

MEMO

TO: District Manager
FROM: Director of Operations
SUBJECT: OPERATIONS DEPARTMENT STATUS REPORT
MARCH 2020
DATE: April 16, 2020

RECOMMENDATION:

It is recommended that the District Manager review and file the Operations Department Project Status Report for the month of March 2020.

BACKGROUND:

COVID 19

Due to the pandemic staff has been isolated and working separately out of District Vehicles. Essentials to keep safe drinking water flowing to the tap is our main priority. Things have been going smoothly and will continue.

DISTRICT WIDE FLUSHING

In March 2020 District staff continued the District's flushing program. Flushing began Monday February 3, 2020. The Flushing program is moving right along and staff has continued to see flushing moving along well with the extended period of time on surface water in 2019.

The flushing program is going to be complete for the year on April 17, 2020.

BEAR CREEK ROAD SLIDE AND WATER MAIN BREAK

During the month of March 2020 staff has worked on plans and specifications for the relocation of the 8 inch main line. Coordination with the County Public Works department for layout and timeline of relocating the main line has been in process as well. Construction is set to begin the week of April 6, 2020.

On January 28, 2020 District on-call staff was called out to a main break on Bear Creek Rd. Staff responded and found that a portion of Bear Creek Rd. had slid and 26 feet of 8 inch transite pipe was missing. Staff shut down the main line and made temporary repairs with a two inch polyethylene pipe as a jumper across the slide and break area. Estimated a total of 45,000 gallons of water were lost.

EL SOLYO TEMPORARY TANK

Staff completed the installation of the temporary 10,000 gallon poly water tank. The old redwood tank has been removed and staff is beginning construction of a concrete pad for the installation of two 10,000 gallon poly tanks on the site.

BLUE TANK GENERATOR SITE

During the month of March 2020 District staff has not been able to work on installation of the propane service and stand by generator at this site due to the COVID 19. A crane is needed to place the propane tank and generator at this site and the District has been unable at this point to get a company out due to the pandemic. Staff will continue to seek out and schedule a crane service.

FELTON WATER SYSTEM WATER METER REPLACEMENT

Domestic water meters are being replaced as existing meters have reached their life expectancy. Meters are being changed to the new Beacon "Eye on Water" system that will allow customers to monitor their water usage over the internet.

MAINTENANCE ISSUES

Removed 80 feet of old 2 inch main line on Rosebloom Drive Felton

Began install of a small pressure system on Wells Road Felton

Installed anti climb hatch on the access ladder to Blue Tank

Secured the old Quail Well 8 well head from contamination

Changed 2 inch meter at the Felton Laundromat

James Furtado

Director of Operations

SAN LORENZO VALLEY WATER DISTRICT PRODUCTION COMPARRISON

Source	March-20	February-20	March-13	Difference This Year To 2013
North System				
Surface Water Sources				
Foreman Creek	6,622,451	11,229,884	28,219,000	
Peavine Creek + Hydro	1,423,351	1,625,535	5,297,000	
Clear Creek	4,945,319	5,532,349		
Sweetwater Creek	3,296,879	3,688,232		
Sub-Total (Streams)	16,288,000	22,076,000	33,516,000	-51.40%
Wells (North)				
Olympia No. 2	392,000	1,413,000	0	
Olympia No. 3	0	149,000	0	
Quail Well No. 4-A	7,942,000	4,920,000	1,610,000	
Quail Well No. 5-A	-	-	4,800	
Sub Total North Wells	8,334,000	6,482,000	1,614,800	416.10%
South System Wells				
Pasatiempo 5A	4,082,400	4,061,500	N/A	
Pasatiempo 6	-	-	6,227,000	
Pasatiempo 7	1,061,000	1,059,000	2,125,000	
Pasatiempo 8	2,728,970	2,549,220	N/A	
Sub Total Pasatiempo Wells	5,143,400	5,120,500	8,352,000	-38.42%
North South All Sources Combined	29,765,400	33,678,500	43,482,800	-31.55%
Felton System - Surface Water				
Fall Creek	4,410,669	4,258,068	5,004,570	
Bennett Spring	2,546,192	2,436,236	4,158,400	
Bull 1 & 2	1,277,584	1,142,196	4,130,500	
Total Felton System Sources	8,234,445	7,836,500	13,293,470	-38.06%
Manana Woods System				
Well 1	-	-	386,725	
Total Manana Woods Sources	-	-	386,725	
Sub - Total Production				
North / Felton / Manana	37,999,845	41,515,000	57,162,995	-33.52%
Surface	24,522,445	29,912,500	46,809,470	-47.61%
Wells	13,477,400	11,602,500	10,353,525	30.17%
Total Surface Water Percentage	64.53	72.05	81.89	-21.19%
Total Wells Percentage	35.47	27.95	18.11	95.82%

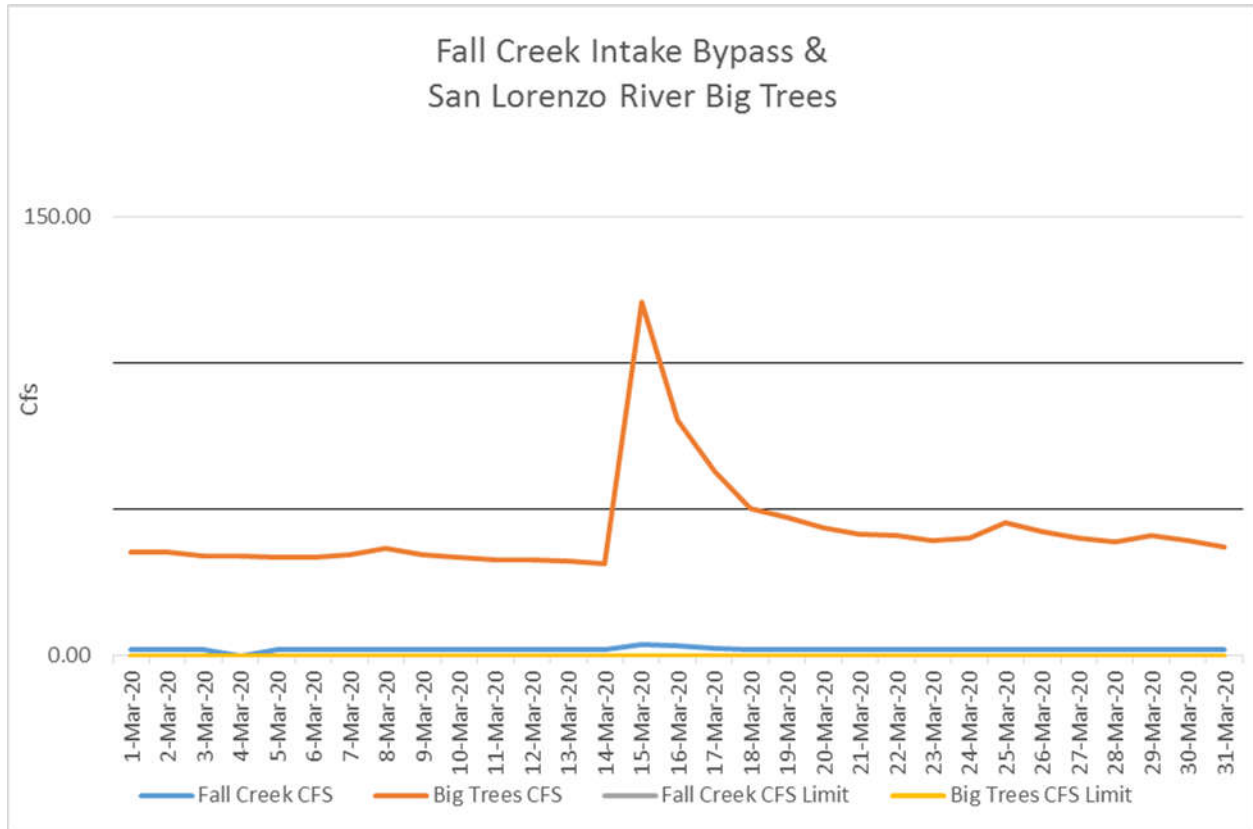
**SAN LORENZO VALLEY WATER DISTRICT
PRODUCTION BY SYSTEM
+/- INTERTIES
March 2020**

