity Units
pCi/L = PicoCuries per liter
ppm = parts per million, or milligrams per liter (mg/L)
ppb = parts per billion, or micrograms per Liter ($\mu\text{g/L}$)
ppt = parts per trillion, or nanograms per liter (ng/L)
ppq = parts per quadrillion, or picograms per liter (pg/L)
TT = Treatment Technique
MRDL = Maximum Residual Disinfectant Level
MRDLG = Maximum Residual Disinfectant Level Goal