RESULTS OF FALL 2019 PUMP TESTS OF YOSEMITE WEST WELLS FOR KENNETH LEBLANC

prepared for
Kenneth LeBlanc
Yosemite West, California

by
Kenneth D. Schmidt & Associates
Groundwater Quality Consultants
Fresno, California

March 2020

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS
600 WEST SHAW AVE., SUITE 250
FRESNO, CALIFORNIA 93704
TELEPHONE (559) 224-4412

March 24, 2020

Mr. Kenneth LeBlanc
7555 Henness Ridge
Yosemite West, CA 95389

Re: Fall 2019 Pump Tests of
Yosemite West Wells

Dear Kenneth:

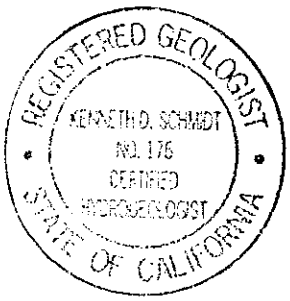
Submitted herewith is our final report. We appreciate the cooperation of Jeff Hornacek during the pump tests.

Sincerely yours,

Kenneth D. Schmidt
Geologist No. 1578
Certified Hydrogeologist
No. 176

KDS/cl





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RESULTS OF FALL 2019 PUMP TESTS OF YOSEMITE WEST WELLS FOR KENNETH LEBLANC

INTRODUCTION

A new community water system is being proposed in the Yosemite West vicinity in Mariposa County. Well No. 3 is located on a 15-acre parcel north of Henness Ridge Drive. Well No. 4 is located on a 7-acre parcel south of Henness Ridge Drive. The testing procedures specified in "Well Capacity Determined in Methods for Wells in Bedrock", by the State Water Resources Control Board, Division of Drinking Water (July 2014) were used for the pump tests of the wells. Figure 1 shows the locations of the two pumped wells and two observation wells that were used for the pump tests.

TOPOGRAPHIC CONDITIONS

The project site is located in the northeast quarter of Section 25, T13S/R20E (Figure 1). The Yosemite West development is west of the project site, and the wells are located near East Creek south of Indian Creek. East Creek drains the watershed at the project site. The land surface elevations are about 5,920 feet above mean sea level at Well No. 3 and 6,050 feet at Well No. 4.

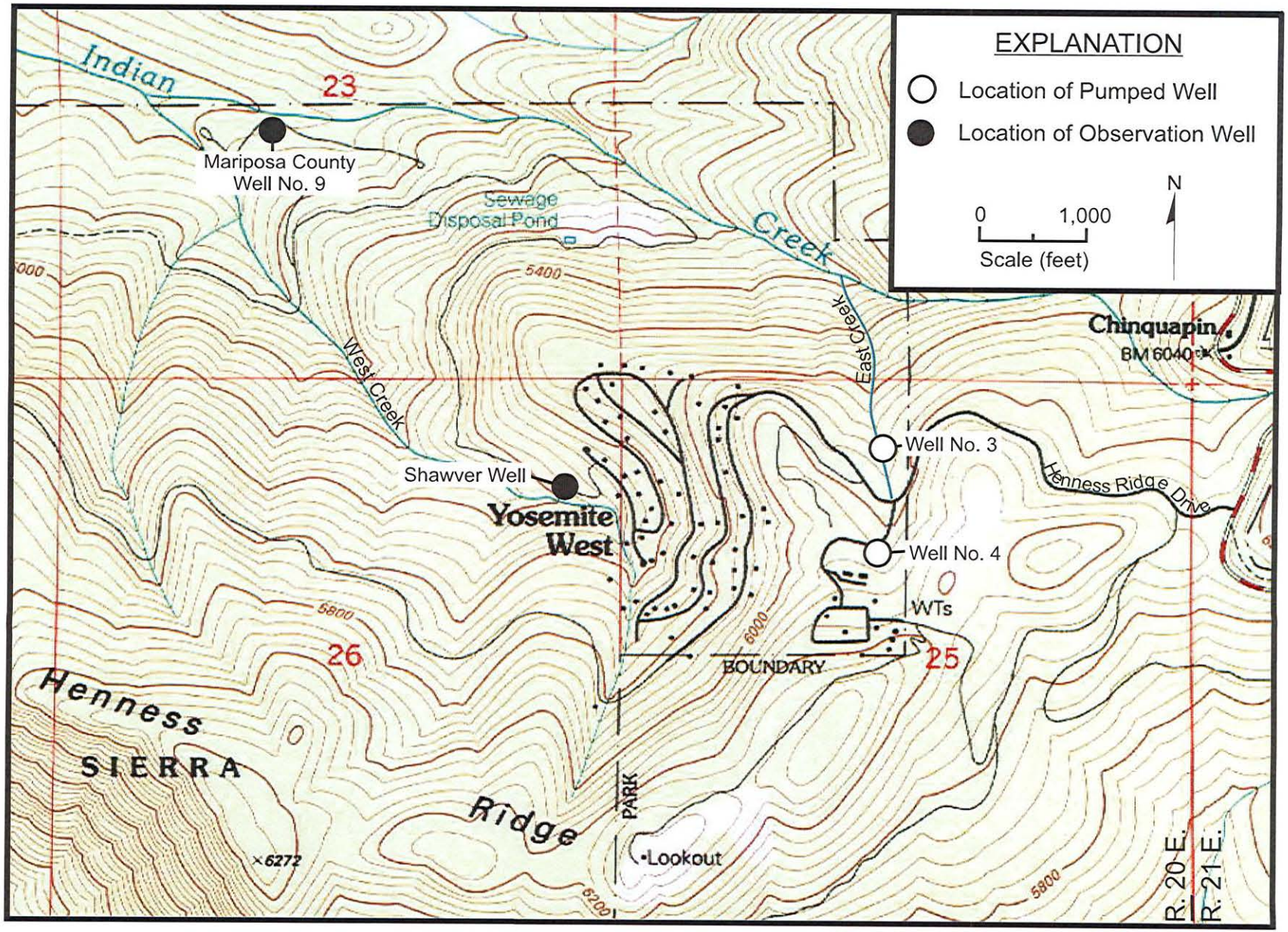

FIGURE 1-LOCATIONS OF PUMPED WELLS AND OBSERVATION WELLS

GEOLOGIC CONDITIONS

Granitic rocks comprise the outcrops in the Yosemite West vicinity. Groundwater is present in shallow weathered granitic rock and in fractured hardrock at depth. The character of the weathered materials and fractured hardrock mandates that groundwater can only be successfully tapped by wells in specific locations, as opposed to throughout the project site.

WELL DATA

Pumped Wells

Table 1 summarizes construction information for the two pumped wells. Both wells were drilled by Walt Bannon Drilling of Oakhurst by the air-rotary method. Well No. 3 was drilled in October 2005 to a depth of 950 feet, and Well No. 4 was drilled in July 2016 to a depth of 1,000 feet. Well No. 3 has a 6-5/8-inch diameter conductor casing extending to a depth of 61 feet and an annular seal extending from the surface to 55 feet in depth. Well No. 4 has 6-5/8-inch diameter conductor casing extending to a depth of 53 feet and an annular seal extending from the surface to 50 feet in depth. The part of each well below the bottom of the casing is uncased, or open hole. Airtest yields at the time of drilling were 65 gpm for Well No. 3 and 15 gpm for Well No. 4. Wells No. 3 and 4 are located approximately

TABLE 1-CONSTRUCTION DATA FOR WELLS USED FOR PUMP TEST

Well No.	Date Completed	Total Depth (feet)	Cased Depth (feet)	Annular Seal (feet)	Airlift Yield (gpm)
3	10/05	950	60	0-55	65
4	07/16	1,000	53	0-50	15
Shawver*	08/17	900	132	0-125	50
County 9*	09/80	325	80	0-80	105

* Mariposa County Well No. 9 and Shawver Well were used as observation wells for the tests.

Wells No. 3, No. 4, and Shawver Well were constructed by Bannon Well Drilling of Oakhurst. County Well No. 9 was constructed by Jack Carrell Drilling of Sonora.

1,130 feet apart. Completion reports for these two wells are provided in Attachment A.

Observation Wells

Two wells were used as observation wells during the test (Figure 1). A well completion report is available for the Shawver Well. The Shawver well is 900 feet deep and is located near West Creek, approximately 3,000 feet from both Wells No. 3 and No. 4. A water well drillers report is available for County Well No. 9 and it is 325 feet deep. This well is located near Indian Creek, approximately 6,350 feet from Well No. 3 and 6,900 feet from Well No. 4.

GROUNDWATER OCURRENCE

At Well No. 3 there are about five feet of overburden and weathered granitic rock extends from 5 to 36 feet in depth. Groundwater was encountered in the granitic hardrock in three fractured intervals below a depth of 380 feet. About 3 gpm was airlifted from a depth of 386 to 387 feet, 7 gpm from 780 to 781 feet, and 55 gpm from 930 to 931 feet in depth at the time of drilling. At Well No. 4 there are about five feet of overburden and weathered granitic rock extends from 5 to 30 feet in depth. Groundwater was encountered in only one depth interval. About

15 gpm was airlifted from a depth of 945 to 946 feet at the time of drilling. Precipitation on the watershed and streamflow in East Creek are the primary sources of recharge to groundwater tapped by these wells.