North System All Sources	<u>29,765,400</u>
Interties IN +	<u>624,171</u>
Interties OUT -	<u>3</u>
TOTAL NORHT SYSTEM	<u>30,389,568</u>
Felton Water system All Sources	<u>8,234,445</u>
Interties IN +	<u>0</u>
Interties OUT -	<u>0</u>
TOTAL FELTON SYSTEM	<u>8,234,445</u>
Manana Woods System	
Manana Woods Well 1	<u>0</u>
Interties IN +	<u></u>
TOTAL MANANA WOODS	<u>0</u>

SAN LORENZO VALLEY WATER DISTRICT
INTERTIE USAGE
March 2020

INTERTIE 2	
SLVWD to SVWD	<u>0</u>
SVWD to SLVWD	<u>0</u>
INTERTIE 3	
SLV SOUTH to SLV NORTH	<u>624,171</u>
SLV NORTH to SLV SOUTH	<u>3</u>
INTERTIE 4	
SLVWD to MHWD	<u>0</u>
MHWD to SLVWD	<u>0</u>
INTERTIE 6	
SLV NORTH to SLV FELTON	<u>-</u>
SLV FELTON to SLV NORTH	<u>-</u>

Fall Creek Intake March 2020



Normal Rainfall Fall Creek Intake Bypass Requirements

April 1 through October 31 1.0 cubic feet per second

November 1 through March 31 1.5 cubic feet per second

Dry Conditions Fall Creek Intake Bypass Requirements

April 1 through October 31 0.5 cubic feet per second

November 1 through March 31 0.75 cubic feet per second

Number of Days in month 0.75 cfs or below, ZERO days

San Lorenzo River USGS Big Trees Flow Requirements

September 11 cubic feet per second

October 26 cubic feet per second

November 1 through May 31 21 cubic feet per second

June - August No Requirements

Fall Creek Intake March 2020

For the protection of fish and wildlife, during the period: (a) April 1 through October 31 bypass a minimum of 0.5 cfs; (b) November 1 through March 31 bypass a minimum of 1.5 cfs past the Fall Creek point of diversion. The natural streamflow shall be bypassed whenever it is less than 1.5 cfs; provided, however, that during a dry year, the bypass requirement shall be reduced from 1.5 to 0.75 cfs. A dry year is defined on a monthly basis of cumulative runoff beginning October 1 of each season in the San Lorenzo River at the USGS gage at Big Trees. These runoff figures are based on approximately 50 percent of normal runoff as the dividing level between normal and dry year runoff and are as follows:

- November 1 for the month of October 500 af
- December 1 for October-November, inclusive 1,500 af
- January 1 for October-December, inclusive 5,000 af
- February 1 for October-January, inclusive 12,500 af
- March 1 for October-February, inclusive 26,500 af

Fall Creek Weir Measurement

	Month:	March		Year:	2020	Big Trees > 26,500 Acre-ft Oct-Feb Normal Year			Big Trees <26,500 Acre-ft Oct-Feb Dry Year		
										<input checked="" type="checkbox"/>	
Date	Time	Initials	Pump #	Fall Cr. GPM into Kirby plant	Weir Board Height (inches)	Fall Creek Bypass (CFS)	Big Trees Bypass (CFS)	Rainfall (Felton gauge)	Met Fall Cr, Bypass Requirement: Normal Year April 1 - Oct 31 1.0 cfs; Nov 1 - March 31 1.5 cfs Dry Year April 1 - Oct 31 0.5 cfs Nov. 1 - March 31 0.75 cfs (yes/no)	Met Big Trees Requirement Nov-May 20cfs Sept 10 cfs Oct 25 cfs (yes/no)	Notes
1	0815	JT	2	126	25	2.06	35.4	0	yes	yes	
2	0745	SS	2	123	25	2.052	35.3	0	yes	yes	
3	0810	SS	1	126	25	1.994	34	0	yes	yes	
4	1000	SS	1	0*	25	1.603*	34	0	yes	yes	*FC Maintenance, weir pulled
5	0745	SS	1	109	25	1.945	33.4	0	yes	yes	
6	0815	TH	1	94	25	2.004	33.4	0	yes	yes	
7	1000	HO	1	94	25	2.082	34.7	0.1	yes	yes	
8	0945	HO	1	97	25	2.063	36.6	0.09	yes	yes	
9	0830	TH	1	101	25	1.994	34.7	0	yes	yes	
10	0730	KM	1	130	25	1.935	33.4	0	yes	yes	
11	0730	KM	1	133	25	1.887	32.7	0.03	yes	yes	
12	0745	KM	1	130	25	1.877	32.7	0	yes	yes	
13	0900	SS	1	117	25	1.877	32.1	0	yes	yes	
14	0935	TH	1	116	25	1.857	31.5	0	yes	yes	
15	0910	TH	1	90	25	3.803	121	2.02	yes	yes	
16	0800	TH	1	86	25	3.294	80.4	0.44	yes	yes	
17	0745	KM	1	99	25	2.366	62.9	0.04	yes	yes	
18	0830	JG	1	117	25	2.179	50.2	0.05	yes	yes	
19	0745	KM	1	91	25	2.23	47	0.02	yes	yes	
20	0815	JG	1	80	25	2.209	43.9	0	yes	yes	
21	1000	SS	1	86	25	2.16	41.6	0.04	yes	yes	
22	0945	SS	1	106	25	2.072	40.9	0.03	yes	yes	
23	0830	JG	1	81	25	2.033	39.4	0	yes	yes	
24	0730	KM	1	92	25	1.994	40.1	0.02	yes	yes	
25	0750	KM	1	75	25	1.975	45.4	0.06	yes	yes	
26	0745	KM	1	90	25	1.975	42.3	0.03	yes	yes	
27	0800	KM	1	83	25	2.023	40.1	0.07	yes	yes	
28	1045	JG	1	88	25	2.063	38.7	0.05	yes	yes	
29	1310	JG	1	94	25	2.179	40.9	0.21	yes	yes	
30	0900	KM	1	106	25	1.984	39.4	0.02	yes	yes	
31	0730	TH	1	94	25	2.033	37.3	0	yes	yes	

San Lorenzo Valley Water District
Loch Lomond Water Supply
March 2020

Loch Lomond Water Level



Week ending Wednesday 4 / 05 / 2020
(in feet above mean sea level; lake spills at 577.15 feet)

Currently:	574.95 ft
Percent of Capacity:	95.1%

In 1958 SLVWD sold 2,500 acres of property in the vicinity of the Newell Creek Watershed to the City of Santa Cruz, with the agreement that SLVWD would be entitled to purchase 12 ½ percent of the annual safe yield from a future Newell Creek reservoir, up to a maximum of 500 AF/yr. Based on the 1958 agreement, SLVWD began receiving deliveries of Loch Lomond water from the City in 1963. In 1965 the District constructed the Glen Arbor Water treatment plant for treating Loch Lomond water. Toward the end of the 1976-77 drought, the City stipulated that the District was not entitled to an allocation of 500 AF/yr, merely 12.5% of the safe yield. This decision based on a reduction to the estimated annual safe yield from the Newell Creek Reservoir, reduced the Districts contractual allocation. On June 7, 1977, the District filed a Complaint for Declaratory Relief, which requested the court to make a judicial determination of the respective parties' duties and rights. In June 1980 a court order fixed the estimated safe yield from Newell Creek Reservoir at reduced quantity, which resulted in a reduction to the Districts contractual allocation to 313 AF/yr.

