

MEMO

TO: District Manager

FROM: Director of Operations

SUBJECT: OPERATIONS DEPARTMENT STATUS REPORT
AUGUST 2019

DATE: SEPTEMBER 19, 2019

RECOMMENDATION:

It is recommended that the District Manager review and file the Operations Department Project Status Report for the month of August 2019.

BACKGROUND:

PROBATION TANK REPLACEMENT

The contractor is in full construction on the replacement of the Probation tank. The contractor completed the ring foundation for the tank and tank pad. Construction is expected to continue until October 2019.

The Old 100,000 gallon redwood tank at the probation site was in very poor condition and was leaking towards the end of its life at an estimated 35-40 gallons per minute. Temporary poly tanks were installed by District staff in the summer of 2018. The system is running on minimal storage through construction. The residents of this area have been cautioned to conserve water during this time.

PASO WELL #8

The new Paso Well #8 construction continues. The District has been working with the concrete contractor on construction of the Well head pad and chlorination building and both were completed. The Well drilling contractor has completed the installation of the well column, pump, and motor. District staff is working on the discharge piping and the electrical for running the well. Expected completion of the Well is late September.

Paso Well #8 is a replacement to Paso Well #6 that began splitting in its casing in 2015, which was allowing sand to overcome the pump and motor. Many attempts to fix and seal the casing on the Well were unsuccessful leading to full replacement of the Well.

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.

LOMPICO PRV’S

District staff has continued to install main line isolation valves. The isolation valves are crucial to this project for isolation of the PRV stations during construction. Construction installation of the PRV stations was set to begin the first week of September this has been pushed out to the end of September due to delivery of the PRV stations.

The District is in contract to have the Lompico PRV’s replaced as part of the assessment. Having functioning PRV’s is important to a system like this with a large span of elevations. Pressures have to be reduced as the water gets lower in elevation from the tanks as they gain pressure the lower the elevation gets. With non-functioning PRV’s the pressure gets very high in the lower elevations and causes failure of main lines and service lines.

MAINTENANCE ISSUES

System Wide

- 6 inch check valve replacement Olympia Well 2.
- 6 inch main break Fairview Road Boulder Creek.
- Two 6 inch main breaks Hermosa Ave Ben Lomond.
- 6 inch main break Brookside Ave Ben Lomond.
- 50 feet of 2 inch main replaced on Laurel Ave Felton
- Replaced valve boxes on Love Creek Road for road sealing.
- Fixed approximately 22 other various leaks throughout the District.

James Furtado

Director of Operations

SAN LORENZO VALLEY WATER DISTRICT

PRODUCTION COMPARRISON

Source	August-19	July-19	August-13	Difference This Year To 2013
North System				
Surface Water Sources				
Foreman Creek	8,525,018	14,003,596	9,503,000	
Peavine Creek + Hydro	1,220,639	1,443,109	2,662,000	
Clear Creek	10,200,206	10,689,177	0	
Sweetwater Creek	6,800,137	7,126,118	0	
Sub-Total (Streams)	26,746,000	33,262,000	12,165,000	119.86%
Wells (North)				
Olympia No. 2	6,242,000	1,590,000	15,905,000	
Olympia No. 3	-	-	10,475,000	
Quail Well No. 4-A	9,412,000	7,131,000	7,841,000	
Quail Well No. 5-A	3,209,300	3,682,000	4,843,000	
Sub Total North Wells	18,863,300	12,403,000	39,064,000	-51.71%
South System Wells				
Pasatiempo 5A	8,719,600	9,992,600	N/A	
Pasatiempo 6	-	-	9,923,000	
Pasatiempo 7	1,908,000	1,606,000	3,078,000	
Sub Total Pasatiempo Wells	10,627,600	11,598,600	13,001,000	-18.26%
North South All Sources Combined	56,236,900	57,263,600	64,230,000	-12.44%
Felton System - Surface Water				
Fall Creek	7,359,474	7,284,957	10,724,420	
Bennett Spring	3,137,860	3,364,504	3,137,000	
Bull 1 & 2	1,133,968	1,264,868	0	
Total Felton System Sources	11,631,302	11,914,329	13,861,420	-16.09%
Manana Woods System				
Well 1	-	-	0	
Total Manana Woods Sources	-	-	0	
Sub - Total Production				
North / Felton / Manana	67,868,202	69,177,929	78,091,420	-13.09%
Surface	38,377,302	45,176,329	26,026,420	47.46%
Wells	29,490,900	24,001,600	52,065,000	-43.36%
Total Surface Water Percentage	56.55	65.30	33.33	69.67%
Total Wells Percentage	43.45	34.70	66.67	-34.83%