PUMP TESTS

Procedure

Ten-day pump tests were conducted on Wells No. 3 and 4 during September-October, 2019. The water levels in the unused Shawver Well and Mariposa County Well No. 9 were measured occasionally during the pump tests. The pump setting in Well No. 3 was 903 feet in depth and the pump setting in Well No. 4 was 960 feet in depth. Each of the pumped wells was equipped with a sounding tube prior to the tests. Water was discharged away from each of the pumped wells so as to not interfere with the test. Water pumped from Well No. 3 was discharged to the north and was used for irrigation on the hillside. Water from Well No. 4 was discharged to the south and was also used for irrigation on the hillside. One-inch diameter totalizing flowmeters were used to measure the pumping rate and total pumpage for the wells. The timing of filling a 5-gallon container was periodically used to verify the pumping rates. Two-line Powers electric sounders and engineers tapes were used to measure the water levels.

Drawdown Measurements

Drawdown measurements for the 10-day pump tests are provided in Attachment B.

Well No. 3

Pumping of Well No. 3 began at 9:37 AM on September 23 and continued until 8:30 AM on October 4, 2019. The static water level in Well No. 3 was 629.2 feet below the measuring point prior to pumping. The initial pumping rate was about 52 gpm. After about a day of pumping, the pumping level in Well No. 1 was intentionally stabilized at about 677 feet in depth, and maintained there for the rest of the pumping period. Figure 2 shows pumping rates for Well No. 3 for the constant head part of the test. The pumping rate gradually decreased to 47 gpm at the end of the pumping period. A total of 694,000 gallons was pumped during the test and the average pumping rate was 48.4 gpm.

Well No. 4

Pumping of Well No. 4 began at 10:40 AM on September 23 and continued until 9:50 AM on October 3, 2019. The static water level in Well No. 4 was 771.5 feet below the measuring point prior to pumping. The initial pumping rate was about 14 gpm. After about one day of pumping, the pumping level in Well No. 4 was intentionally stabilized at about 787 feet in depth and

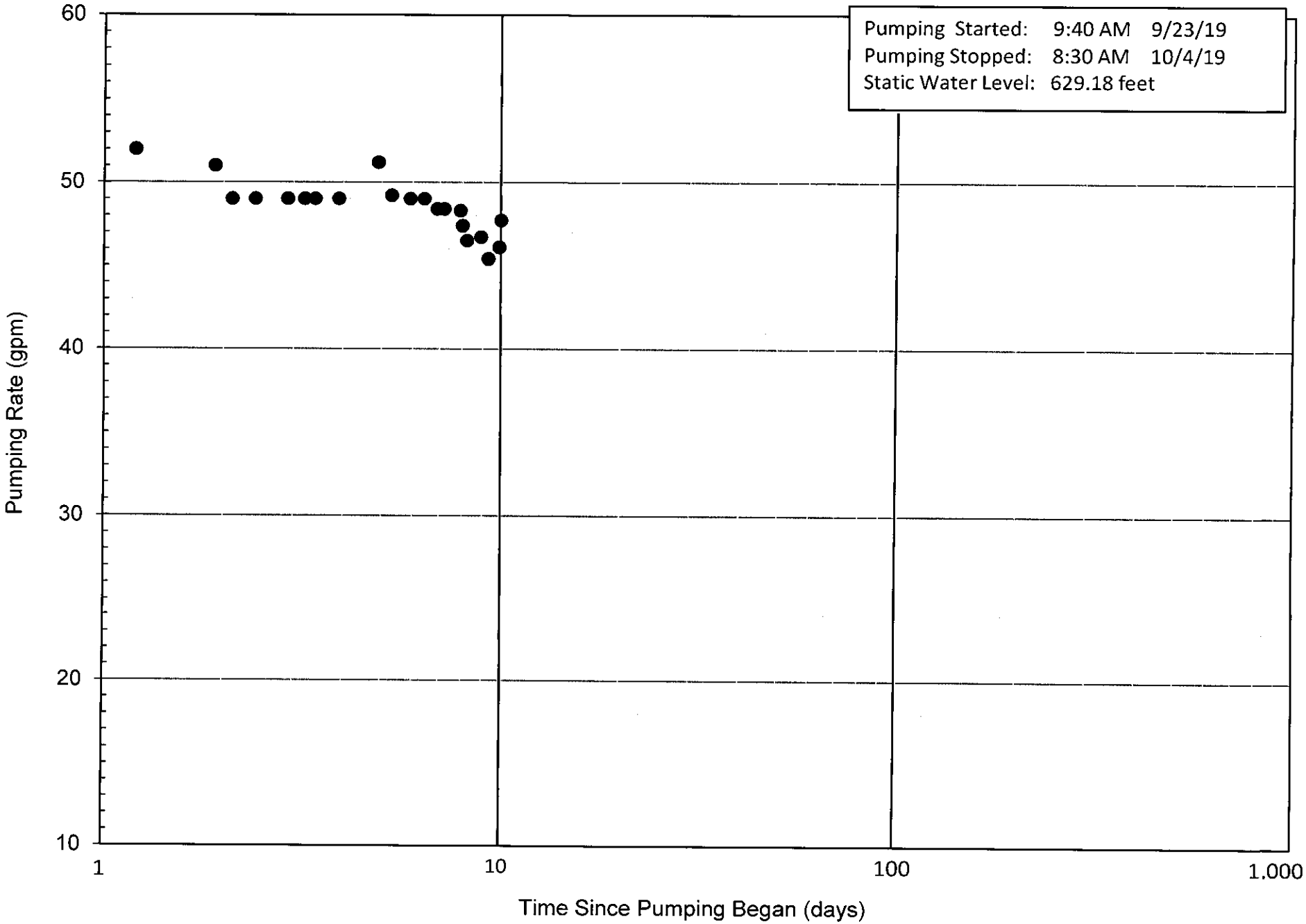

FIGURE 2-PUMPING RATES FOR WELL NO. 3

maintained for the rest of the pumping period. Figure 3 shows pumping rates for Well No. 4 for the constant head part of the test. The pumping rate gradually decreased to 10 gpm at the end of the pumping period. A total of 180,600 gallons was pumped during the test and the average pumping rate was 12.5 gpm.

Observation Wells

Water levels in the Shawver and Mariposa County observation wells were periodically measured before pumping began and after pumping ceased. The pumping of Wells No. 3 and No. 4 had no effect on the water levels in these two wells.

Precipitation records at the south entrance to Yosemite National Park indicated no precipitation during September 1-October 28, 2019.

Recovery Measurements

Water-level recovery measurements for the pump tests are provided in Attachment C.

Well No. 3

Water-level recovery measurements were made from after pumping stopped at 8:30 AM on October 3 through March 19, 2020. Figure 4 shows water-level recovery for Well No. 3. After about nine days of recovery, depth to water was 635.6 feet, or 6.4 feet below the static level prior to pumping. After 72 days of