Production Loch Lomond to SLVWD

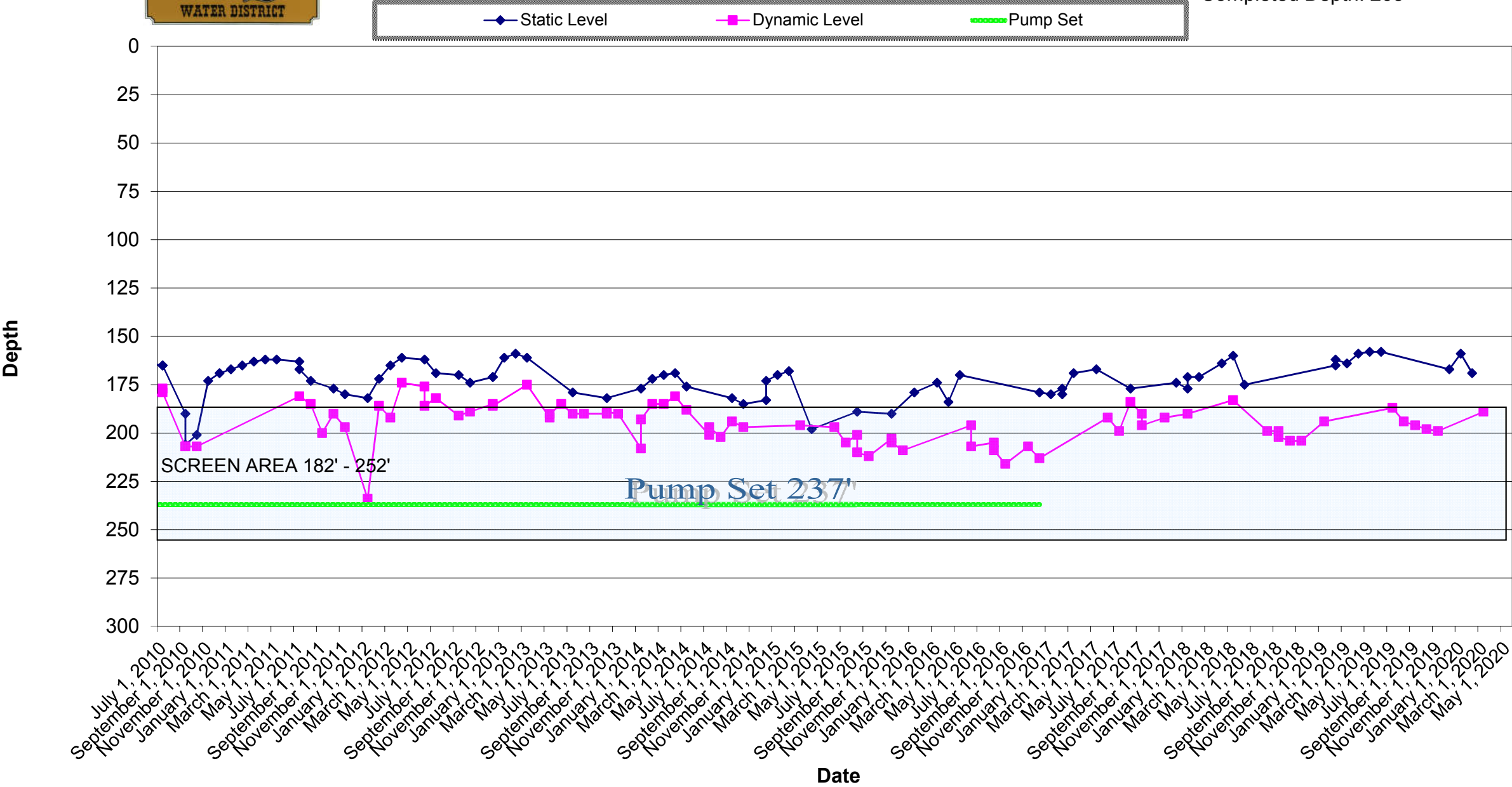
Date	Total Used	Total Available
1976 July to June 1977	353 AF	
1977 July to June 2015	0	313 AF
2015 July to 02/2016	0	313 AF
2/20/16 to Current	0	313 AF

Last time District used Loch Lomond water was June 1977



SAN LORENZO VALLEY WATER DISTRICT
Well Drawdown Report
Quail Well 4-A

Location: Cumora Ln. Ben Lomond
Elevation: 596.54 ft @ Pad
Installed: 6-07-2001
State Well #: 4410014-026
Completed Depth: 265



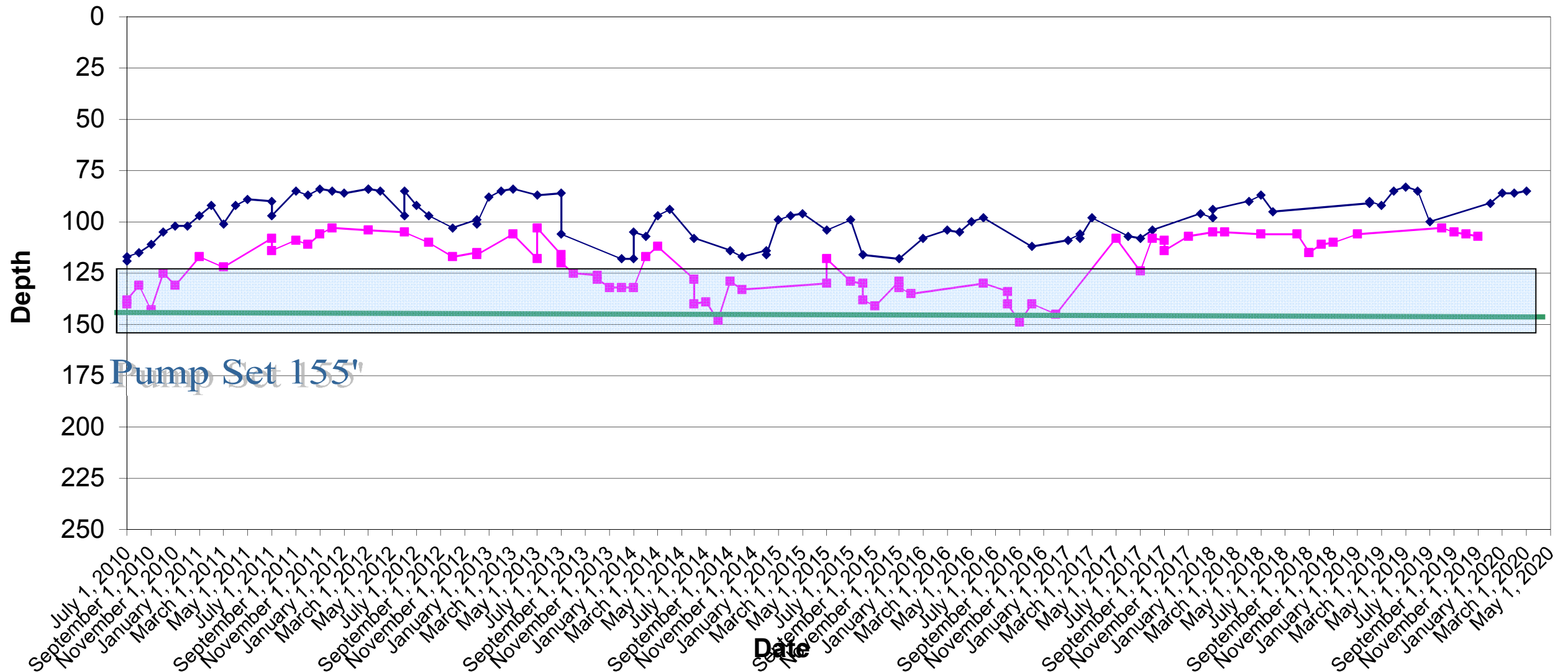


SAN LORENZO VALLEY WATER DISTRICT

Well Drawdown Report

Quail Well 5-A

Location: 1161 Quail Hollow Rd.
Ben Lomond
Elevation: 517.65 ft. @ Pad
Installed: March 2000
State Well #: 4410014-025
Completed Depth: 174'



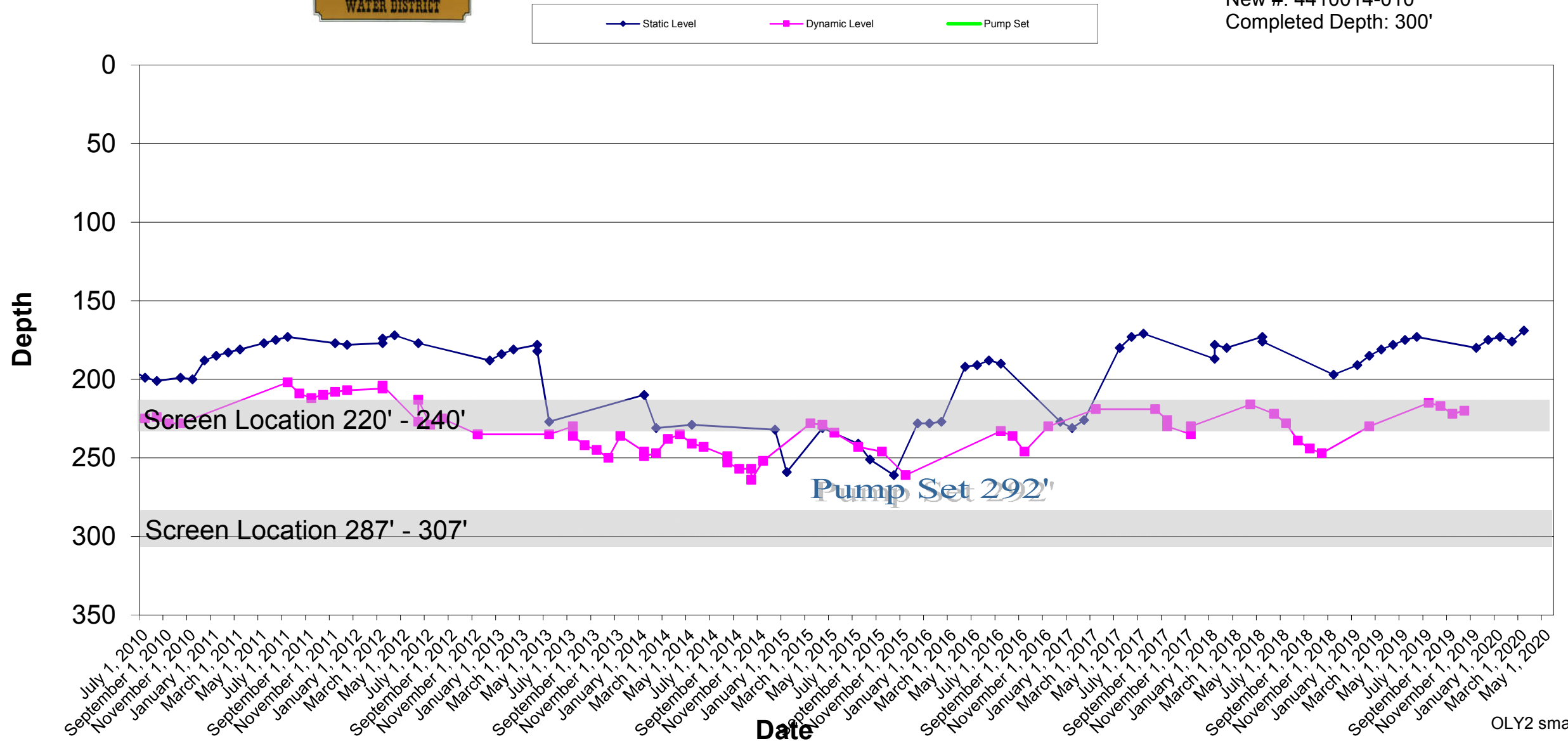


SAN LORENZO VALLEY WATER DISTRICT

Well Drawdown Report

Olympia 2

Location: 7701 E. Zayante Rd.
Elevation: 525'
Installed: April 28, 1980
State Well #:10S/O2W-11P01
New #: 4410014-010
Completed Depth: 300'



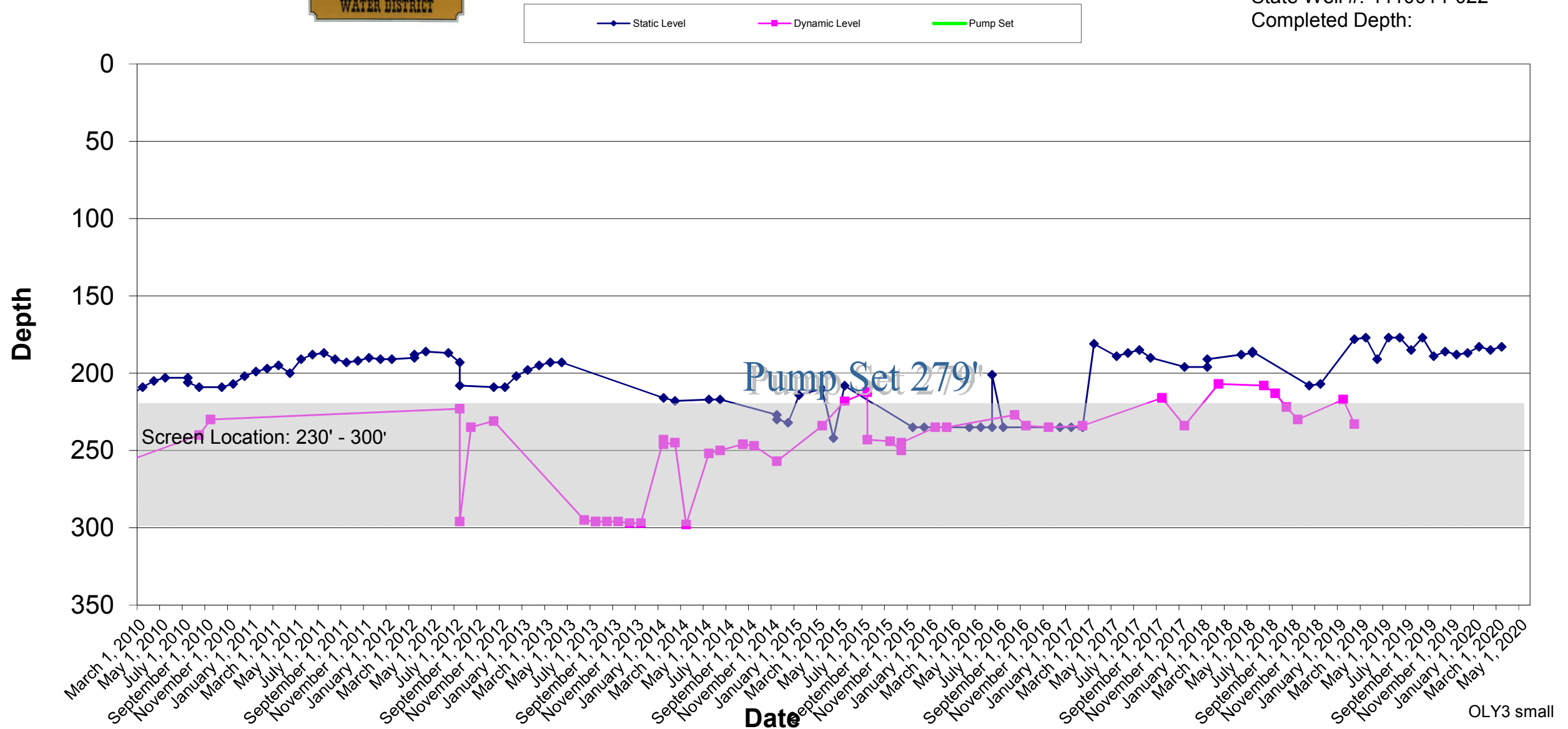


SAN LORENZO VALLEY WATER DISTRICT

Well Drawdown Report

Olympia 3

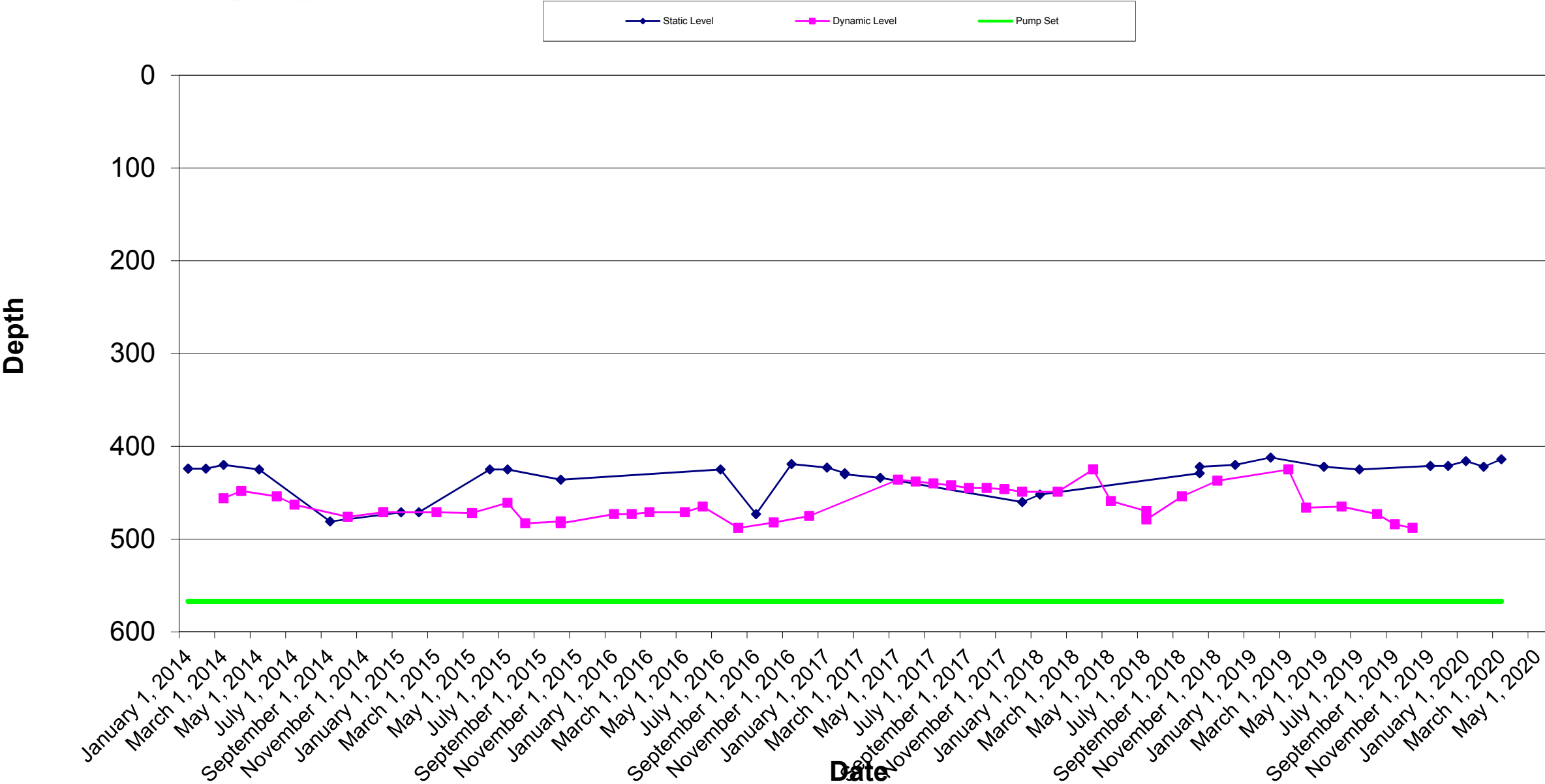
Location: 7701 E. Zayante Rd
Elevation: 538' Mean Sea Level
Installed: 8-15-90
State Well #: 4410014-022
Completed Depth:





SAN LORENZO VALLEY WATER DISTRICT
Well Drawdown Report
Pasatiempo 5-A

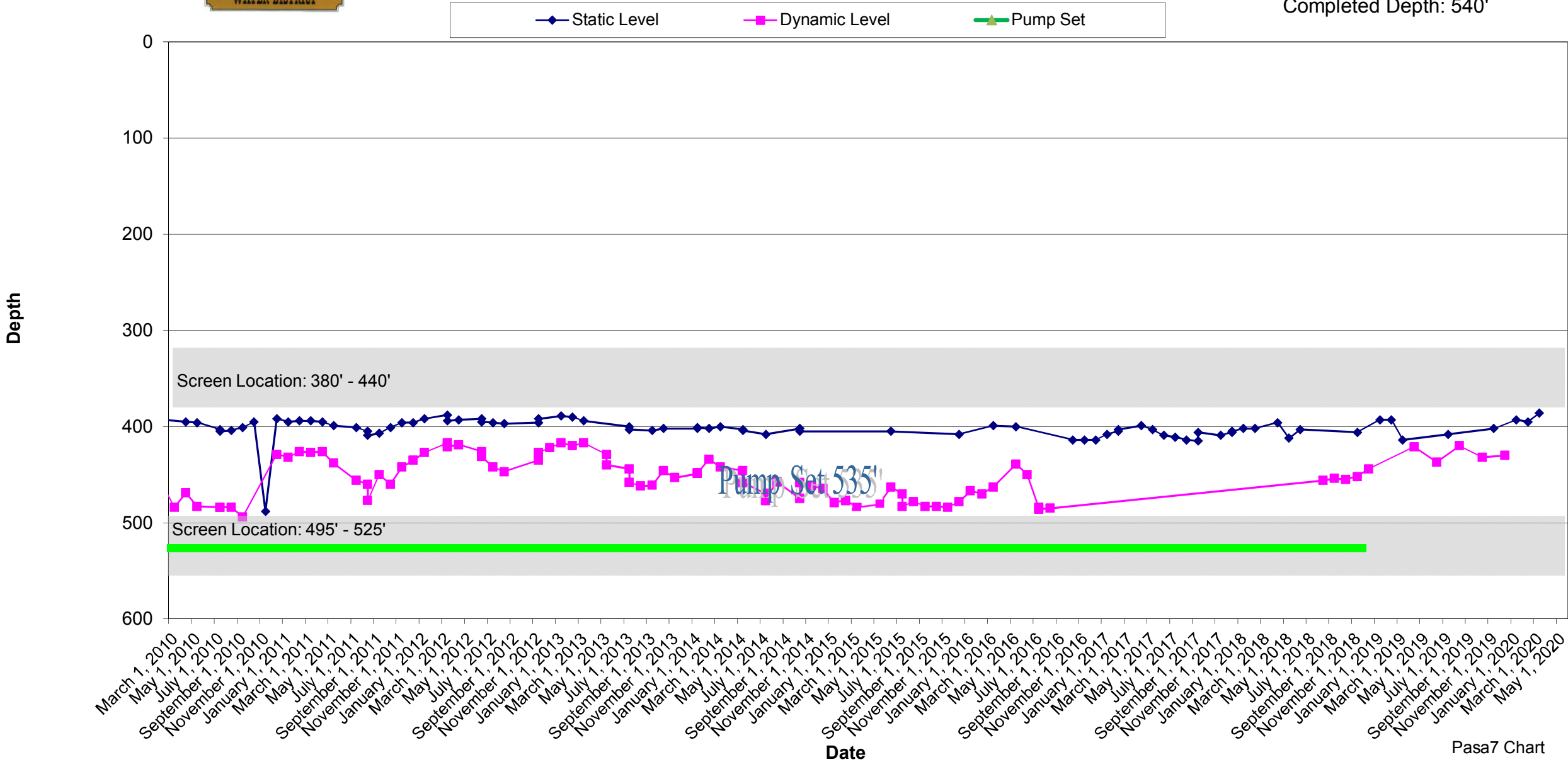
Location: So. Of 3650 Graham Hill Rd
Elevation: 752'
Installed 1-1-14
State Well #:4410014-014
Completed Depth: 710'





