NELAP Accreditation 01103CA

ELAP Certification 1664

Caltest
ANALYTICAL LABORATORY
ENVIRONMENTAL ANALYSES

LAB ORDER No.: E060695

REPORT of ANALYTICAL RESULTS

Report Date: 02 JUL 2004
Received Date: 18 JUN 2004

Client: Roger Rawlings
Quixote Winery
6126 Silverado Trail
Napa, CA 94558

Project: 584 MILLS LN.

Sampled by: MEL ROYAL

Lab Number	Sample Identification	Matrix	Sampled Date/Time
E060695-1	584 MILLS LN. (NEW WELL)	DRINKING WATER	18 JUN 04 13:00

Sonya L. Babcock
Project Manager

CAHorn
Christine Horn
Laboratory Director

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax: (707) 226-1001 • e-mail: info@caltestlabs.com

INORGANIC ANALYTICAL RESULTS

LAB ORDER No.: E060695

LAB NUMBER: E060695-1
SAMPLE ID: 584 MILLS LN. (NEW WELL)
SAMPLED: 18 JUN 04 13:00

ANALYTE	RESULT	R.L.	UNITS	D.F.	METHOD	ANALYZED	QC BATCH	NOTES
Boron	0.2	0.1	mg/L	1	6010B	06.28.04	A040703UND	1,2
Calcium	31.	0.5	mg/L	1	200.7	06.28.04	A040703UND	1,3
Copper	ND	0.05	mg/L	1	200.7	06.28.04	A040703UND	1,4
Iron	1.2	0.1	mg/L	1	200.7	06.28.04	A040703UND	1,5
Magnesium	14.	0.5	mg/L	1	200.7	06.28.04	A040703UND	1,6
Manganese	0.41	0.03	mg/L	1	200.7	06.28.04	A040703UND	1,7
Silica, total	43.	1.	mg/L	1	6010B	06.28.04	A040703UND	1,8
Sodium	61.	1.	mg/L	1	200.7	06.28.04	A040703UND	1,9
Total Cations	5.4		meq/L	1	CALC	06.30.04		
Zinc	ND	0.05	mg/L	1	200.7	06.29.04	A040703UND	1,10
pH	8.4		Units	1	150.1	06.21.04	B040171PH	1,11
Adjusted SAR	2.6		Units	1	CALC	07.01.04		
ALKALINITY				2	SM2320B	06.28.04	I040033ALK	1,12
Bicarbonate as CaCO3	210.	20.	mg/L					
Hydroxide as CaCO3	ND	20.	mg/L					
Carbonate as CaCO3	ND	20.	mg/L					
Total Alkalinity as CaCO3	230.	20.	mg/L					
Chloride	12.	1.	mg/L	1	300.0	06.21.04	I040090IC	1,13

1) The following information is from California Code of Regulations Title 22; Napa County Env. Health "Interpreting Drinking Water Test Results"; UC Davis Department of Land, Air, and Water Resources - Cooperative Extension. This information is provided for your convenience. Caltest does not provide consultation regarding the suitability of water for a given purpose.
2) Boron has an agricultural recommended limit and a state drinking water Action (Advisory) Limit of 1.0 mg/L. Boron effects the health and production of boron sensitive plants. Drinking water with greater than 10 times the Action Limit Level are recommended for removal from service.
3) Calcium and Magnesium are related to water hardness. See Hardness remarks.
4) Copper has a drinking water Maximum Contaminant Level (MCL) of 1.0 mg/L.
5) Iron has a drinking water Maximum Contaminant Level (MCL) of 0.3 mg/L.
6) Magnesium and Calcium are related to water hardness. See Hardness remarks.
7) Manganese has a drinking water Maximum Contaminant Level (MCL) of 0.05 mg/L.
8) Silica has a recommended limit of 70 mg/L. Silica in water may etch various household materials such as leaded crystal, marble, tile, windows, and porcelain.
9) Sodium has a recommended limit of 100 mg/L. According to the American Heart Association, water containing more than 270 mg/L should not be consumed by those on a moderately restricted sodium diet.
10) Zinc has a drinking water Maximum Contaminant Level (MCL) of 5.0 mg/L.
11) Suggested pH is 6.5 - 8.5.
12) Alkalinity has no regulatory, or recommended level. However, higher alkalinity waters may have a distinctly unpleasant taste. Alkalinities of natural waters rarely exceed 400 to 500 mg/L (as CaCO3).
13) Chloride has a drinking water Maximum Contaminant Level (MCL) of 500 mg/L, with a recommended level of 250 mg/L and a short term limit of 600 mg/L.