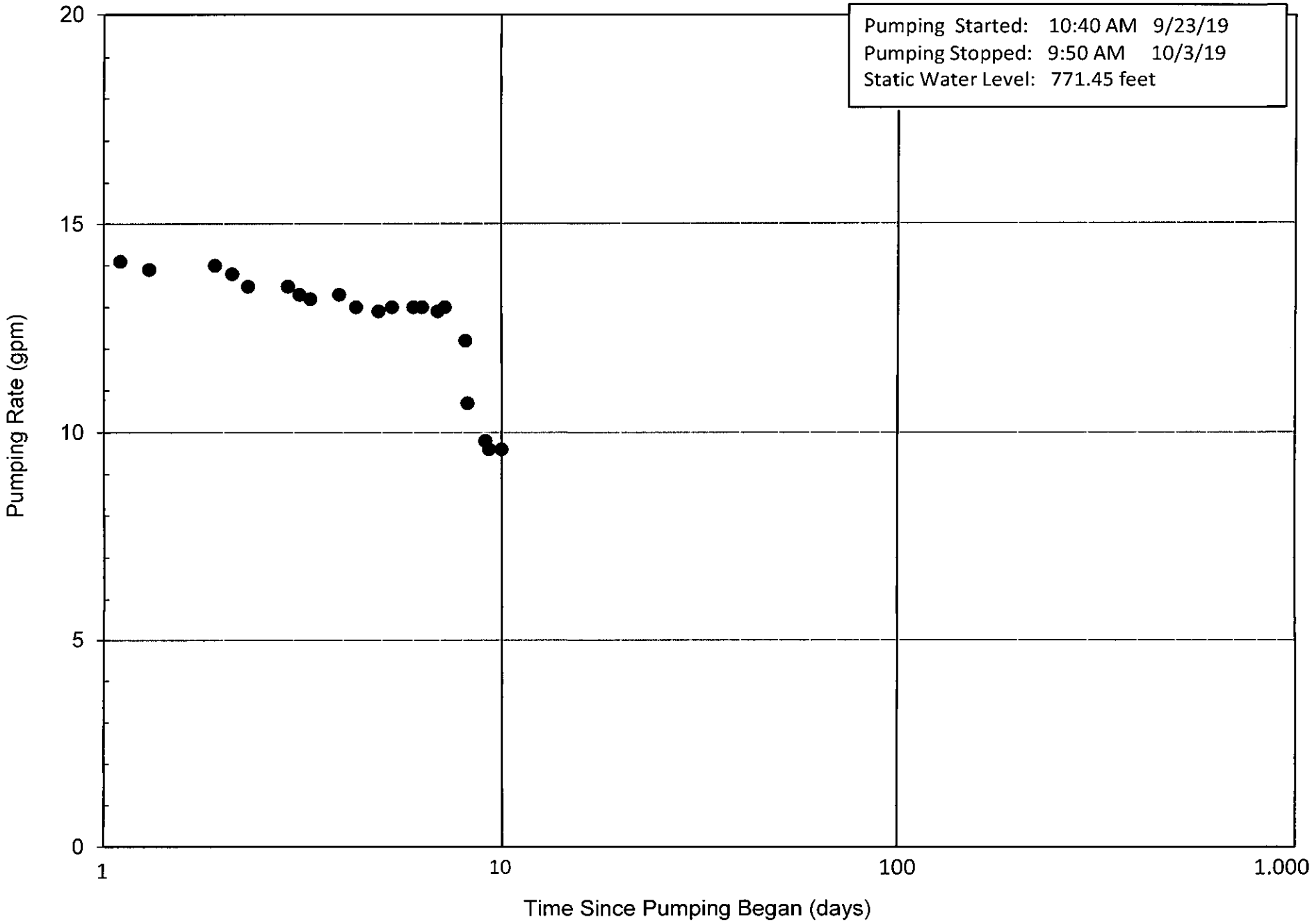

FIGURE 3-PUMPING RATES FOR WELL NO. 4

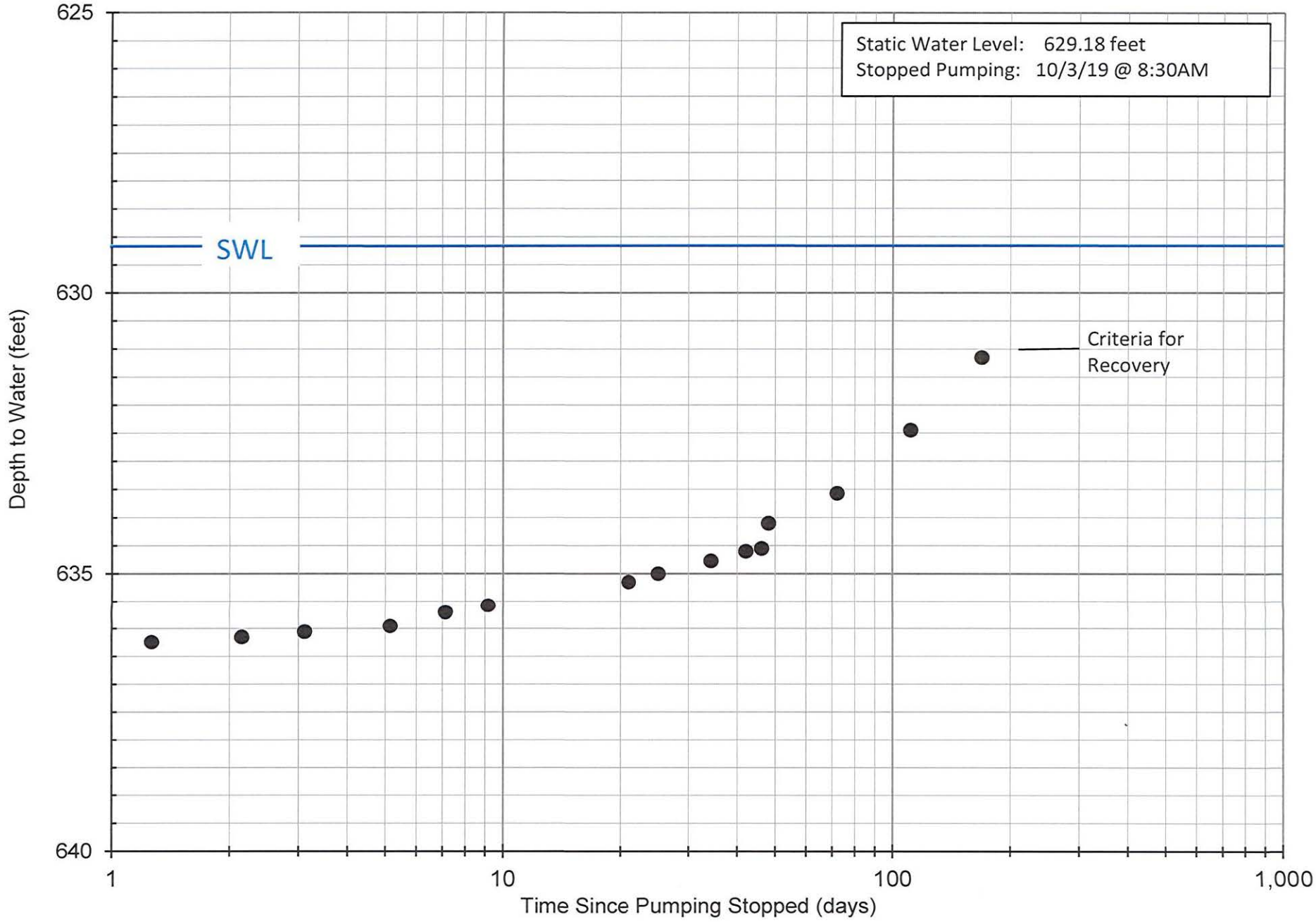

FIGURE 4-WATER-LEVEL RECOVERY FOR WELL NO. 3

recovery, depth to water was 633.6 feet, or 4.4 feet below the static level prior to pumping. After 111 days of recovery, depth to water was 632.5 feet, 3.3 feet below the static level prior to pumping. After 169 days of recovery, depth to water was 631.2 feet, or 2.0 feet below the static level prior to pumping. Thus this level met the criteria for recovery.

Well No. 4

Water-level recovery measurements were made from after pumping stopped at 9:50 AM on October 3 through December 14, 2019. Figure 5 shows water-level recovery for Well No. 4. After nine days of recovery, depth to water was 777.9 feet, or 6.4 feet below the static level prior to pumping. After 72 days of recovery, depth to water was 775.5 feet, or 4.0 feet below the static level prior to pumping. After 110 days of recovery, depth to water was 774.8 feet, or 3.3 feet below the static level prior to pumping. After 168 days of recovery, depth to water was 773.4 feet, or 1.9 feet below the static level prior to pumping. Thus this level met the criteria for recovery.

Well Yields

Precipitation records at the south entrance to Yosemite National park indicated 0.1 inch on October 28, 0.25 inch on November 30, and 0.06 inch on December 15, 2019. There was 0.1

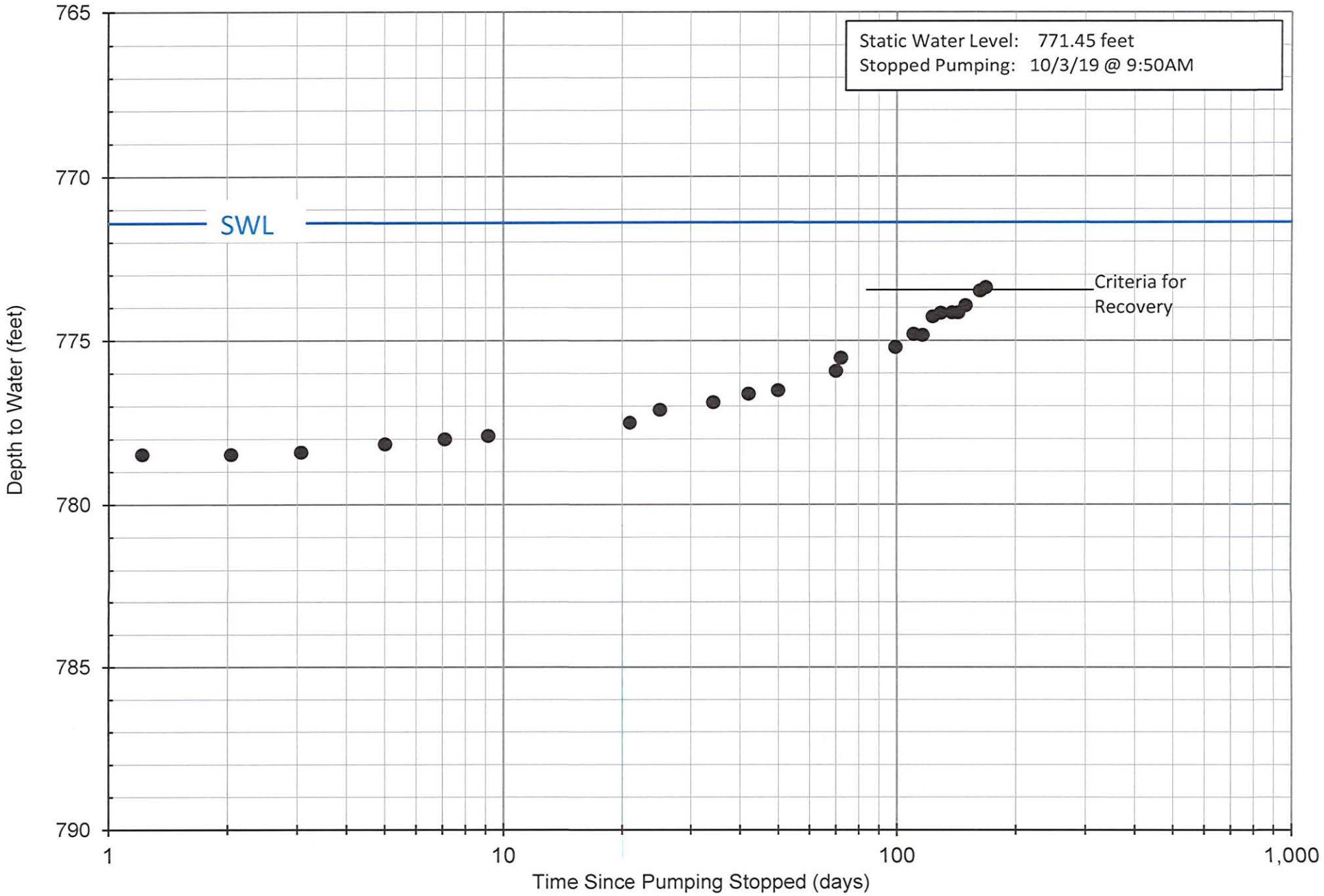

FIGURE 5-WATER-LEVEL RECOVERY FOR WELL NO. 4

inch of precipitation on January 10, 0.8 inch on January 17, 0.34 inch on January 26-27, and 1.7 inch on March 14-16. This was the only precipitation recorded through March 16, 2020. The total precipitation was about 3.3 inches, which is indicated to be relatively small compared to other winters.

Following the Drinking Water Division Well Capacity Determination Methods, following are the allocated yields of the tested wells.

Well No.	Pumping Rate at End of 10 days (gpm)	Half of 10-day Pumping Rate (gpm)
3	47	23.5
4	10	5
Total	57	28.5

GROUNDWATER QUALITY

Table 2 provides a summary of the results of analyses of water collected from Wells No. 3 and 4 just prior to the cessation of pumping for the test. The water samples were preserved and hand to delivered to APPL Inc. of Clovis for inorganic chemical analyses. Water samples for radiological analyses were preserved and shipped by overnight delivery to FGL Environmental in Santa Paula. For Well No. 3, the total dissolved solids (TDS) concentration was 124 mg/l and the water was of the calcium bicarbonate type. Concentrations of nitrate, iron, manganese, and

TABLE 2 - CHEMICAL ANALYSIS RESULTS FOR WELLS 3 AND 4 (OCTOBER 3, 2019)

Constituent (mg/l)	MW-3	MW-4
Calcium	19	19
Magnesium	2	2
Sodium		
Potassium	1	1
Bicarbonate	93	90
Sulfate	6	6
Chloride	<1	<1
Nitrate	<0.4	<0.4
pH	7.3	7.9
Electrical Conductivity (micromhos/cm @ 25° C)	165	160
Total Dissolved Solids	124	109
Fluoride	0.2	0.2
Iron	<0.04	<0.04
Manganese	0.01	0.03
Arsenic (ppb)	1.2	1.0
Alpha Activity (pCi/l)	4.4	0
Temperature (°F)	50	51

Inorganic chemical constituent analyses by APPL, Inc. of Clovis and alpha activity by FGL Environmental of Santa Paula

arsenic were low, well below the respective MCLs. The alpha activity was 4.4 picocuries per liter, also well below the MCL. For Well No. 4, the TDS concentration was 109 mg/l, and the water was of the calcium bicarbonate type. Concentrations of nitrate, iron, manganese, and arsenic were also well below the respective MCLs. The alpha activity was less than 1 picocurie per liter. This water thus appears of suitable quality for public supply.

ATTACHMENT A
WATER WELL DRILLERS REPORTS
AND WELL COMPLETION REPORTS

WELL 3

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. e030107

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

Began 10-7-05 Ended 10-12-05
Permit Agency Mariposa County
Permit No. 25002 Permit Date 9-23-05

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD Air Rotary Water Inject FLUID

DEPTH FROM SURFACE FL.	to FL.	DESCRIPTION *Describe material, grain size, color, etc.*
0	5	Overburden (loose rock & dirt)
5	16	Decomposed Granite (DG)
16	21	Granite
21	26	Decomposed Granite
26	32	Granite
32	36	Decomposed Granite
36	950	Granite
		Fractures
166	167	0
386	387	3 GPM
651	652	0
737	738	0
780	781	7 GPM
930	931	55 GPM

TOTAL DEPTH OF BORING 950 (Feet)
TOTAL DEPTH OF COMPLETED WELL 950 (Feet)

WELL OWNER

Name Jeff Hornacek/Yosemite Casades LLC
Mailing Address 33232 Ocean Bright
Dana Point, CA. 92629
CITY STATE ZIP

WELL LOCATION

Address Henness Ridge & Henness Dr.
City Yosemite West
County Mariposa County
APN Book 006 Page 150 Parcel 0060
Township ___ Range ___ Section ___
Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH / WEST / EAST / SOUTH

*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 (✓)

X NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY *(Describe Procedures and Materials Under "GEOLOGIC LOG")*

PLANNED USES (✓)

WATER SUPPLY
___ Domestic X 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

DEPTH TO FIRST WATER 386 (FL) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL ___ (FL) & DATE MEASURED ___
ESTIMATED YIELD* 65 (GPM) & TEST TYPE Air Lift
TEST LENGTH 1/4 (Hrs.) TOTAL DRAWDOWN ___ (FL)
** May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE FL.	to FL.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	14	14.75			X		Steel	14	.188	
0	60	11	X				Steel	6 5/8	.156	

ANNULAR MATERIAL

DEPTH FROM SURFACE FL.	to FL.	TYPE CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	55		X		Pumped

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ 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 Walt Bannon Drilling, Inc.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

40487 Hwy. 41 Oakhurst, CA. 93644.
ADDRESS CITY STATE ZIP

Signed Russell Duncanson 10-17-05 606385
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

Pg. 2 of 2

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

Page 1 of 1 WELL4

Owner's Well Number

Date Work Began 07/18/2016 Date Work Ended 7/23/2016

Local Permit Agency Mariposa County

Permit Number 695 Permit Date 6/28/16

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0317793

DWR Use Only – Do Not Fill In

State Well Number/Site Number

N W

Latitude Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Air Rotary Water Inject Drilling Fluid Fresh Water

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	5	Overburden
5	15	Dirt
15	25	Mud, Water, Dirt & Some Small Gravel
25	30	Decomposed Granite
30	1,000	Granite
		FRACTURES
175	176	0
205	206	0
228	229	0
375	415	Broken Area Multiple Small Fractures
460	461	0
945	946	15 GPM
		Air Test
		900' - 10 GPM
		800' - 2 GPM

Total Depth of Boring 1000 Feet

Total Depth of Completed Well 1000 Feet

Well Owner

Name Yosemite West Association

Mailing Address P.O. Box 6232

City San Jose State CA Zip 95150

Well Location

Address 7548 Henness Circle

City Yosemite West County Mariposa

Latitude Deg Min Sec N Longitude Deg Min Sec W

Datum Dec. Lat. Dec. Long.

APN Book 006 Page 150 Parcel 002/003

Township Range Section

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

◉ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply

☑ Domestic ☑ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

○ Monitoring

○ Remediation

○ Sparging

○ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water 945 (Feet below surface)

Depth to Static Water Level (Feet) Date Measured

Estimated Yield * 15 (GPM) Test Type Constant Rate

Test Length 0.3 (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	53	11	Casing	Steel	.156	6 5/8"		
0	26	13	Conductor	Steel	.188	12 3/4"		

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	50	Pumped	Sand Cement

Attachments

☐ Geologic Log

☐ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☐ 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 WALT BANNON DRILLING, INC.
Person, Firm or Corporation

40487 HWY 41 OAKHURST CA 93644
Address City State Zip

Signed Chris Duncan
C-57 Licensed Water Well Contractor

07/22/2016 606385
Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Mariposa Co. Well 9
Obs. Well

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Hardrick Well

Do not fill in
No. 062870

R-25 DL

Notice of Intent No.
Local Permit No. or Date:
State Well No.
Other Well No. # 7

(1) OWNER: Name Yosemite West Sub.
Address P. O. Box 326
City San Jose, Calif. Zip 95103

(2) LOCATION OF WELL (See instructions):
County Mariposa Owner's Well Number
Well address if different from above Yosemite west sub
Township 3 S Range 21 E Section 23
Distance from cities, roads, railroads, fences, etc. 1 Mile west of Highway 41 5 mi. S west of Yosemite Village

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☒
Stock ☐
Municipal ☒
Other ☐

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☒ Size
Diameter of bore
Packed from to ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	80	6"	.10

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 20 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ft.
Method of sealing Pour

(10) WATER LEVELS:
Depth of first water, if known 100' ft.
Standing level after well completion 20' ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom?
Type of test Pump ☒ Bailer ☐ Air lift ☐
Depth to water at start of test 20 ft. At end of test 77 ft.
Discharge 105 gal/min after 19 hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 325' ft. Depth of completed well 225' ft.

from ft.	to ft.	Formation (Describe by color, character, size of material)
0	10	Small rock & soil
10	60	Clay & rock
60	78	Firm rock
78	100	Granite
100	101	Granite & water
101	130	Granite
130	132	Fractured granite & water
132	190	Granite
190	300	Hard rock & granite
300	310	Granite
310	315	Granite & water 1 GPM
315	325	Granite