SAN LORENZO VALLEY WATER DISTRICT
Well Drawdown Report
Pasatiempo 7

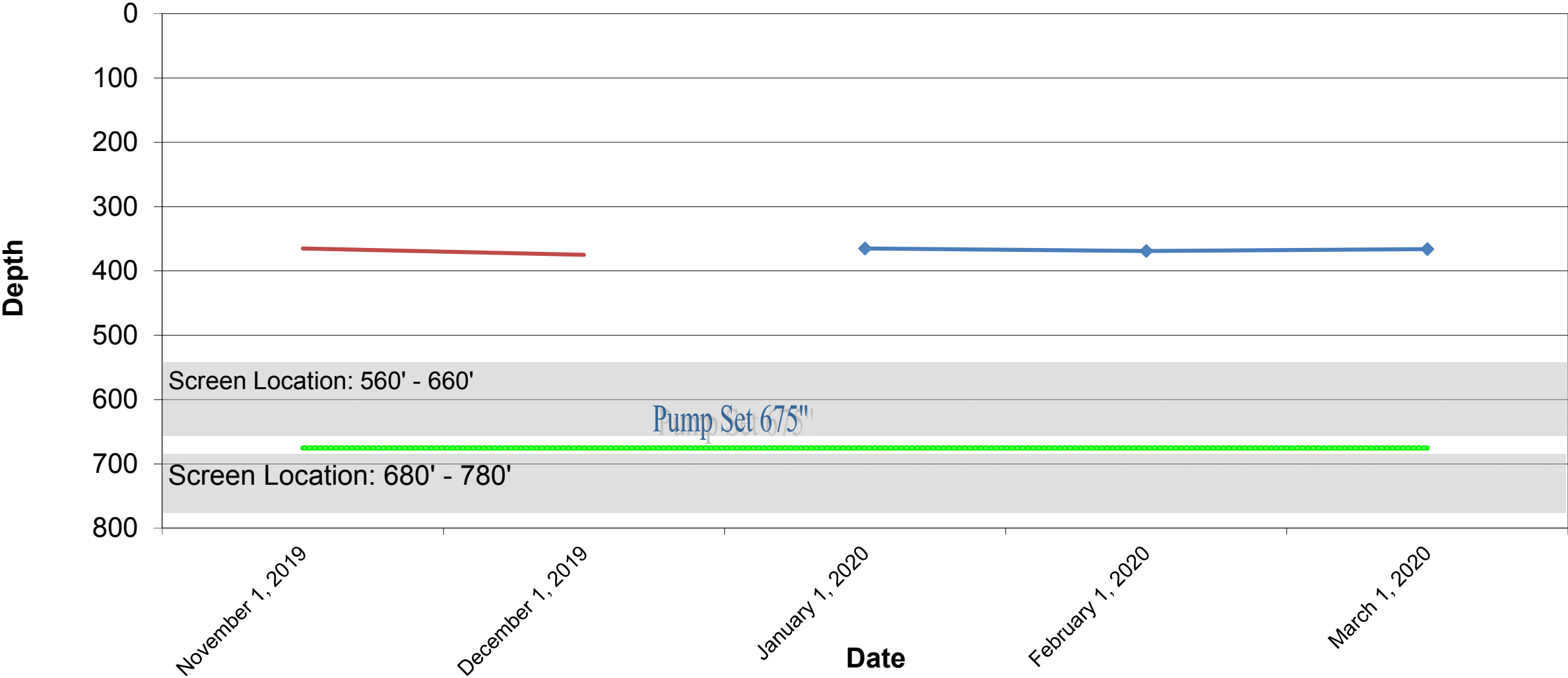
Location: South of Probation
Center
Elevation: 734' MSL
Installed: July 21, 1990
State Well #: 4410014-024
Completed Depth: 540'



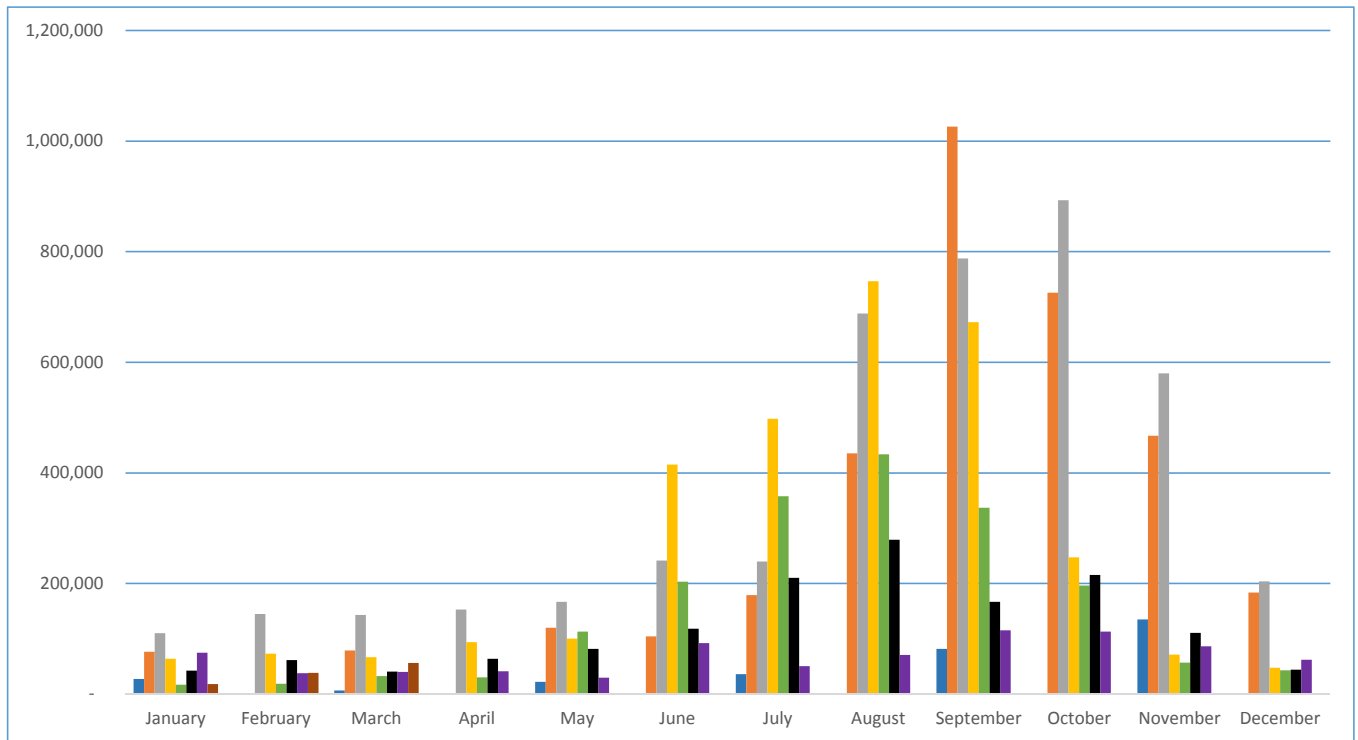


SAN LORENZO VALLEY WATER DISTRICT
Well Drawdown Report
Pasatiempo 8

Location: Behind 3650 Graham Hill Rd.
Elevation: 775'
Installed: 11-20-2019
State Well #: 4410014-041
Completed Depth: 805'