Caltest
ANALYTICAL LABORATORY
ENVIRONMENTAL ANALYSES

LAB ORDER No.: E060695

INORGANIC ANALYTICAL RESULTS

ANALYTE	RESULT	R.L.	UNITS	D.F.	METHOD	ANALYZED	QC BATCH	NOTES
LAB NUMBER: E060695-1 (continued)								
Electrical Conductance	420.	10.	umhos/cm	1	SM2510B	07.01.04	I040034CON	1,2
Fluoride	0.5	0.1	mg/L	1	300.0	06.21.04	I040090IC	1,3
Hardness	140.	3.	mg/L	1	SM2340B	06.30.04		1,4
Nitrate as N	ND	0.1	mg/L	1	300.0	06.21.04	I040090IC	1,5
Solids, Dissolved	380.	10.	mg/L	1	SM2540C	06.21.04	I040044TDS	
Sulfate	9.9	0.5	mg/L	1	300.0	06.30.04	I040098IC	1,6
TDS to EC ratio	0.90			1	CALC	07.01.04		
Total Anions	5.2		meq/L	1	CALC	06.30.04		

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2) Electrical Conductance has a drinking water Maximum Contaminant Level (MCL) of 1,600 umhos/cm, with a recommended level of 900 umhos/cm and a short term limit of 2,200 umhos/cm. Electrical Conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25 degrees C.
3) Fluoride has a recommended level of 1.0 mg/L in temperate climates. Fluoride in concentrations greater than 3 mg/L can cause dental fluorosis (a brownish discoloration of the teeth).
4) Hardness is due primarily to calcium and magnesium carbonates and bi-carbonates. Up to 60 mg/L is SOFT. Between 60 to 120 mg/L is MODERATE (typically most desireable). Between 120 to 180 mg/L is HARD. Over 180 mg/L is VERY HARD.
5) NO3-N.HOME2 The sample was analyzed out of regulatory holdtime.
6) Sulfate has a drinking water Maximum Contaminant Level (MCL) of 500 mg/L, with a recommended level of 250 mg/L and a short term limit of 600 mg/L.

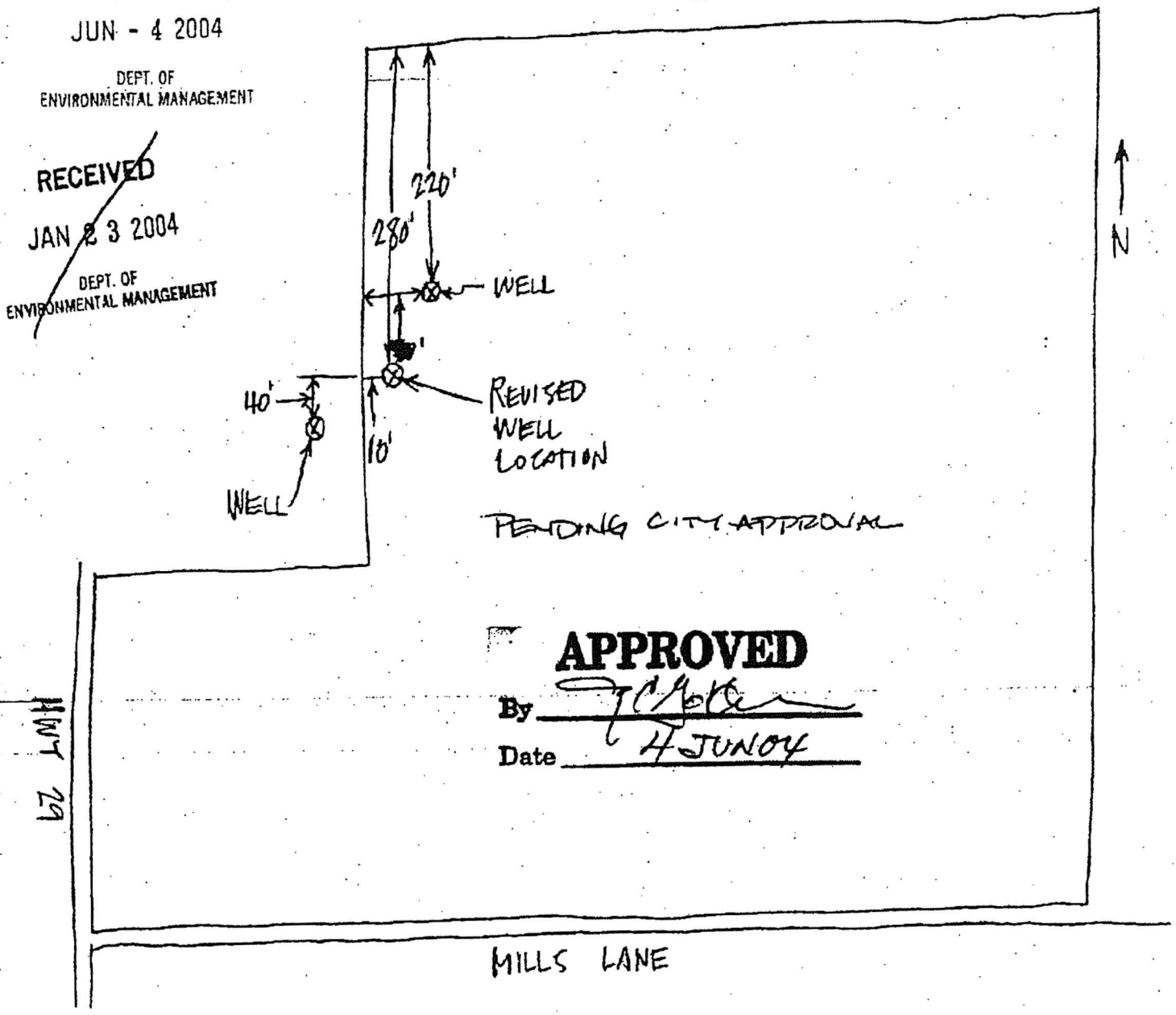
CITY OF ST. HELENA
JUN 04 2004
Department of Public Works

