

# 2018 Consumer Confidence Report

Water System Name: **California Resources Elk Hills, LLC**

Report Date: 6.28.19

*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2018 and may include earlier monitoring data.*

**Este informe contiene información muy importante sobre su agua para beber.**

Type of water source(s) in use: Ground Water Wells, Treated, 100% purchased from West Kern Water District

Name & general location of source(s): West Kern Water District obtains its water supply from eight groundwater wells located within the Kern River Hydrologic Basin on the western edge of the Kern River Alluvial Fan

Drinking Water Source Assessment information: An assessment of the drinking water sources for West Kern Water District was completed in May 2001. The sources are considered most vulnerable during artificial recharge activities in spending basins, but these activities have not been associated with any detected contaminants. A copy of the completed assessment may be viewed at: West Kern Water District, 800 Kern Street, PO Box 1105, Taft, CA 93268  
You may request a summary of the assessment be sent to you by contacting: West Kern Water District (661) 763-3151

Time and place of regularly scheduled board meetings for public participation: \_\_\_\_\_

For more information, contact: Esteban Solano

Phone: (661) 565-6398

## TERMS USED IN THIS REPORT

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Variances and Exemptions:** Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**ND:** not detectable at testing limit

**ppm:** parts per million or milligrams per liter (mg/L)

**ppb:** parts per billion or micrograms per liter (µg/L)

**ppt:** parts per trillion or nanograms per liter (ng/L)

**ppq:** parts per quadrillion or picogram per liter (pg/L)

**pCi/L:** picocuries per liter (a measure of radiation)

**The sources of drinking water** (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

**Contaminants that may be present in source water include:**

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

**In order to ensure that tap water is safe to drink**, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

**Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent.** The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

**TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

| Microbiological Contaminants<br>(complete if bacteria detected) | Highest No. of Detections | No. of Months in Violation | MCL  | MCLG | Typical Source of Bacteria           |
|---|---------------------------|----------------------------|--|------|--------------------------------------|
| Total Coliform Bacteria<br>(state Total Coliform Rule)          | (In a month)              | 0                          | 1 positive monthly sample  | 0    | Naturally present in the environment |
| Fecal Coliform or <i>E. coli</i><br>(state Total Coliform Rule) | (In the year)             | 0                          | A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive | 0    | Human and animal fecal waste         |
| <i>E. coli</i><br>(federal Revised Total Coliform Rule)         | (In the year)             | 0                          | (a)  | 0    | Human and animal fecal waste         |

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

| Lead and Copper<br>(complete if lead or copper detected in the last sample set) | Sample Date | No. of Samples Collected | 90 <sup>th</sup> Percentile Level Detected | No. Sites Exceeding AL | AL  | PHG | No. of Schools Requesting Lead Sampling | Typical Source of Contaminant   |
|---|-------------|--------------------------|--|------------------------|-----|-----|---|---|
| Lead (ppb)  | 8/20/18     | 5                        | .008                                       | 0                      | 15  | 0.2 | 0                                       | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm)  | 8/20/18     | 10                       | .031                                       | 0                      | 1.3 | 0.3 | Not applicable                          | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives               |

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

| Chemical or Constituent<br>(and reporting units) | Sample<br>Date | Level<br>Detected | Range of<br>Detections | MCL  | PHG<br>(MCLG) | Typical Source of Contaminant  |
|--|----------------|-------------------|------------------------|------|---------------|--|
| Sodium (ppm)                                     | 2015-2016      | 72                | 45-110                 | None | None          | Salt present in the water and is generally naturally occurring   |
| Hardness (ppm)                                   | 2015-2016      | 90                | 38-200                 | None | None          | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring |

**TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

| Chemical or Constituent<br>(and reporting units) | Sample<br>Date | Level<br>Detected | Range of<br>Detections | MCL<br>[MRDL] | PHG<br>(MCLG)<br>[MRDLG] | Typical Source of Contaminant  |
|--|----------------|-------------------|------------------------|---------------|--------------------------|--|
| Aluminum (mg/L)                                  | 2016-2018      | .007              | ND-.001                | 1             | .6                       | Erosion of natural deposits; residual from some surface water treatment processes  |
| Arsenic <sup>1</sup> (ug/L)                      | 2018           | 1.25              | ND-2.91                | 10            | 4                        | Erosion of natural deposits  |
| Antimony <sup>2</sup> (ug/L)                     | 2016-2018      | 3.6               | ND-22                  | 6             | 1                        | Discharge from petroleum refineries, fire retardants, ceramics solder  |
| Barium (mg/L)                                    | 2016-2018      | .03               | .02-.010               | 1             | 2                        | Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits                                 |
| Total Chromium (ug/L)                            | 2016-2018      | .0                | ND-4                   | 50            | (100)                    | Erosion of natural deposits  |
| Fluoride (mg/L)                                  | 2016-2018      | .08               | ND-0.27                | 2             | 1                        | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate as Nitrogen (mg/L)                       | 2018           | 1.93              | 0.26 – 5.5             | 10            | 45                       | Runoff and leaching fertilizer use   |
| Gross Alpha (pCi/L)                              | 2016-2018      | 5.61              | 0 to 15                | 15            | 0                        | Erosion of natural deposits  |
| Uranium (pCi/L)                                  | 2016-2018      | 5.21              | 0 to 10                | 20            | .43                      | Erosion of natural deposits  |

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

| Chemical or Constituent<br>(and reporting units) | Sample<br>Date | Level Detected | Range of<br>Detections | SMCL | PHG<br>(MCLG) | Typical Source of Contaminant   |
|--|----------------|----------------|------------------------|------|---------------|---|
| Aluminum (mg/L)                                  | 2016-2018      | 7              | ND - 81                | 200  | N/A           | Erosion of natural deposits; residual from some surface water treatment processes                               |
| Chloride (mg/L)                                  | 2016-2018      | 48.90          | 29 - 99                | 500  | N/A           | Erosion of natural deposits; seawater influence   |
| Copper (mg/L)                                    | 2016-2018      | .0015          | ND-.013                | 1    | N/A           | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Iron (ug/L)                                      | 2016-2018      | 88.6           | ND - 130               | 300  | N/A           | Leaching from natural deposits; industrial wastes   |
| Specific Conductance (µS/cm)                     | 2016-2018      | 534            | 326 - 947              | 1600 | N/A           | Substance that forms ions when in water; seawater influence   |
| Sulfate (mg/L)                                   | 2016-2018      | 104.81         | 30 - 271               | 500  | N/A           | Runoff/leaching from natural deposits; industrial waste   |
| Total dissolved solids (mg/L)                    | 2018           | 335            | 205 - 688              | 1000 | N/A           | Runoff/leaching from natural deposits   |
| Turbidity (NTU)                                  | 2016-2018      | .46            | .1 – 3.22              | 5    | N/A           | Soil runoff   |
| Zinc (mg/L)                                      | 2016-2018      | .006           | ND - .049              | 5    | N/A           | Runoff/leaching from natural deposits; industrial wastes  |

**TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS**

| Chemical or Constituent<br>(and reporting units) | Sample Date | Level Detected | Range of Detections | Notification Level | Health Effects Language |
|--|-------------|----------------|---------------------|--------------------|-------------------------|
| N/A  |             |                |                     |                    |                         |

### Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead-Specific Language: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [ENTER WATER SYSTEM'S NAME HERE] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. **[OPTIONAL:** If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/lead>.

### Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

**VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT**

| Violation | Explanation | Duration | Actions Taken to Correct the Violation | Health Effects Language |
|-----------|-------------|----------|--|-------------------------|
| N/A       |             |          |  |                         |
|           |             |          |  |                         |

### For Water Systems Providing Groundwater as a Source of Drinking Water

**TABLE 7 – SAMPLING RESULTS SHOWING  
FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLES**

| Microbiological Contaminants<br>(complete if fecal-indicator detected) | Total No. of Detections | Sample Dates | MCL<br>[MRDL] | PHG<br>(MCLG)<br>[MRDLG] | Typical Source of Contaminant |
|--|-------------------------|--------------|---------------|--------------------------|-------------------------------|
|--|-------------------------|--------------|---------------|--------------------------|-------------------------------|

|                |               |     |    |     |                              |
|----------------|---------------|-----|----|-----|------------------------------|
| <i>E. coli</i> | (In the year) | N/A | 0  | (0) | Human and animal fecal waste |
| Enterococci    | (In the year) |     | TT | N/A | Human and animal fecal waste |
| Coliphage      | (In the year) |     | TT | N/A | Human and animal fecal waste |

### Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Groundwater TT

| SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLE |             |          |  |                         |
|--|-------------|----------|--|-------------------------|
|  |             |          |  |                         |
|  |             |          |  |                         |
|  |             |          |  |                         |
|  |             |          |  |                         |
| SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES              |             |          |  |                         |
|  |             |          |  |                         |
|  |             |          |  |                         |
|  |             |          |  |                         |
|  |             |          |  |                         |
| VIOLATION OF GROUNDWATER TT  |             |          |  |                         |
| TT Violation   | Explanation | Duration | Actions Taken to Correct the Violation | Health Effects Language |
| N?A  |             |          |  |                         |
|  |             |          |  |                         |

### For Systems Providing Surface Water as a Source of Drinking Water

| TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES                                    |   |
|--|---|
| Treatment Technique <sup>(a)</sup><br>(Type of approved filtration technology used)                      |   |
| Turbidity Performance Standards <sup>(b)</sup><br>(that must be met through the water treatment process) | Turbidity of the filtered water must:<br>1 – Be less than or equal to ____ NTU in 95% of measurements in a month.<br>2 – Not exceed ____ NTU for more than eight consecutive hours.<br>3 – Not exceed ____ NTU at any time. |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.                      |   |
| Highest single turbidity measurement during the year   |   |
| Number of violations of any surface water treatment requirements   |   |

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

### Summary Information for Violation of a Surface Water TT

| VIOLATION OF A SURFACE WATER TT |             |          |  |                         |
|---------------------------------|-------------|----------|--|-------------------------|
| TT Violation                    | Explanation | Duration | Actions Taken to Correct the Violation | Health Effects Language |
| N/A                             |             |          |  |                         |
|                                 |             |          |  |                         |
|                                 |             |          |  |                         |

### Summary Information for Operating Under a Variance or Exemption

N/A

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### Summary Information for Federal Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

#### Level 1 or Level 2 Assessment Requirement not Due to an *E. coli* MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct [**INSERT NUMBER OF LEVEL 1 ASSESSMENTS**] Level 1 assessment(s). [**INSERT NUMBER OF LEVEL 1 ASSESSMENTS**] Level 1 assessment(s) were completed. In addition, we were required to take [**INSERT NUMBER OF CORRECTIVE ACTIONS**] corrective actions and we completed [**INSERT NUMBER OF CORRECTIVE ACTIONS**] of these actions.

During the past year [**INSERT NUMBER OF LEVEL 2 ASSESSMENTS**] Level 2 assessments were required to be completed for our water system. [**INSERT NUMBER OF LEVEL 2 ASSESSMENTS**] Level 2 assessments were completed. In addition, we were required to take [**INSERT NUMBER OF CORRECTIVE ACTIONS**] corrective actions and we completed [**INSERT NUMBER OF CORRECTIVE ACTIONS**] of these actions.

N/A

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### Level 2 Assessment Requirement Due to an *E. coli* MCL Violation

*E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems. We found *E. coli* bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) identify problems and to correct any problems that were found during these assessments.

We were required to complete a Level 2 assessment because we found *E. coli* in our water system. In addition, we were required to take [**INSERT NUMBER OF CORRECTIVE ACTIONS**] corrective actions and we completed [**INSERT NUMBER OF CORRECTIVE ACTIONS**] of these actions.

N/A

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## Elk Hills Potable Water System CCR Postings 2019

| Contact         | Mail Stop | Location                                       | Number Needed | Comments                       |
|-----------------|-----------|--|---------------|--------------------------------|
| Deborah Porter  | H-4       | 11G Bldg. 1 - Old HSE & Cafeteria Hallways     | 2             |                                |
| Danielle Wilson | H-3       | Trailer #15 Training Room/ Sink area           | 1             |                                |
| Gayla Dempsey   | J-6       | 11G Bldg. 2 - West & North Side Bulletin Board | 2             |                                |
| Joanna Gunther  | E-1       | Emergency Services Building                    | 1             |                                |
| Debby Paine     | C-6       | CCF/2B Main Lunch Room                         | 1             |                                |
| Debby Paine     | C-6       | CCF/2B Lunch Room                              | 1             | By training rooms/surface ops. |
| Tim Williams    | C-2       | Trailer 76 /2B E. Side Bulletin Board          | 1             |                                |
| Rich Harvill    | C-3       | 18G Warehouse (Office- Break room)             | 1             |                                |
| Roger Almond    | C-3       | 18G Reclamation Yd. Trl. #70                   | 1             |                                |
| Welden Mayo     | C-6       | Cogeneration Plant                             | 1             |                                |
| Binh Nguyen     | D-3       | 35R Lab Lunch Room                             | 1             |                                |
| Welden Mayo     | C-4       | LTS-2 Hallway                                  | 1             |                                |
| J. R. Vela      | A-2       | 36S Garage Hallway                             | 1             |                                |
|                 |           |  |               |                                |
|                 |           |  | 15            |                                |
|                 |           |  |               |                                |
|                 |           |  |               |                                |
|                 |           |  |               |                                |
|                 |           |  |               |                                |

\*Power Plant doesn't need a posting – they are under a different water system