**SAN LORENZO VALLEY WATER DISTRICT
PRODUCTION BY SYSTEM
+/- INTERTIES
August 2019**

North System All Sources	<u>56,236,900</u>
Interties IN +	<u>57</u>
Interties OUT -	<u>3,171,954</u>
TOTAL NORTH SYSTEM	<u>53,065,003</u>
Felton Water system All Sources	<u>11,631,302</u>
Interties IN +	<u>0</u>
Interties OUT -	<u>0</u>
TOTAL FELTON SYSTEM	<u>11,631,302</u>
Manana Woods System	
Manana Woods Well 1	<u>0</u>
Interties IN +	<u>0</u>
TOTAL MANANA WOODS	<u>0</u>

SAN LORENZO VALLEY WATER DISTRICT
INTERTIE USAGE
August 2019

INTERTIE 2

SLVWD to SVWD 0

SVWD to SLVWD 0

INTERTIE 3

SLV SOUTH to SLV NORTH 57

SLV NORTH to SLV SOUTH 715,081

INTERTIE 4

SLVWD to MHWD 0

MHWD to SLVWD 0

INTERTIE 6

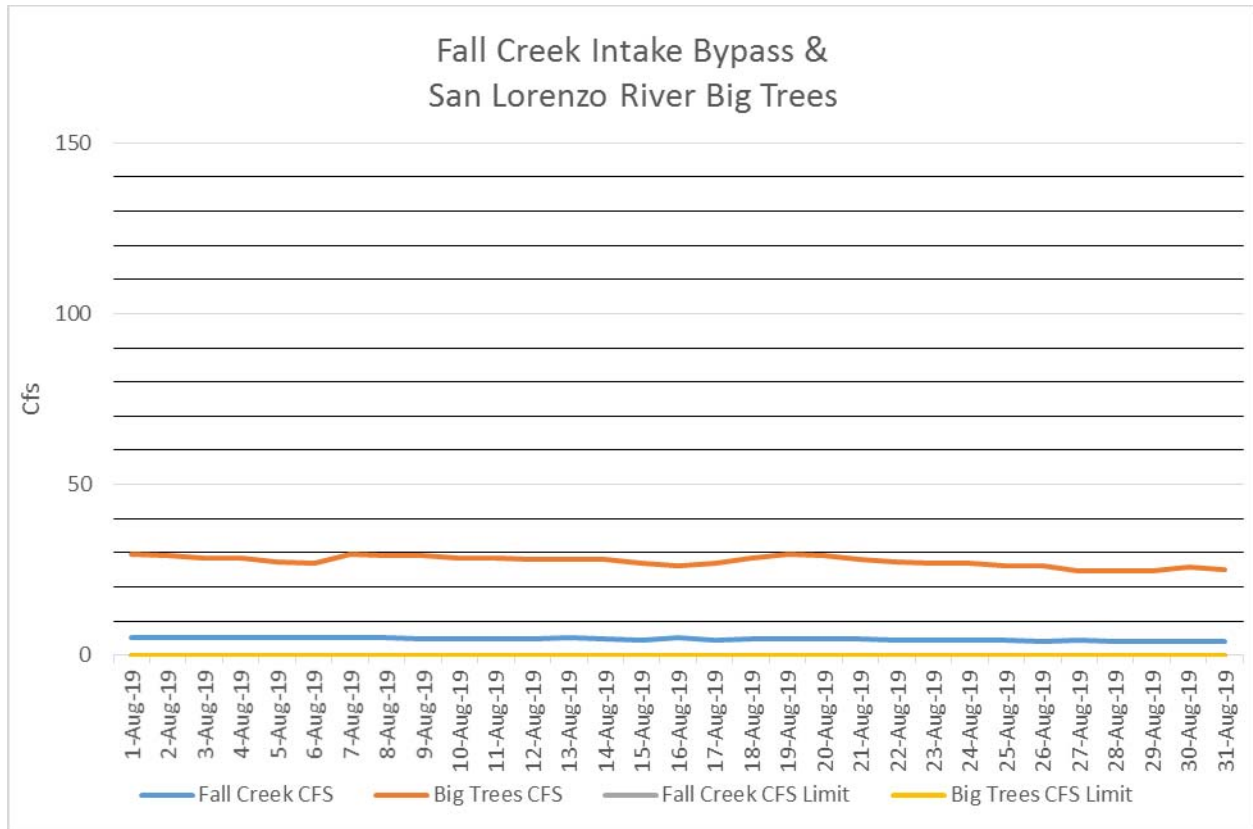
SLV NORTH to SLV FELTON -

SLV FELTON to SLV NORTH -

LOMPICO INTERTIE

SLV NORTH to LOMPICO 2,456,873

Fall Creek Intake August 2019



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 0.5 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 August 2019

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:	August		Year:	2019	Big Trees > 26,500 Acre-ft Oct-Feb Normal Year <input checked="" type="checkbox"/>			Big Trees <26,500 Acre-ft Oct-Feb Dry Year <input 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	0810	SS	2	166	25	5.31	29.7	0	Yes	Yes	
2	0900	SS	2	161	25	5.31	29.1	0	Yes	Yes	
3	0915	SS	2	182	25	5.15	28.5	0	Yes	Yes	
4	0900	SS	2	168	25	5.15	28.5	0	Yes	Yes	
5	0750	SS	2	145	25	5.12	27.4	0	Yes	Yes	
6	1345	KS	2	158	25	5.11	26.8	0	Yes	Yes	
7	1020	SS	2	176	25	5.05	29.7	0	Yes	Yes	
8	0745	SS	2	145	25	5.05	29.1	0	Yes	Yes	
9	0845	SS	2	162	25	4.94	29.1	0	Yes	Yes	
10	0945	SS	2	158	25	4.97	28.5	0	Yes	Yes	
11	1030	SS	2	188	25	4.90	28.5	0	Yes	Yes	
12	0745	SS	2	220	25	4.66	27.9	0	Yes	Yes	
13	0800	SS	2	207	25	5.15	27.9	0	Yes	Yes	
14	0940	SS	2	195	25	4.63	27.9	0	Yes	Yes	
15	0800	SS	2	186	25	4.55	26.8	0	Yes	Yes	
16	0730	SS	2	170	25	4.99	26.3	0	Yes	Yes	
17	1130	JG	2	176	25	4.57	26.8	0	Yes	Yes	
18	1215	JG	2	179	25	4.69	28.5	0	Yes	Yes	
19	0745	HO	2	136	25	4.80	29.7	0	Yes	Yes	
20	0740	HO	2	181	25	4.70	29.1	0	Yes	Yes	
21	0740	HO	1	141	25	4.63	27.9	0	Yes	Yes	
22	0820	SS	1	172	25	4.47	27.4	0	Yes	Yes	
23	0745	SS	1	177	25	4.44	26.8	0	Yes	Yes	
24	0845	HO	1	163	25	4.57	26.8	0	Yes	Yes	
25	1005	HO	1	156	25	4.37	26.3	0	Yes	Yes	
26	0800	SS	1	181	25	4.21	26.3	0	Yes	Yes	
27	0800	SS	1	180	25	4.27	24.7	0	Yes	Yes	
28	1100	SS	1	177	25	4.20	24.7	0	Yes	Yes	
29	0800	SS	1	181	25	4.17	24.7	0	Yes	Yes	
30	0800	SS	1	179	25	4.10	25.7	0	Yes	Yes	
31	1210	JG	1	176	25	4.05	25.2	0	Yes	Yes	