HUCKFELDT WELL DRILLING

CARL DOUMANI
584 MILLS LANE
ST. HELENA, CA 94574
AP # 09-070-33

RECEIVED
JUN - 4 2004
DEPT. OF ENVIRONMENTAL MANAGEMENT

RECEIVED
JAN 23 2004
DEPT. OF ENVIRONMENTAL MANAGEMENT



PENDING CITY APPROVAL

APPROVED
By
Date 4 JUNE 04

ORIGINAL
File with DWR

Page 1 of 1

STATE OF CALIFORNIA
WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. e013584

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./ STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Owner's Well No. Well #1-'04
Date Work Began 6/9/2004 Ended 6/18/2004
Local Permit Agency Napa County Environmental Mgmt
Permit No. 96-12592 Permit Date 2/13/2004

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD ROTARY FLUID BENTONITE

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
0 3	BROWN CLAY
3 40	SAND & GRAVEL
40 55	BROWN CLAY
55 60	SAND & GRAVEL
60 120	BROWN CLAY
120 140	SAND & GRAVEL
140 160	BROWN CLAY
160 220	SAND & GRAVEL
220 235	BROWN CLAY
235 300	SAND & GRAVEL
300 320	BROWN CLAY
320 350	SAND & GRAVEL
350 360	BROWN CLAY
360 380	SAND & GRAVEL
380 420	GREEN CLAY
420 440	GREEN SANDY CLAY
440 460	GREEN CLAY
460 520	GREEN SANDY CLAY
	CONTINUED CASING LAYOUT
300 320	BLANK PVC 6"
320 380	SCREEN PVC 6" .032 SLOT
380 400	BLANK PVC 6"

TOTAL DEPTH OF BORING 520 (Feet)
TOTAL DEPTH OF COMPLETED WELL 400 (Feet)

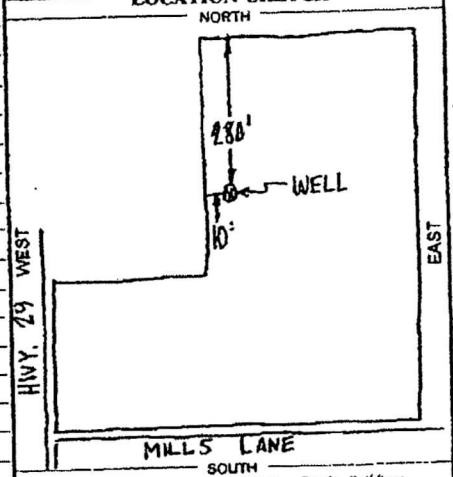
WELL OWNER

Name Quixote Winery
Mailing Address 6126 Silverado Trail
Napa CA 94558
CITY STATE ZIP

WELL LOCATION

Address 584 Mills Lane
City St. Helena CA
County Napa
APN Book 09 Page 070 Parcel 33
Township — Range — Section —
Latitude — DEG. MIN. SEC. — DEG. MIN. SEC.

LOCATION SKETCH



Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE

ACTIVITY (✓)

✓ NEW WELL
MODIFICATION/REPAIR
— Deepen
— Other (Specify)
— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY
✓ Domestic — Public
✓ Irrigation — Industrial
MONITORING —
TEST WELL —
CATHODIC PROTECTION —
HEAT EXCHANGE —
DIRECT PUSH —
INJECTION —
VAPOR EXTRACTION —
SPARGING —
REMEDIATION —
OTHER (SPECIFY) —

WATER LEVEL & YIELD OF COMPLETED WELL

1

DEPTH TO FIRST WATER N/A (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 26 (Ft.) & DATE MEASURED 6/18/2004
ESTIMATED YIELD * 75 (GPM) & TEST TYPE AIR LIFT
TEST LENGTH 3 (Hrs.) TOTAL DRAWDOWN N/A (Ft.)
May not be representative of a well's long-term yield.

CASING (S)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 420	12								
420 520	9								
0 120		✓				PVC F480	6	SDR-21	
120 220			✓			PVC F480	6	SDR-21	.032
220 240		✓				PVC F480	6	SDR-21	
240 300			✓			PVC F480	6	SDR-21	.032

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 65	✓			CONCRETE
65 400			✓	#6 SAND
400 520			✓	CUTTINGS

ATTACHMENTS (✓)

— Geologic Log
— Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— Other —

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME HUCKFELDT WELL DRILLING
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
2110 Penny Lane Napa CA 94559
ADDRESS CITY STATE ZIP
Signed [signature] 06/25/04 439-746
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM