# WEEKS

DRILLING & PUMP CO. • WATER TREATMENT

6100 HIGHWAY 12
SEBASTOPOL, CA 95472
WWW.WEEKSDRILLING.COM

OFFICE: (707) 823-3184
(707) 542-3272
FAX: (707) 823-4258

## CUSTOMER INFORMATION

| | |
|---|---|
| **W/O#:** 41464 | **DATE OF TEST:** 1/6/23 |
| **CUSTOMER NAME:** [redacted] | **CUSTOMER PHONE:** [redacted] |
| **AGENT NAME:** **AGENT PHONE:** | **AGENT EMAIL:** |
| **BILLING ADDRESS:** [redacted] | **SENT TO:** [redacted] |
| | **PHOTOS TAKEN/SENT** ☐ |

## WATER PRODUCTION RESULTS

****ALL WATER LEVEL READINGS TAKEN FROM THE TOP OF WELL CASING UNLESS OTHERWISE SPECIFIED****

| | |
|---|---|
| **WATER LEVEL AT START (STATIC LEVEL):** 79' | **FLOW RATE AT START:** 12.5GPM |
| **FINAL PUMPING LEVEL:** 103' | **FINAL FLOW RATE:** 12 GPM |
| **WATER LEVEL DRAW DOWN:** 24' | **TOTAL LENGTH OF TEST:** 2 hours |

## CONSTANT PUMPING LEVEL INFORMATION

| | |
|---|---|
| **STABILIZED PUMPING LEVEL:** 103' | |
| **DURATION OF CONSTANT PUMPING LEVEL:** 1hr 50 min | **TOTAL YIELD:** 1,444.00 |

## WELL SYSTEM DATA

| | | | | |
|---|---|---|---|---|
| **LOCATION OF WELL (ADDRESS):** 2001 Mark West Springs Road, Santa Rosa, Ca 95404 | | | | |
| **(LATITUDE & LONGITUDE):** 38°32'6"N, 122°43'34"W | | | | |
| **CASING SIZE & TYPE:** 5" PVC | | | **CURRENT DEPTH OF WELL:** 145' | |
| **PUMP MAKE & TYPE:** Submersible | | | **PUMP HP:** 1 | **PUMP VOLTS/PHASE:** 230v 1 phase |
| **PUMP SETTING SIZE & DEPTH:** Set 135' on 1" PVC | | | | |
| **WINDINGS TO GROUND: R:** 2.7M | **Y:** 2.7M | **B:** 2.7M | **WINDINGS: R-Y:** 12.8 | **R-B:** 4.3 **Y-B:** 15.9 |
| **RUNNING AMPS:** | **R:** 0 | **Y:** 8.2 | | **B:** 8.2 |
| **VFD:** ☐ **MODEL:** N/A | | | | **STARTER PANEL** ☐ |
| **FLOAT SWITCH:** ☐ | | **PRESSURE SWITCH:** ☐ | **PRESSURE SWITCH SETTING:** N/A | |
| **MOTOR PROTECTION MODEL:** N/A | | | **PRESSURE TANK:** See comments | |
| ☒ **SEE COMMENTS** | | | | |

## BOOSTER SYSTEM DATA

| | | | | |
|---|---|---|---|---|
| **STORAGE TANK :** | **SIZE:** N/A | **TYPE :** N/A | | |
| **BOOSTER PUMP:** | **MODEL/TYPE:** N/A | **HP:** N/A | **VOLTS:** N/A | **PHASE:** N/A |
| **PRESSURE TANK:** | **SIZE:** N/A | **PRESSURE SWITCH SETTING:** N/A | | |
| **VFD** ☐**:** **MODEL:** N/A | | **STARTER PANEL** ☐ | **MOTOR PROTECTION MODEL:** N/A | |
| ☐ **SEE COMMENTS** | | | | |

## TREATMENT DATA

| | | | |
|---|---|---|---|
| **CALCITE:** | ☐ YES | ■ NO | ☐ SEE COMMENTS |
| **SOFTENER:** | ☐ YES | ■ NO | ☐ SEE COMMENTS |
| **TRIPLE O:** | ☐ YES | ■ NO | ☐ SEE COMMENTS |
| **U.V.:** | ☐ YES | ■ NO | ☐ SEE COMMENTS |
| **R.O.:** | ☐ YES | ■ NO | ☐ SEE COMMENTS |
| **FEED PUMP:** | ☐ YES | ■ NO | ☐ SEE COMMENTS |
| **OTHER:** | ☐ YES | ☐ NO | ☐ SEE COMMENTS |