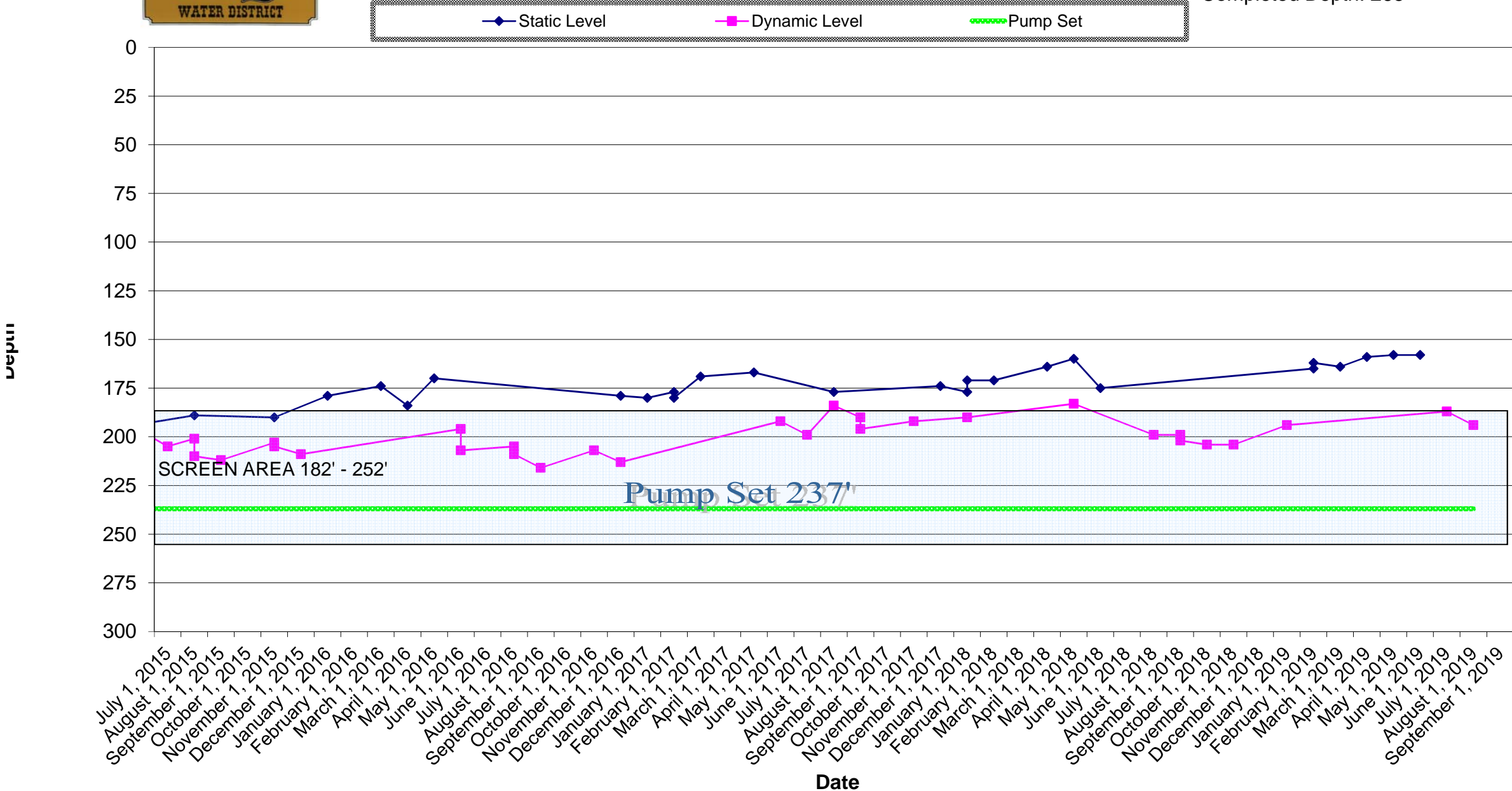


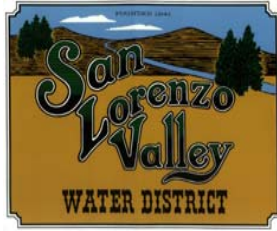
SAN LORENZO VALLEY WATER DISTRICT

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



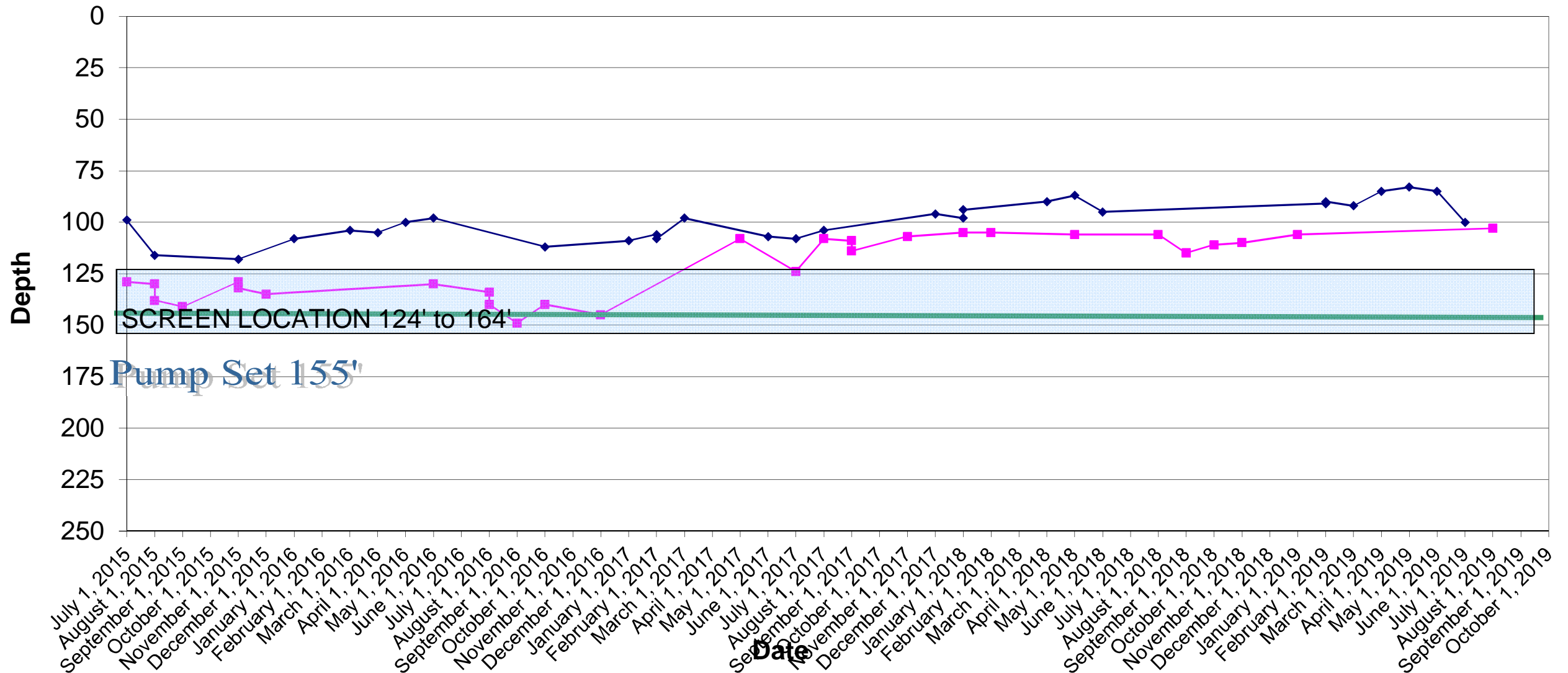
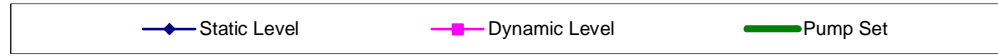


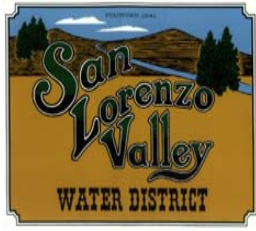
SAN LORENZO VALLEY WATER DISTRICT

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'