SAN LORENZO VALLEY WATER DISTRICT
BULK WATER SALES
GALLONS
March 2020



Month	2013	2014	2015	2016	2017	2018	2019	2020
January	26,928	76,296	109,965	63,850	16,456	41,888	74,800	17,952
February			144,364	72,556	18,700	61,366	37,400	38,148
March	5,984	78,540	142,868	66,572	32,164	40,392	39,644	56,100
April			152,592	93,500	29,920	63,580	41,140	
May	21,692	119,680	166,804	100,232	112,948	81,532	29,172	
June		103,972	240,983	415,140	203,179	118,184	92,004	
July	35,904	178,772	239,360	497,420	357,544	210,188	50,116	
August		435,336	688,160	746,504	433,092	279,004	70,312	
September	81,352	1,026,256	787,644	672,183	336,570	166,804	115,192	
October		725,560	893,112	246,840	195,976	215,424	112,948	
November	134,640	466,752	579,700	71,060	56,848	110,704	86,020	
December		183,260	203,456	47,124	42,636	44,132	62,084	
Totals	306,500	3,394,424	4,349,008	3,092,981	1,836,033	1,433,198	810,832	112,200

SAN LORENZO VALLEY WATER DISTRICT
MONTHLY LEAK REPORT
March 2020

Leak Type	Location - NORTH SYSTEM	Town	Gallons Lost
400 MAIN LEAKING	212 RIVERSIDE PARK DR	BEN LOMOND	1,080
400 MAIN LEAKING	750 PARK DR	BEN LOMOND	100
Total North			1,180
FELTON SYSTEM			
400 MAIN LEAKING	12489 COLEMAN AVE	FELTON	720
Total Felton			720
LOMPICO			
Total Lompico			-
SCOTTS VALLEY			
Total Scotts Valley			-
Total All Systems			1,900

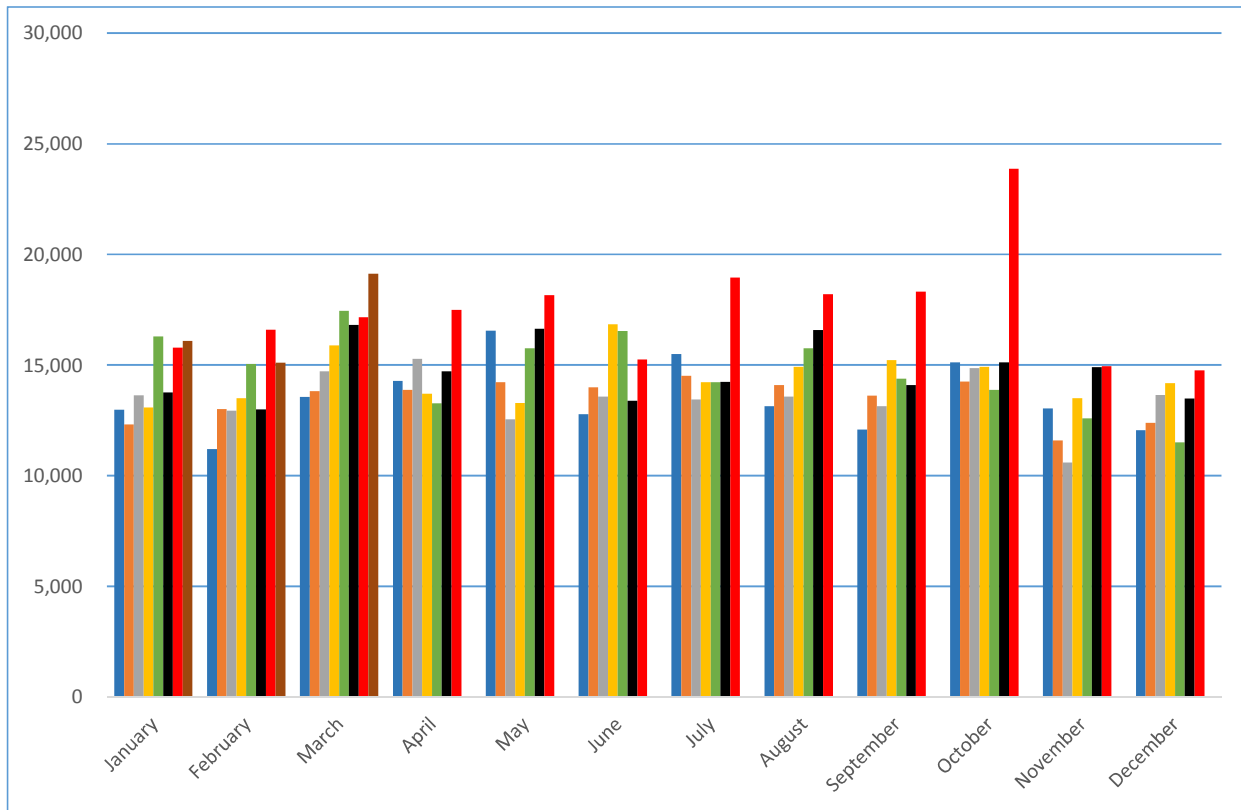
SLV Monthly Water Quality Service Order Summary

				Water Quality Complaint List						
Date Received	Type Of Complaint							Address	Conclusion	System
	Taste/ Odor	Color	Turbidit y/Particl es	Worms/ Other Visible Organisms	Pressure (High/Low)	Illness (Waterborne)	Other (Specify)			
3/30/2020	X						Customer complained of strong chlorine taste for the past 2 days	258 Either Way	Upon investigation by SLVWD staff, water quality results were normal and within range. A sample was collected from the fire hydrant in front of the customers residence, which had a free chlorine residual of 1.1 mg/L. Customer was notified of results and will call back with any other water quality concerns.	SLVWD-North