NOT USED FOR PUBLIC WATER SUPPLY
SEC. 1352 UDHS

Work started 7/17 1980 Completed 7/17 1980

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
SIGNED Jack Carroll (Well Driller)
NAME Jack Carroll Drilling Inc. (Person, firm, or corporation) (Typed or printed)
Address 20033 State Hwy 108
City Sonora, Calif. Zip 95370
License No. 351126 Date of this report 9/30/80

DWR 188 (REV. 7-78) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

State of California

Well Completion Report

Form DWR 188 Submitted 12/20/2019

WCR2019-017822

Owner's Well Number | Date Work Began 08/01/2017 | Date Work Ended 08/10/2017

Local Permit Agency Mariposa County Health Department

Secondary Permit Agency | Permit Number 811 | Permit Date

Well Owner (must remain confidential pursuant to Water Code 13752)

Name YOSEMITE WESTPARK I, LLC, ROBERT SHAWVER

Mailing Address 3540 ROSEDALE

City DALLAS State TX Zip 75205

Planned Use and Activity

Activity New Well

Planned Use Water Supply Public

Well Location

Address 7170 YOSEMITE PARK WAY

City DALLAS Zip 95389 County Mariposa

Latitude 37 (Deg.) 38 (Min.) 56.7599 (Sec.) N Longitude -119 (Deg.) 43 (Min.) 24.456 (Sec.) W

Dec. Lat. 37.6491 Dec. Long. -119.72346

Vertical Datum Horizontal Datum WGS84

Location Accuracy Location Determination Method

APN 006090002

Township 03 S

Range 20 E

Section 26

Baseline Meridian Mount Diablo

Ground Surface Elevation

Elevation Accuracy

Elevation Determination Method

Borehole Information

Orientation Vertical Specify

Drilling Method Downhole Hammer Drilling Fluid Water

Total Depth of Boring 900 Feet

Total Depth of Completed Well 900 Feet

Water Level and Yield of Completed Well

Depth to first water 875 (Feet below surface)

Depth to Static Water Level (Feet) Date Measured 08/10/2017

Estimated Yield* 50 (GPM) Test Type Air Lift

Test Length 2 (Hours) Total Drawdown (feet)

*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	5	OVERBURDEN
5	20	DIRT
20	90	MUD/DG
90	95	GRANITE
95	100	MUD/DG
100	900	GRANITE

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	125	Conductor or Fill Pipe	Mild Steel	N/A	0.25	12.75			
1	125	132	Blank	Mild Steel	N/A	0.25	6.625			
1	132	900	No Casing Installed	Other	N/A		6			GRANITE

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	125	Cement	Portland Cement/Neat Cement		PUMPED GROUT
0	900	Other Fill	See description.		GRANITE

Other Observations:

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	900	6

Certification Statement

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

Name: WALT BANNON DRILLING INC
Person, Firm or Corporation

40487 HWY 41 (Address) | OAKHURST (City) | CA (State) | 93644 (Zip)

Signed: *electronic signature received* (C-57 Licensed Water Well Contractor) | 12/20/2019 (Date Signed) | 606385 (C-57 License Number)

DWR Use Only

CSG #	State Well Number	Site Code	Local Well Number

N — Latitude Deg/Min/Sec

W — Longitude Deg/Min/Sec

TRS:

APN:

ATTACHMENT B
DRAWDOWN MEASUREMENTS FOR PUMP TESTS

Le Blanc

Well No. 3 (Yosemite Cascades Well 3)

Page No. 1/2

~~Perf. Interval~~ (ft.) 950' T.D.

Pump Setting (ft.) 903

Pump Co. Bannon

DRAWDOWN MEASUREMENTS

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS

Time (Min.)	Date/Time	Depth to Water (feet)	Pumping Rate (gpm)	Total Pumpage Gallons	Total Pumpage ~~A.F.~~	Notes
	9/23/19 9:37am	629+.18 = 629.18	SWL	392		Flow Meter
	9:40am	Begin Pumping				Master Meter
	9:41	638+.48 = 638.48	52			1.5"
	9:44	664+.04 = 664.04				
	9:45	—		665		Water is
	9:46	669+.42 = 669.42	52			flowing in
	9:49	672+.78 = 672.78		171		East ck
	9:51	673+.63 = 673.63				T45.9°F
	9:53	674+.05 = 674.05	52			EC 95umhos
	9:57	674+.48 = 674.48				
	10:00	674+.55 = 674.55		1,417		
	10:06	674+.60 = 674.60	51	1,714		
	10:10	674+.63 = 674.63				
	10:15	674+.63 = 674.63		2,164		T49.8°F
	11:15	673+.95 = 673.95				EC 171umhos
	11:19	673+.95 = 673.95	52	4,800		
	11:25	673+.95 = 673.95		5,161		50gpm
202	1:02pm	674+.21 = 674.21		10,165 @ 1:06pm (206min)		
462	5:22pm	674+.73 = 674.73	51	22,840		
9/24/19	7:16am	676+.12 = 676.12	51	64,130	Time (Days)	
		Maintain 677' Pumping Level			52gpm 1.2	
1,719	2:19pm	675.71	50	85,960		
1,976	6:36pm	675.97	50	97,605	48gpm 1.9	
2745 9/25/19	7:25am	[illegible]	50	135,670		[illegible]
2761	7:41		49		51gpm 1.9	
2775	7:55	676.70	49	[illegible]	[illegible]am	
2785	8:15	676.61				
3040	12:20pm	676.43	50	150,165	49gpm 2.1	
3433	6:53pm	676.68	49.5	169,420	49gpm 2.4	
4192 9/26	7:32am	677.55	50	[illegible]	49gpm 2.9	
4198	7:38	close valve.				
4204	7:44	677.41	49.0		49gpm 3.2	
4564	1:44pm	677.21	49.1	[illegible]	49gpm 3.4	
4851	6:31pm	677.34	49.0	[illegible]	49gpm 3.9	
5643 9/27	7:43am	678.[illegible]	50.0	[illegible]		

LeBlanc

Well No. 3 (Yosemite Cascades Well 3)

Page No. 2/2

~~Perf. Interval~~ (ft.) 750' T.D.

Pump Setting (ft.) 903

Pump Co. [illegible]

DRAWDOWN MEASUREMENTS

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS

Time (Min.)	Date/Time	Depth to Water (feet)	Pumping Rate (gpm)	Total Pumpage Gallons	Total Pumpage ~~AF~~ Time (days)	Notes
5650 9/27	7:50am	closed valve	50			
5660	8:00	678.0	49			
6251	5:51pm	677.88	49	305,813		
7127 9/28	8:27	678.68	50	[illegible]	51.2 gpm 4.9	
7135	8:35	close valve	49			
7685	5:45pm	678.80	49	[illegible]	49.2 gpm 5.2	
8547 9/29	8:07am	678.88	49	420,410	49 gpm 5.9	
9175	6:35pm	679.71	50	451,162	49 gpm 6.4	
9183	6:43	close valve	49.3			
9937 9/30	7:17am	679.36	49.6	486,072	48.4 gpm 6.9	
10,405	3:05pm	679.33	49.8	510,735	48.4 gpm 7.2	
10,410	3:10	close valve	49.0			
11,427 10/1	8:07	680.18	49.6	560,050	48.3 gpm 7.9	
	8:14	close valve	48.6			
	8:48	[illegible]	[illegible]			
	8:56	[illegible]	[illegible]		47.4 8.0	
11,488	9:03	[illegible]	49.0	562,705		
	9:16	close valve				
	9:25	677.55	46.3		46.5 8.2	
11,780	2:00pm	677.43	47.7	576,[illegible]		
12856 10/2	7:56am	678.15	48.0	626,710	46.7 8.9	
	7:58	close valve				
	8:12	677.18	47.3	627,360		
	8:34	677.75	47.7	628,[illegible]		
	8:35	close valve	46.0		45.4 9.3	
	8:42	676.00	46.0	628,[illegible]		10/3
	8:43	open valve	46.7			8:10am
	8:52	676.55	46.7	[illegible]		Flow meter check
13118	12:16pm	676.43	46.0	[illegible]		110 sec to fill 90 gal
	12:22	[illegible] valve	47.0			90 gal / 110 sec × 60 = 49.1 gpm
	12:34	677.50	47.0	[illegible]		7:45am
13343	4:03	677.42	47.2	648,805		T 49.8°F
14278 10/3	7:38am	678.22	[illegible]	691,[illegible]	46.1 9.9	EC 172 umhos
	8:25	678+.03 = 678.03	47.2		47.7 10.0	Water sample
14330	8:30am	Pump [illegible]		[illegible]		Collected @ 7:45am

Well No. 4 (7acres) Newwell

Page No. 1 /2

~~Perf. Interval~~ (ft.) T.D. 1000'