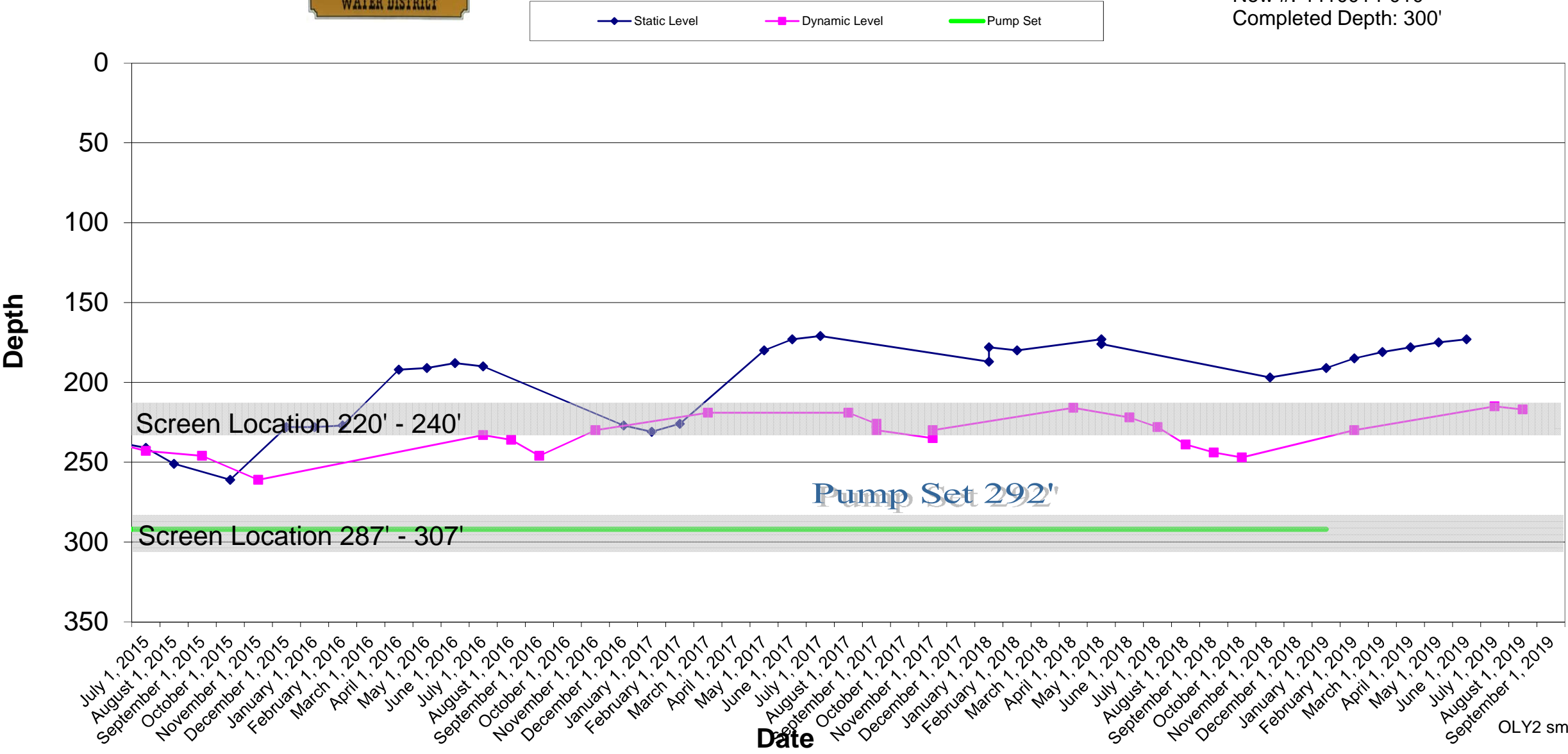


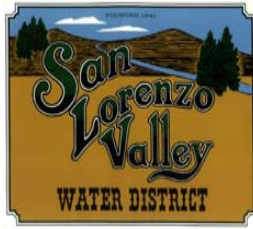
SAN LORENZO VALLEY WATER DISTRICT

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'