## WATER QUALITY TESTING

| *THE FOLLOWING SAMPLES ARE BEING ANALYZED. PLEASE REFER TO THE FOLLOW UP REPORT FOR RESULTS.* | | |
|---|---|---|
| **BACTERIA – COLIFORM & E. COLI** | **DATED:** 1/6/23 | **TURNAROUND:** 3-5 Working Days |
| **ARSENIC** | **DATED:** 1/6/23 | **TURNAROUND:** 3-5 Working Days |
| **NITRATE** | **DATED:** 1/6/23 | **TURNAROUND:** 10-12 Working Days |
| **MINERAL** | **DATED:** 1/6/23 | **TURNAROUND:** 3-5 Working Days |
| **ADDITIONAL** | **DATED:** | **TURNAROUND:** |

**WELL TEST COMMENTS:** Well pump does not have a ground wire coming from motor or in coming wiring. Part of this system was damged in fire from 2017. Control box and plumbing at pressure tank burned. There is currently no power to well pump system. Generator was brought out to run this test.

**WELL TEST RECOMMENDATIONS:** Motor should have a line of sight power disconnect. Schedule sales call with salesmen to replace equipment that was burned by fire.

# WEEKS DRILLING & PUMP CO. TEST PUMP LOG

JOB: [redacted]

WORK ORDER NO: 41464

DATE STARTED: 1/6/23

LOCATION: 2001 Mark West Springs Road, Santa Rosa

DATE COMPLETED: 1/6/23

WELL DEPTH: 145'

CASING SIZE & TYPE: 5" PVC

STATIC LEVEL: 79'

PUMP MAKE: Submersible

SETTING SIZE & DEPTH: 135' set on 1" PVC

METER READING
START: 58,700
END: 60,144

| Date | Time AM | Time PM | Operator | Water Level | Est GPM | Water Color | Water Temp | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| 1/6/23 | | 1:05 | Babcock | 79' | 12.5 | Rusty | Cool | Running pump wide open |
| | | 1:08 | | 97' | 12.5 | Gray | | |
| | | 1:10 | | 99' | 12 | Gray | | |
| | | 1:15 | | 103' | 12 | Gray | | |
| | | 1:20 | | 103' | 12 | Gray | | |
| | | 1:20 | | 103' | 12 | Gray | | |
| | | 1:30 | | 103' | 12 | Gray | | |
| | | 1:35 | | 103' | 12 | Gray | | |
| | | 1:45 | | 103' | 12 | Slight Haze | | |
| | | 1:55 | | 103' | 12 | | | |
| | | 2:05 | | 103' | 12 | | | |
| | | 2:20 | | 103' | 12 | | | |
| | | 2:35 | | 103' | 12 | | | |
| | | 3:05 | | 103' | 12 | | | |

WEEKS
DRILLING & PUMP CO.
WATER TREATMENT
6100 HWY 12 / PO BOX 176
SEBASTOPOL, CALIFORNIA 95473
WWW.WEEKSDRILLING.COM
(707) 823-3184
LIC. 177681

*Safe Clear Water Solutions*

# Report of Water Analysis

**Date:** 1/6/2023 **Work Order #** 41464

**For:** [redacted] **Phone Number:**

**Email:**

**The following information was derived from water samples we recently received:**

| **Sample Description** ⟶ | | Well Head |
|---|---|---|
| Total Alkalinity | mg/l | 154 |
| Total Hardness | gpg | 8 |
| Total Iron | mg/l | 2.5 |
| Total Manganese | mg/l | 0 |
| pH | | 7.4 |
| Total Dissolved Solids | mg/l | 100 |
| Visual Appearance | | cloudy/yellow |
| Nitrate (N) | mg/l | 0 |
| Other: | | |
| Other: | | |

**Comments and Recommendation:**
Please see attached Water Analysis Sheet
Please call Lilia Contreras (707) 823-3184, for questions on this report or for water treatment cost information.

By: Alyssa M Andrade

**Abbreviations: gpg = Grains per US Gallon mg/l = Milligrams per liter**

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WATER TREATMENT

# WATER ANALYSIS INFORMATION

## ABOUT OUR ANALYSIS

We use industry standard methods of informational water analysis both in the field and in our lab. We analyze water to assist our customers in securing a useful water supply and to support our water treatment work. The tests performed and the way we report the results are tailored to these two goals. Certified analysis for other purposes such as regulatory compliance or litigation should be performed by a commercial laboratory

## TOTAL ALKALINITY

Total alkalinity is an indicator of the general character of well water. The values for total alkalinity can be useful when evaluating other water quality parameters. There is no recommended upper or lower limit.