Pump Setting (ft.) 960

Pump Co. Bannon

DRAWDOWN MEASUREMENTS

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS

Time (Min.)	Date/Time	Depth to Water (feet)	Pumping Rate (gpm)	Total Pumpage Gallons	Time in Days ~~A.F.~~	Notes
9	2/3/19 8:44am	771+.45= 771.45=	SWL	386		Badger
	10:38	771+.61 = 771.61		Valve installed, pumped briefly		Flowmeter
	10:40	Begin Pumping		386.5		1"
	10:42	776+.42= 776.42				
	10:43	780+.26 = 780.26	14			
	10:45	776+.25 = 776.25		471.5		
	10:47	785+.72 = 785.72				
	10:50	785+.80 = 785.80				
	10:53	785+.52 = 785.52	14			
	10:55	785+.82 = 785.82				
	11:00	785+.55 = 785.55		667		
	11:05	785+.70 = 785.70				
	11:08	785+.85 = 785.85				
	11:10	785+.88 = 785.88	14			
	11:15	785+.92 = 785.92		1,158		T 50.5°F
	11:17	785+.94 = 785.94				EC 156 umhos
	1:41pm	785+.91 = 785.91		2,663		
	5:38pm	786+.11 = 786.11	14	6,273		
1281	9/24/19 8:40am	786+.26 = 786.26	14	18,346	Time in Days 1.1	
		Maintain 787' Pumping	Level		14.1 gpm	
1594	1:14pm	787.01	14.3	23,716		
1649	2:15	786.91	13.9		13.9 gpm 1.3	
1905	6:25	786.96	14	27,076	14.0 gpm 1.9	
2739	1/25 8:[illegible]am	[illegible]	[illegible]	[illegible]		
2747	8:27	[illegible]	13.75			
2761	8:41	[illegible]	13.75			
2780	[illegible]:00	787.27		39,371	13.8 gpm 2.1	
2956	11:56	787.38	13.87	41,702		
2962	12:02pm	Close Valve			13.5 gpm 2.3	
2973	12:13	787.11	13.65			
2975	12:15			41,950		
3383	7:03pm	787.16	13.6	47,401		
4152	9/26 7:58am	787.71	13.7	57,891		
4162	8:02	Close valve				
4165	8:05	787.78	13.4			

Well No. 4 (7 Acres) Newwell

Page No. 2/2

~~Perf. Interval~~ (ft.) T.D. 1000'

Pump Setting (ft.) 960

Pump Co. Bannon

DRAWDOWN MEASUREMENTS

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS

Time (Min.)	Date/Time	Depth to Water (feet)	Pumping Rate (gpm)	Total Pumpage Gallons	Time (Days)	Notes
4182	9/26 8:22am	787.33	13.4	58,280	13.5gpm 2.9	
4486	1:26pm	787.57	13.4	62,323	13.3 3.1	
4782	6:22pm	787.51	13.5	66,241	13.2 3.3	
5605	9/27 8:05am	787.97	13.7	77,147	13.3 3.9	
	8:15am	Close Valve	13.2			
	8:22	787.61	13.2		13.0 4.3	
6140	5:00pm	787.83	13.2	84,081	12.9 4.9	
[illegible]	9/28 8:46am	788.08	13.2	96,362	13.0 5.3	
[illegible]	[illegible]	788.28	13.1	103,514	13.0 6.0	
8449	9/29 8:[illegible]am	788.22	13.0	114,602	13.0 6.3	
9132	6:[illegible]pm	787.[illegible]	13.0	122,[illegible]71	12.9 6.9	
[illegible]	9/[illegible] 7:[illegible]am	787.53	13.0	13[illegible],667	13.0 7.2	
10,366	3:26pm	[illegible]		138,851		
	3:29	Close Valve	12.5			
	10/1 8:24am	789.58	12.5			
	8:26	Close Valve	11.7		12.2 8.1	
	8:30	788.38	11.7			
	8:35	788.34				
11730	2:10pm	789.53	11.7	155,441		
	2:19	Close Valve	11.4			
	2:30	788.[illegible]	12.5		10.7 8.2	
	2:33	Close Valve	11.9			
11760	2:40	789.[illegible]	11.9	155,[illegible]	9.8 9.1	10/3 9:30am
11769	2:49	[illegible]	10.3	[illegible]		Flow Meter
13081	10/2 12:41pm	78[illegible]	9.8	[illegible]	12.45pm, 13085	Check
13322	4:42pm	[illegible]25	[illegible]	171,[illegible]	9.6gpm 9.3	24 to 25
14345	10/3 9:45am	787.41	10.0	180,[illegible]	9.6gpm 10.0	Seconds
14350	9:50am	Pump Off		180,958		to fill 5gal

Flow Meter 10.0gpm

5gal/24sec x 60 = 12.5gpm

5gal/25sec x 60 = 12.0gpm

Water Sample Collected @ 9:30am
T 50.4°F
EC 161umhos

Well No. Shawver Obs. Well

Page No. 1 / 1

Perf. Interval (ft.) 950

No Pump

DRAWDOWN MEASUREMENTS

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS

Time (Min.)	Date/Time	Depth to Water (feet)	Notes
	9/23/19 8:30am	506.12	
	5:45pm	[illegible]	
	9/24 7:02pm	[illegible]	
	9/25 7:20am	505.92	
	9/26 7:26pm	[illegible]90	
	10/2 6:46pm	506.05	

Mariposa County

Well No. 9 Indian Ck

Page No. 1/1

Perf. Interval (ft.) 350

DRAWDOWN MEASUREMENTS

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS

Time (Min.)	Date/Time	Depth to Water (feet)	Notes
	9/19	45.7	Measured by Fresno Co.
	10/1	45.1	"

ATTACHMENT C
RECOVERY MEASUREMENTS FOR PUMP TESTS

LeBlanc

Well No. 3

SWL (ft.) 629.18

RECOVERY MEASUREMENTS

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS

Time (Min.)	Date/Time	Depth to Water (feet)	Time (Min.)	Date/Time	Depth To Water (feet) Time (Days)
	10/3/19 8:30am	[illegible]	69,630	11/14 11:00am	634.60 42.1
1	8:31	672+.63 = 672.63	69,525	11/18 1:15pm	634.55 46.2
3	8:33	652+.13 652.13	69,360	11/20	634.10 48.2
5	8:35	644+0 = 644.0	103,920	12/14 12:30pm	633.57 72.2
7	8:37	637+.03 = 637.03	160,170	1/20/20 2:00pm	628.45 111.2
10	8:40	636+.58 = 636.58	243,630	3/19/20 1:00pm	631.15 169.2
12	8:42	636+.44 = 636.44			
15	8:45	636+.43 = 636.43			
18	8:48	636+.44 = 636.44			
22	8:52	636+.36 = 636.36			
27	8:57	636+.40 = 636.40			
31	9:01	636+.41 = 636.41			
37	9:07	636+.44 = 636.44			
47	9:17	636+.40 = 636.40			
54	9:24	636+.39 = 636.39			
125	11:05	636+.32 = 636.32			
546	6:06pm	636.28	Time (Days)		
1823	10/4 2:53pm	636.24	1.3		
3095	10/5 12:05pm	636.15	2.1		
4478	10/6 11:08am	636.05	3.1		
7410	10/8 12:00pm	635.95	5.1		
10,265	10/10 11:30am	635.70	7.1		
13,200	10/12 12:20pm	635.58	9.2		
30,315	10/24 9:45am	635.15	21.1		
36,165	10/28 11:15am	635.00	25.1		
49,350	11/6 3:00pm	635.77	34.3		

LeBlanc

Well No. 4

SWL (ft.) 771.45

RECOVERY MEASUREMENTS

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS

Time (Min.)	Date/Time	Depth to Water (feet)	Time (Min.)	Date/Time	Depth To Water (feet)
	10/3/19				Time (Days)
	9:45am	787+.41 = 787.41	10,210	10/10 12:00pm	778.0 7.1
	9:50 am	Pump off	13,160	10/12 1:00pm	777.90 9.1
1	9:51	785+.85 = 785.85	30,200	10/24 9:10am	777.50
2	9:52	780+.70 = 780.70	36,045	10/28 10:35am	777.11
4	9:54	779+0.2 = 779.2	49,255	11/6 2:45pm	776.88
6	9:56	779+0 = 779.0	60,535	11/14 10:45am	776.62
8	9:58	778+.90 = 778.90		10:46am	Begin Pumping 180,462
12	10:02	778+.92 = 778.92		10:49am	789.0
14	10:04	778+.85 = 778.85		10:53am	790.18 Totalizer (gpm)
16	10:06	778+.85 = 778.85		11:03am	790.25 181,317
18	10:08	778+.85 = 778.85		12:08pm	790.40 182,221
20	10:10	778+.85 = 778.85		12:09	Pump off 182234
25	10:15	778+.85 = 778.85		12:12	778.00 182234
30	10:20	778+.82 = 778.82		12:23	776.72
35	10:25	778+.85 = 778.85		11/18 10:45am	776.50 182,234
40	10:30	778+.85 = 778.85		11:15am	Begin Pumping 182,234
44	10:34	778+.82 = 778.82		3:35pm	Pump off 185,604
50	10:40	778+.78 = 778.78		3:55pm	776.60
55	10:45	778+.80 = 778.80		11/19 9:00am	776.45
60	10:50	778+.78 = 778.78		11/20 8:30am	776.00 185,604
563	10/3 6:13pm	778.50 Time (Days)		11:40am	Begin Pumping 185,604
1750	10/4 3:00pm	778.47 1.2		11:50	789.72 185,777
2935	10/5 11:45am	778.47 2.0		11/20	Pump off Time (Days)
4420	10/6 11:30am	778.40 3.1	71,950	11/22 9:00am	776.51 50.0
7280	10/8 11:10am	778.15 5.1	100,900	12/12 11:30am	775.92 70.0