SAN LORENZO VALLEY WATER DISTRICT

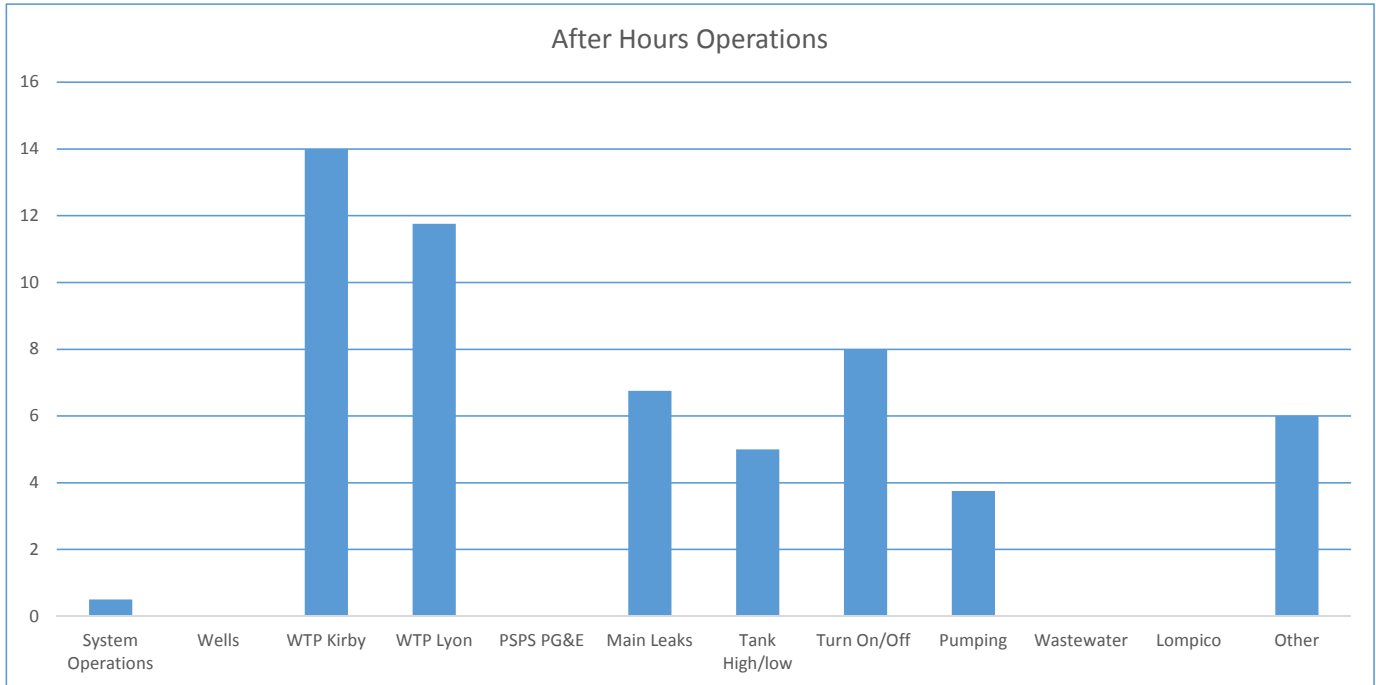
VEHICLE MILEAGE

March 2020



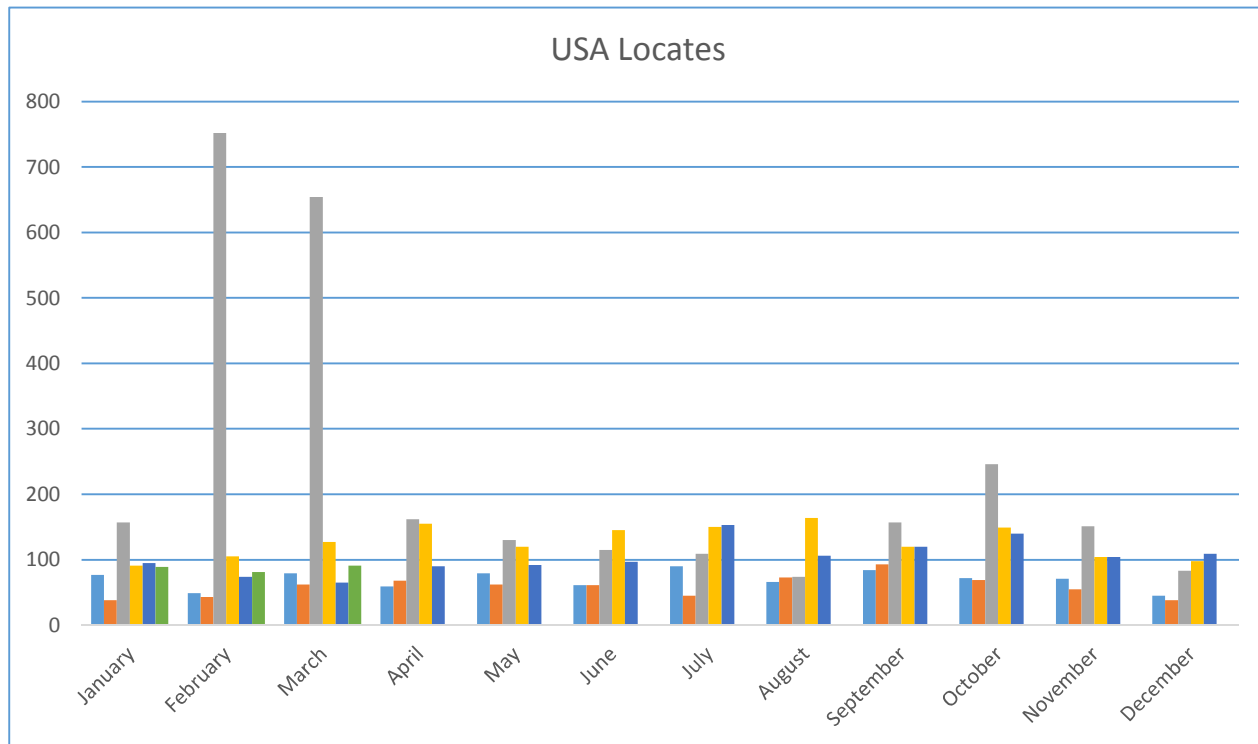
<u>Month</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
January	12,976	12,317	13,633	13,082	16,286	13,763	15,790	16,088
February	11,201	13,015	12,934	13,505	15,045	13,003	16,599	15,113
March	13,558	13,817	14,714	15,882	17,451	16,809	17,167	19,132
April	14,283	13,883	15,279	13,704	13,270	14,711	17,488	
May	16,560	14,228	12,550	13,290	15,757	16,646	18,156	
June	12,780	14,000	13,582	16,841	16,534	13,390	15,249	
July	15,497	14,519	13,441	14,228	14,229	14,242	18,955	
August	13,136	14,096	13,569	14,923	15,761	16,576	18,194	
September	12,087	13,622	13,137	15,229	14,388	14,094	18,321	
October	15,120	14,261	14,868	14,924	13,880	15,126	23,864	
November	13,046	11,594	10,591	13,510	12,598	14,908	14,942	
December	12,060	12,394	13,648	14,187	11,512	13,492	14,763	
Totals	162,304	161,746	161,946	173,305	176,711	176,760	209,488	50,333

SAN LORENZO VALLEY WATER DISTRICT
OPERATIONS DEPARTMENT
 March 2020



Description	Hours		2015	2016	2017	2018	2019	2020
System Operations	0.5	January	N/A	145.00	280.75	90.50	96.50	109.00
Wells	0	February	N/A	86.50	192.25	72.00	180.00	89.50
WTP Kirby	14	March	N/A	153.75	105.75	80.25	106.25	55.75
WTP Lyon	11.75	April	82.50	72.00	128.75	156.75	76.25	
PSPS PG&E	0	May					82.50	
Main Leaks	6.75	June	172.50	83.25	112.75	89.00	136.75	
Tank High/low	5	July	124.25	80.25	162.00	145.25	158.30	
Turn On/Off	8	August	111.75	81.25	141.25	134.5	119.75	
Pumping	3.75	September	230.25	175.00	201.25	155.25	133.00	
Wastewater	0	October	128.25	78.50	104.00	111.5	605.75	
Lompico	0	November	114.25	96.25	122.50	197.5	182.00	
Other	6	December	186.25	130.75	134.00	220.25	195.50	
Total	55.75		1150.00	1182.50	1685.25	1452.75	2072.55	

SAN LORENZO VALLEY WATER DISTRICT
OPERATIONS DEPARTMENT
March 2020



Month	2015	2016	2017	2018	2019	2020
January	77	38	157	91	95	89
February	49	43	752	105	74	81
March	79	62	654	127	65	91
April	59	68	162	155	90	
May	79	62	130	120	92	
June	61	61	115	145	97	
July	90	45	109	150	153	
August	66	73	74	164	106	
September	84	93	157	120	120	
October	72	69	246	149	140	
November	71	55	151	104	104	
December	45	38	83	98	109	
Total to Date	832	707	2,790	1528	1245	261