## TOTAL HARDNESS

Hardness in water is the total of the calcium and magnesium. These metals cause numerous problems in water, primarily by reacting with soap or by creating limestone scale when water is heated. Hardness causes excessive soap consumption and causes a buildup of difficult-to-remove soap deposits on plumbing fixtures and in fabrics. In some cases when water containing hardness is heated the hardness may precipitate as limestone scale, causing inefficiencies in the water heater as well as other problems. Hardness is shown here as grains per gallon (GPG). The degree of hardness in water can be determined by the following chart prepared by the US Geologic survey:

| | |
|---|---|
| SOFT: | LESS THAN 1 GPG |
| SLIGHTLY HARD: | 1 TO 3.5 GPG |
| MODERATELY HARD: | 3.5 TO 7. GPG |
| HARD: | 7.0 TO 10.5 GPG |
| VERY HARD: | GREATER THAN 10.5 GPG |

## IRON AND MANGANESE

Iron can occur in water in several forms. We report the total iron content. The recommended limit is 0.3 milligrams per liter, although levels slightly higher than this are not always objectionable. Iron can cause stains on plumbing fixtures, appliances, and laundry. It can plug pipelines, and cause unpleasant tastes and odors in water. Manganese is a metal similar in occurrence to iron. The recommended limit is 0.05 milligrams per liter. The problems caused by manganese are similar to iron except that the stains caused by manganese are brown or black. Both iron and manganese are aesthetic nuisances in water but are not of health concern.

## pH

The pH scale is a measure of the relative balance between acid and basic properties of water. The pH scale runs from 0 to 14 with 7, in the middle, being considered neither acid nor basic or, in other words, neutral. Values less than 7 are increasingly acidic; values greater than 7 are increasingly basic. There is no specific recommended limit for pH but because this factor can play a major role in the corrosion of plumbing, water with a pH of less than 6.8 should be considered potentially corrosive.

## TOTAL DISSOLVED SOLIDS

Total dissolved solids (TDS) is a measurement of the all the dissolved minerals in the water. The recommended limit for TDS is 500 mg/l based mainly on taste considerations rather than physiological effects. Depending on what minerals are present in the water to account for high TDS the recommended limit may in many cases be too low. Some water substantially above the recommended limit may be completely acceptable in some cases but not in others. Although there is no recommended lower limit it is important that TDS not be too low as very low TDS water is often cor rosive. We usually consider TDS lower than 50 to 75 mg/l to be cause for further inquiry into possible corrosion.

## NITRATE

Nitrate is a ground water pollutant of health significance. It is found in ground water due to excessive use of fertilizers, faulty septic systems, the existence of feed lots, or several other surface activities. Our analysis for nitrate is a brief screening test and if the presence of nitrate is shown we recommend a nitrate test by a commercial laboratory. According to public health experts, nitrate in drinking water at elevated levels is a hazard for infants but is not considered a hazard for adults. Not all researchers agree that nitrate is harmless to adults. Call us for current information.

## ODOR

If our analysis reports odor it is usually expressed as a description of what is causing the odor rather than a numerical result. In some cases we report sulfur odor as parts per mil lion of hydrogen sulfide. On water samples tested at our office we usually do not report odor because it may not persist in a transported sample.

## APPEARANCE

As with odor, we report the appearance of water as a visual description rather than a numerical value. Iron or manganese may discolor a water sample before analysis, resulting in a report of discoloration or haziness even though the water was clear at the time of sampling.