Well No. LeBlanc 4

SWL (ft.) 771.45

RECOVERY MEASUREMENTS

KENNETH D. SCHMIDT AND ASSOCIATES
GROUNDWATER QUALITY CONSULTANTS

Time (Min.)	Date/Time	Depth to Water (feet)	Time (Days)	Time (Min.)	Date/Time	Depth To Water (feet)
103,810	12/14 12:00pm	775.52	72.1			
142,810	1/10/20 2:00pm	775.20	99.1			
158,710	1/21/20 3:00pm	774.80	110.2			
167,230	1/27/20 1:00pm	774.83	116.1			
177,370	2/3/20 2:00pm	774.27	123.1			
185,830	2/9/20 11:00am	774.16	129.0			
198,730	2/18/20 10:00am	774.15	138.0			
205,990	2/23/20 11:00am	774.15	143.0			
214,750	2/29/20 1:00pm	773.93	149.1			
233,770	3/13/20 [illegible]	773.48	162.3			
241,810	3/19/20 [illegible]	773.38	167.9			

ATTACHMENT D
CHEMICAL ANALYSES

Metals Results

ARF: 90358

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Kenneth D. Schmidt & Assoc.
600 West Shaw Avenue Suite 250
Fresno, CA 93704

Attn: Cheryl Lassotovitch

Method	Analyte	Result	PQL	Units	Prep Date	Analysis Date
APPL ID: BA00541	-Client Sample ID: LEBLANC WELL 3		-Sample Collection Date: 10/03/19		Project: Yosemite West	
200.7	CALCIUM (CA) (DISSOLV	18.9	0.05	mg/L	10/15/19	10/21/19
200.7	MAGNESIUM (MG) (DISSO	2.2	0.025	mg/L	10/15/19	10/21/19
200.7	POTASSIUM (K) (DISSOL	1.1	0.5	mg/L	10/15/19	10/21/19
200.8	ARSENIC (AS) (DISSOLVE	1.2	0.5	ug/L	10/15/19	11/11/19
200.8	IRON (FE) (DISSOLVED)	Not detected	40.0	ug/L	10/15/19	11/11/19
200.8	MANGANESE (MN) (DISS	10.6	0.5	ug/L	10/15/19	11/11/19
APPL ID: BA00542	-Client Sample ID: LEBLANC WELL 4		-Sample Collection Date: 10/03/19		Project: Yosemite West	
200.7	CALCIUM (CA) (DISSOLV	18.5	0.05	mg/L	10/15/19	10/21/19
200.7	MAGNESIUM (MG) (DISSO	1.9	0.025	mg/L	10/15/19	10/21/19
200.7	POTASSIUM (K) (DISSOL	0.94	0.5	mg/L	10/15/19	10/21/19
200.8	ARSENIC (AS) (DISSOLVE	1.0	0.5	ug/L	10/15/19	11/11/19
200.8	IRON (FE) (DISSOLVED)	Not detected	40.0	ug/L	10/15/19	11/11/19
200.8	MANGANESE (MN) (DISS	25.4	0.5	ug/L	10/15/19	11/11/19

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Wet Lab Analysis

Kenneth D. Schmidt & Assoc.
600 West Shaw Avenue Suite 250
Fresno, CA 93704

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Cheryl Lassotovitch

Project: Yosemite West

Sample ID: LEBLANC WELL 3

APPL ID: BA00541

Sample Collection Date: 10/03/19

ARF: 90358

Method	Analyte	Result	PQL	Units	Prep Date	Analysis Date
HCO3	BICARBONATE	76.0	2.4	mg/L	10/04/19	10/04/19
SM 2320B	TOTAL ALKALINITY AS CACO3	76.0	2.0	mg/L	10/04/19	10/04/19
SM 2510B	SPECIFIC CONDUCTANCE	165	3.0	umhos/cm @ 25C	10/04/19	10/04/19
SM2540C	TOTAL DISSOLVED SOLIDS	124	10	mg/L	10/07/19	10/07/19
SM4500HB	PH	7.3@16C	1.0	pH Units	10/04/19	10/04/19

Form 1 - APPL Standard Wetlab - No MC
Printed: 11/26/19 12:57:28 PM

Metals Results

ARF: 90358

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Kenneth D. Schmidt & Assoc.
600 West Shaw Avenue Suite 250
Fresno, CA 93704

Attn: Cheryl Lassotovitch

Method	Analyte	Result	RL	MDL	Units	DF	Prep Date	Analysis Date
APPL ID: BA00541	-Client Sample ID: LEBLANC WELL 3		-Sample Collection Date: 10/03/19		Project: Yosemite West			
200.7	CALCIUM (CA) (DISSOLVED	18.9	0.05	0.035	mg/L	1	10/15/19	10/21/19
200.7	MAGNESIUM (MG) (DISSOL	2.2	0.025	0.0067	mg/L	1	10/15/19	10/21/19
200.7	POTASSIUM (K) (DISSOLVE	1.1	0.5	0.09	mg/L	1	10/15/19	10/21/19
APPL ID: BA00542	-Client Sample ID: LEBLANC WELL 4		-Sample Collection Date: 10/03/19		Project: Yosemite West			
200.7	CALCIUM (CA) (DISSOLVED	18.5	0.05	0.035	mg/L	1	10/15/19	10/21/19
200.7	MAGNESIUM (MG) (DISSOL	1.9	0.025	0.0067	mg/L	1	10/15/19	10/21/19
200.7	POTASSIUM (K) (DISSOLVE	0.94	0.5	0.09	mg/L	1	10/15/19	10/21/19

These results are preliminary and represent information available on 11/4/19 at 6:21 am

Printed: 11/04/19 6:21:08 AM

APPL-F1-SC-NoMC-REG MDLs

Wetlab Results

ARF: 90358

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Kenneth D. Schmidt & Assoc.
600 West Shaw Avenue Suite 250
Fresno, CA 93704

Attn: Cheryl Lassotovitch

Method	Analyte	Result	PQL	MDL	Units	Prep Date	Analysis Date
APPL ID: BA00541 -Client Sample ID: LEBLANC WELL 3 -Sample Collection Date: 10/03/19 Project: Yosemite West							
EPA 300.0	CHLORIDE	0.56 J	1.0	0.08	mg/L	10/07/19	10/07/19
EPA 300.0	FLUORIDE	0.17	0.1	0.08	mg/L	10/07/19	10/07/19
EPA 300.0	NITRATE	Not detected	0.5	0.04	mg/L	10/07/19	10/07/19
EPA 300.0	SULFATE	5.9	1.0	0.09	mg/L	10/07/19	10/07/19
SM 2320B	TOTAL ALKALINITY AS C	76.0	2.0	0.85	mg/L	10/04/19	10/04/19
SM 2510B	SPECIFIC CONDUCTANC	165	3.0	1.11	umhos/cm @ 25C	10/04/19	10/04/19
SM2540C	TOTAL DISSOLVED SOLI	124	10	4.0	mg/L	10/07/19	10/07/19
SM4500HB	PH	7.3@16C	1.0		pH Units	10/04/19	10/04/19
APPL ID: BA00542 -Client Sample ID: LEBLANC WELL 4 -Sample Collection Date: 10/03/19 Project: Yosemite West							
EPA 300.0	CHLORIDE	0.53 J	1.0	0.08	mg/L	10/07/19	10/07/19
EPA 300.0	FLUORIDE	0.17	0.1	0.08	mg/L	10/07/19	10/07/19
EPA 300.0	NITRATE	Not detected	0.5	0.04	mg/L	10/07/19	10/07/19
EPA 300.0	SULFATE	5.9	1.0	0.09	mg/L	10/07/19	10/07/19
SM 2320B	TOTAL ALKALINITY AS C	73.7	2.0	0.85	mg/L	10/04/19	10/04/19
SM 2510B	SPECIFIC CONDUCTANC	160	3.0	1.11	umhos/cm @ 25C	10/04/19	10/04/19
SM2540C	TOTAL DISSOLVED SOLI	109	10	4.0	mg/L	10/07/19	10/07/19
SM4500HB	PH	7.88@16.6C	1.0		pH Units	10/04/19	10/04/19

J = Estimated value.

These results are preliminary and represent information available on 11/4/19 at 6:24 am

Printed: 11/04/19 6:24:20 AM

Wet Lab Analysis

Kenneth D. Schmidt & Assoc.
600 West Shaw Avenue Suite 250
Fresno, CA 93704

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Cheryl Lassotovitch

Project: Yosemite West

Sample ID: LEBLANC WELL 4

APPL ID: BA00542

Sample Collection Date: 10/03/19

ARF: 90358

Method	Analyte	Result	PQL	Units	Prep Date	Analysis Date
HCO3	BICARBONATE	73.7	2.4	mg/L	10/04/19	10/04/19
SM 2320B	TOTAL ALKALINITY AS CACO3	73.7	2.0	mg/L	10/04/19	10/04/19
SM 2510B	SPECIFIC CONDUCTANCE	160	3.0	umhos/cm @ 25C	10/04/19	10/04/19
SM2540C	TOTAL DISSOLVED SOLIDS	109	10	mg/L	10/07/19	10/07/19
SM4500HB	PH	7.88@16.6C	1.0	pH Units	10/04/19	10/04/19