*For further information on water quality, water treatment, or a quotation for water quality improvement, please call us.*

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

10 January 2023

Weeks Drilling and Pump
Attn: Alyssa Andrade
P.O. Box 176
Sebastopol, CA 95473
RE: Water Quality
[redacted]
Work Order: 23A0976

Enclosed are the results of analyses for samples received by the laboratory on 01/06/23 16:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney
Project Manager

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | Service Center

| | | | |
|---|---|---|---|
| Weeks Drilling and Pump | Project: | Water Quality | |
| P.O. Box 176 | Project #: | [redacted] | Reported: |
| Sebastopol CA, 95473 | Project Mgr: | Alyssa Andrade | 01/10/23 11:40 |

**Analytical Report for Samples**

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| Well Head | 23A0976-01 | Water | 01/06/23 15:05 | 01/06/23 16:35 |

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Sample Name: Well Head
Laboratory ID: 23A0976-01
Notes:

Report Date: 01/10/23 11:40
Sample Date: 01/06/23 15:05
Sample Received: 01/06/23 16:35

| Parameter | Result | MCL | Reporting Limit | Units | Test Method | ELAP # | Notes |
|---|---|---|---|---|---|---|---|
| Total Coliforms | <1.0 | 1 | 1.0 | MPN/100mL | SM9223B | 2303 | |
| E. Coli | <1.0 | 1 | 1.0 | MPN/100mL | SM9223B | 2303 | |

## Inorganic Chemicals

| Parameter | Result | MCL | Reporting Limit | Units | Test Method | ELAP # | Notes |
|---|---|---|---|---|---|---|---|
| Arsenic | <2.0 | 10 | 2.0 | ug/L | EPA 200.5 | 2303 | |

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**Notes and Definitions**

MCL Maximum Contaminant Level, the highest level of a contaminant that is allowed in drinking water regulated by the state of California. If no MCL is listed, the MCL has not been established.

ND Analyte NOT DETECTED at or above the reporting limit

* Tiered Maximum Contaminant and/or Action Levels: Sulfate and Chloride 250-500-600 mg/L, Specific Conductance 900-1600-2200 umho/cm, TDS 500-1000-1500 mg/L.

Non-accredited analytes are reported only when ELAP accreditation for a requested analyte method pair is not available. For a list of accredited analytes, view our certificates at the Company link on our website at www.alpha-labs.com or contact your Project Manager directly.

Alpha Analytical Laboratories Inc.
www.alpha-labs.com
WATERS, SEDIMENTS, SOLIDS

**Corporate Laboratory #1551**
208 Mason Street, Ukiah CA 95482
707-468-0401 F) 707-468-5267
email: clientservices@alpha-labs.com
**North Bay Area Laboratory #2303**
110 Liberty Street, Petaluma, CA 94952
707)-769-3128 F) 707)-769-8093

**Bay Area Laboratory #2728**
262 Rickenbacker Circle, Livermore CA 94551
925-828-6226 F) 925-828-6309

**Central Valley Laboratory #2922**
9090 Union Park Way #113, Elk Grove CA 95624
916-686-5190 F) 916-686-5192

# Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 23A0976 Pg _____ of _____

| Report to | Invoice to (if different) | Project Information |
|---|---|---|
| Company: Weeks Drilling & Pump | Company: | Project Name: [redacted] |
| Attn: Alyssa Allen | Contact: | Project No: 41464 |
| Address: P.O. Box 176, Sebastopol, CA 95473 | Address: | |
| Phone/Fax: 707-823-8134 | Phone/Fax: | |
| Email Address: Weeks Distribution | | |
| Field Sampler - Printed Name & Signature: | | |

Signature below authorizes work under terms stated on reverse side.

**TAT**
Standard 10 days ○
RUSH: 5 days ○ 48 hours ⊘ Other: ___days ○ (Lab preapproval required)

**Temp upon Receipt °C**
Ukiah temp:
Petaluma temp: 14.6
Other temp:

**Residual Chlorine mg/L**
Ad Hno3 Ac 1/6

| Sample Identification | Sampling Date | Sampling Time | Container: 40ml Vial | 100ml Bacti | Glass | Sleeve | Other | Preservative: HCl | HNO3 | H2SO4 | Other | None | Matrix: Water | Soil | Other | Total Number of Containers per Sample ID | Analysis Request: Bac-T | As |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Well head | 1-6-23 | 3:05pm | | | | | | | | | | | | | | | 1 | 1 |
| Well head | | | | | | | | | | | | | | | | | | |
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| Relinquished by | Received by | Date | Time |
|---|---|---|---|
| | | 1/6/23 | 1635 |
| | | | |
| | | | |
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| | | | |

**DDW Write On EDT Transmission?** ○ Yes ○ No
State System Number: _____
If "Y" please enter the Source Number(s) in the column above

**CA Geotracker EDF Report?** ○ Yes ○ No
Global ID: Sampling Company Log Code:
EDF to (Email Address):

| Travel and Site Time: | Mileage: | Misc. Supplies: |
|---|---|---|
| | | |