Form 1 - APPL Standard Wetlab - No MC
Printed: 11/26/19 12:57:28 PM

90358

CHAIN OF CUSTODY RECORD

APPL, Inc.
908 N Temperance Ave
Clovis, CA 93611
www.applinc.com

Phone: (559) 275-2175
Fax: (559) 275-4422
coc@applinc.com

C.O.C. 55478

Report to: (PLEASE PRINT)	Invoice to: (PLEASE PRINT)
Company Name: Ken Schmidt & Assoc Phone: 224-4412	Company Name: Phone:
Address: 600 W Shaw Ste 250 Fresno, CA 93704 Fax:	Address: Fax:
Attn: Cheryl Lassotovitch	Attn:
Email: classotovitch@gmail.com	Email:

Project Name/Number	Sampler (Print)	Date Shipped: 10/3/19
Yosemite West	Cheryl Lassotovitch	Carrier:
Purchase Order Number	Sampler (Signature) Cheryl Lassotovitch	Waybill No.:
		Comments:

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Matrix: Sed.	Matrix: Soil	Analysis Requested/Method Number: Fe, Mn, As, NO_3, F	EC, TDS, pH	Ca, Mg, K	Ca, SO_4, Hard	
~~Yosemite West~~ LeBlanc	Well 3	10/3/19	7:45	am	1	X			X	X	X	X	X
~~Yosemite West~~ LeBlanc	Well 4	10/3/19	9:30	am	1	X			X	X	X	X	X

For Metals - Please filter through a 0.45 micron filter and acidify prior to analysis

Shuttle Temperature:	Turnaround Requested: Check one	Sample Disposal:
IR @ -0.3 4.4/4.1	☒ Standard 2-3 wk ☐ One week ☐ 3 days ☐ 24/48 Hrs. ☐ Other:	☐ Return to client ☐ Disposal by Lab (30-day retention)

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Cheryl Lassotovitch	10/3/19	2:35pm					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date 10.3.19	Time 1435	Received at lab by:

White: Return to client with report Yellow: Laboratory Copy See reverse side for Container Preservative and Sampling Information

November 5, 2019

Kenneth D. Schmidt & Assoc.
600 W. Shaw Ave., Suite #250
Fresno, CA 93704

Lab ID : VI 1946066-001
Customer ID : 4-18180

Sampled On : October 3, 2019-07:45
Sampled By : Cheryl Lassotovitch
Received On : October 7, 2019-11:05
Matrix : Ground Water

Description : Le Blanc Well 3
Project : Yosemite West

Sample Result - Radio

Constituent	Result ± Error	MDA	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Radio Chemistry								
Gross Alpha	4.38 ± 1.26	0.968	pCi/L	15/5	900.0	10/24/19-10:30 2P1912319	900.0	10/25/19-13:12 2A1916781

ND=Non-Detected. PQL=Practical Quantitation Limit. * PQL adjusted for dilution.

MDA = Minimum Detectable Activity (Calculated at the 95% confidence level) = Data utilized by DHS to determine matrix interference.
MCL / AL = Maximum Contamination Level / Action Level. Alpha's Action Level of 5 pCi/L is based on the Assigned Value (AV).
AV = Assigned Value(Gross Alpha Result + (0.84 x Error)). CCR Section 64442: Drinking Water Compliance Note: Do the following
If Gross Alpha's (AV) exceeds 5 pCi/L run Uranium. If Gross Alpha's (AV) minus Uranium exceeds 5 pCi/L run Radium 226.

Drinking Water Compliance:
Gross Alpha (AV) minus Uranium is less than or equal to 15 pCi/L
Uranium is less than or equal to 20 pCi/L
Radium 226 + Radium 228 is less than or equal to 5 pCi/L

Note: Samples are held for 3-6 months prior to disposal.

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805)392-2000
Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209)942-0182
FAX: (209)942-0423
CA ELAP Certification No. 1563

Office & Laboratory
563 E. Lindo Avenue
Chico, CA 95926
TEL: (530)343-5818
FAX: (530)343-3807
CA ELAP Certification No. 2670

Office & Laboratory
3442 Empresa Drive, Suite D
San Luis Obispo, CA 93401
TEL: (805)783-2940
FAX: (805)783-2912
CA ELAP Certification No. 2775

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
TEL: (559)734-9473
FAX: (559)734-8435
CA ELAP Certification No. 2810

November 5, 2019

Kenneth D. Schmidt & Assoc.
600 W. Shaw Ave., Suite #250
Fresno, CA 93704

Lab ID : VI 1946066-002
Customer ID : 4-18180

Sampled On : October 3, 2019-09:30
Sampled By : Cheryl Lassotovitch
Received On : October 7, 2019-11:05
Matrix : Ground Water

Description : Le Blanc Well 4
Project : Yosemite West

Sample Result - Radio

Constituent	Result ± Error	MDA	Units	MCL/AL	Sample Preparation Method	Sample Preparation Date/ID	Sample Analysis Method	Sample Analysis Date/ID
Radio Chemistry								
Gross Alpha	0.000 ± 0.904	1.52	pCi/L	15/5	900.0	10/24/19-10:30 2P1912319	900.0	10/30/19-14:48 2A1917013

ND=Non-Detected. PQL=Practical Quantitation Limit. * PQL adjusted for dilution.

MDA = Minimum Detectable Activity (Calculated at the 95% confidence level) = Data utilized by DHS to determine matrix interference.
MCL / AL = Maximum Contamination Level / Action Level. Alpha's Action Level of 5 pCi/L is based on the Assigned Value (AV).
AV = Assigned Value(Gross Alpha Result + (0.84 x Error)). CCR Section 64442: Drinking Water Compliance Note: Do the following
If Gross Alpha's (AV) exceeds 5 pCi/L run Uranium. If Gross Alpha's (AV) minus Uranium exceeds 5 pCi/L run Radium 226.

Drinking Water Compliance:
Gross Alpha (AV) minus Uranium is less than or equal to 15 pCi/L
Uranium is less than or equal to 20 pCi/L
Radium 226 + Radium 228 is less than or equal to 5 pCi/L

Note: Samples are held for 3-6 months prior to disposal.

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Chico, CA 95926
TEL: (530)343-5818
FAX: (530)343-3807
CA ELAP Certification No. 2670

Office & Laboratory
3442 Empresa Drive, Suite D
San Luis Obispo, CA 93401
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Office & Laboratory
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Visalia, CA 93291
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Analytical Chemists

www.fglinc.com

CHAIN OF CUSTODY
AND ANALYSIS REQUEST DOCUMENT

ORIGINAL

CLIENT DETAILS — SECTION I

Client: Ken Schmidt & Associates
☐ New Customer Customer Number: _____
Address: 6000 W Shaw Ste 250
Fresno CA 93704
Phone: 559 224-4412 Fax: _____
E-Mail: classotovitch@gmail.com
Project name: Yosemite West
Contact person: Cheryl Lassotovitch

Billing Information (if different from above)
Name: _____
Address: _____
Phone: _____ Fax: _____
E-Mail: _____
Contact person: _____
Purchase order/contract/FGL quote number: _____
Pre Log Required: yes ____ Frequency: Monthly☐ Weekly☐ Quarterly☐ Other☐ _____

SAMPLING — SECTION II

Sampler (s): Cheryl Lassotovitch
Comp Sampler Set up Date: _____ Time: _____
Time: _____ Mileage: _____
Shipping Charge: _____ Pickup Charge: _____

REPORT INFORMATION — SECTION III

Rush Analysis (surcharge will apply):
☐5 Day ☐4 Day ☐3 Day ☐2 Day ☐24 hour
Rush pre-approved by lab: _____
Electronic Data Transfer: ☐yes ☐no
If yes, To: State ____ Client ____ Other ____
Lab number: 19460606

SAMPLE INFORMATION — SECTION IV

Sample Number	Location/Description	Date Sampled	Time Sampled	Type of Sampling: Composite (C) or Grab (G)	Number of Containers	Type of Containers: (G) Glass (P) Plastic (V) VOA (MT) Metal Tube	(P) Potable (NP) Non-Potable	(SW) Surface Water (MW) Monitoring Well (GW) Ground Water (TB) Travel Blank (AgW) Ag Water (WW) Wastewater (DW) Drinking Water	(S) Soil (SLG) Sludge (SLD) Solid (O) Oil	BacT: (Sys) System (SRC) Source (W) Waste	BacT: Routine (ROUT) Repeat (RPT) Other (OTH) Replace (RPL)	(LT) Leaf Tissue (PET) Petiole Tissue (PRD) Produce	Preservative: (1) NaOH + ZnAc, (2) NaOH, (3) HCL (4) H_2SO_4, (5) HNO_3, (6) $Na_2S_2O_3$, (7) Other ____	Analyses Requested: Gross Alpha	Uranium if GA > 5pCi/L
	~~Yosemite West~~ Well 3	10/3/19	7:45am	G	2	P	P	GW						X	X
	~~Yosemite West~~ Well 4	10/3/19	9:30am	G	2	P	P	GW						X	X
	* Please filter through a 0.45 micron filter before analyzing.														
	TRACKING #: 1Z 4R2 671 03 5552 9257														

REMARKS — SECTION V

20C

CUSTODY — SECTION VI

Relinquished by and subject to the terms and conditions on the reverse of this document:
Cheryl Lassotovitch Date: 10/4/19 Time: 10:00am Relinquished by: _____ Date: _____ Time: _____
Received by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____
Relinquished by: _____ Date: _____ Time: _____ Relinquished by: UPS Date: _____ Time: _____
Received by: _____ Date: _____ Time: _____ Received by: _____ Date: 10/7/19 Time: 1105

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Santa Paula, CA 93060
TEL: (805) 392-2000
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