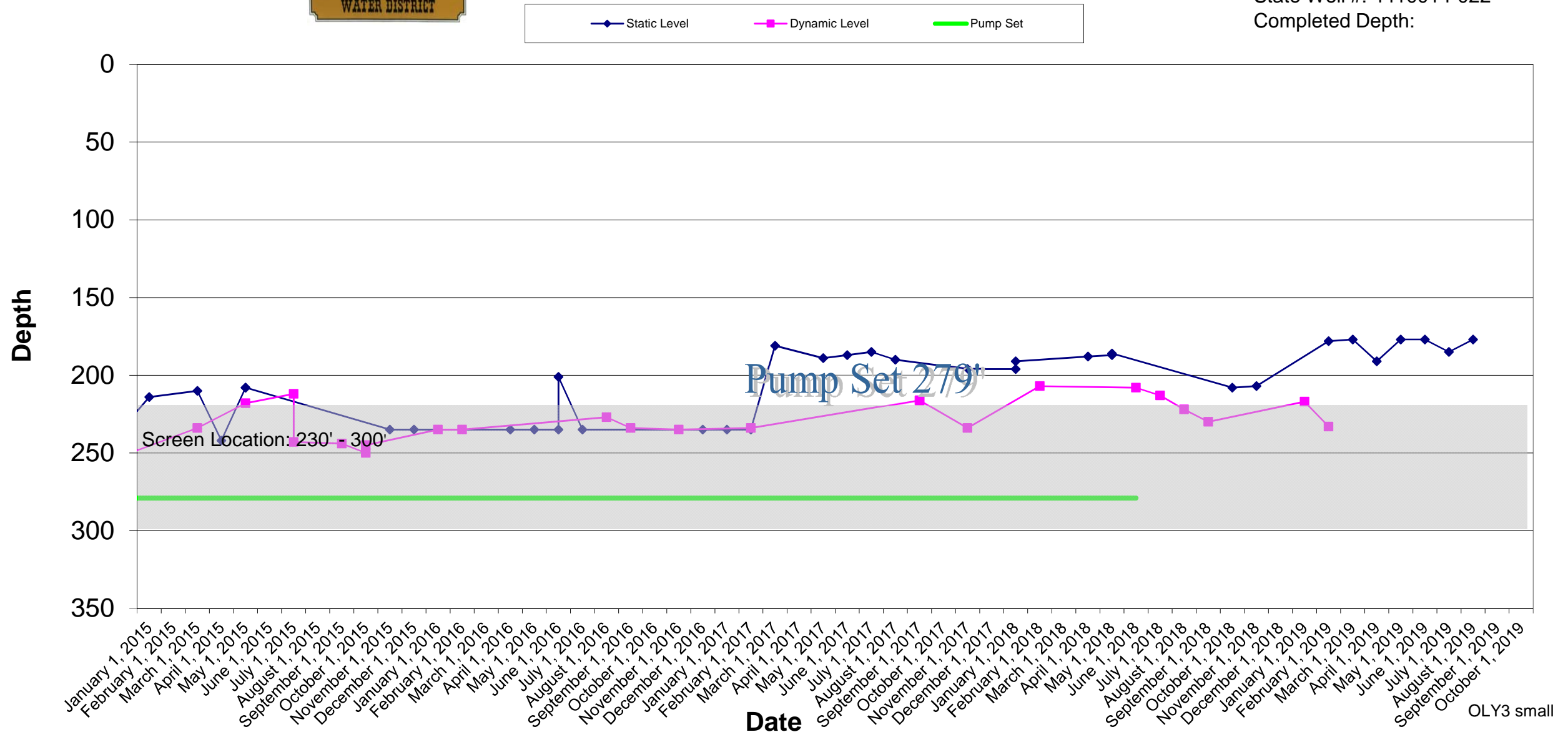


SAN LORENZO VALLEY WATER DISTRICT

Well Drawdown Report

Olympia 3

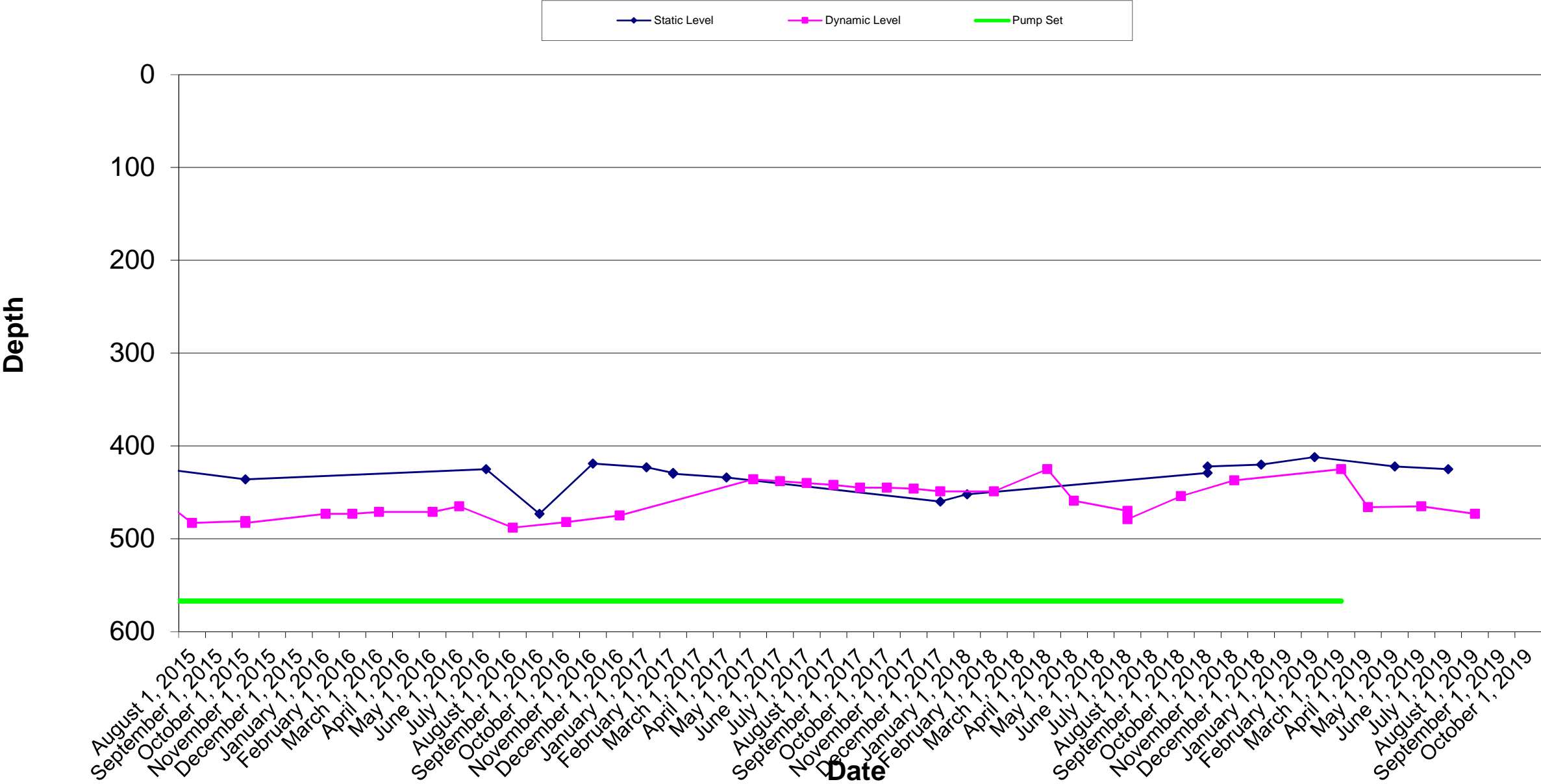
Location: 7701 E. Zayante Rd
Elevation: 538' Mean Sea Level
Installed: 8-15-90
State Well #: 4410014-022
Completed Depth:





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'



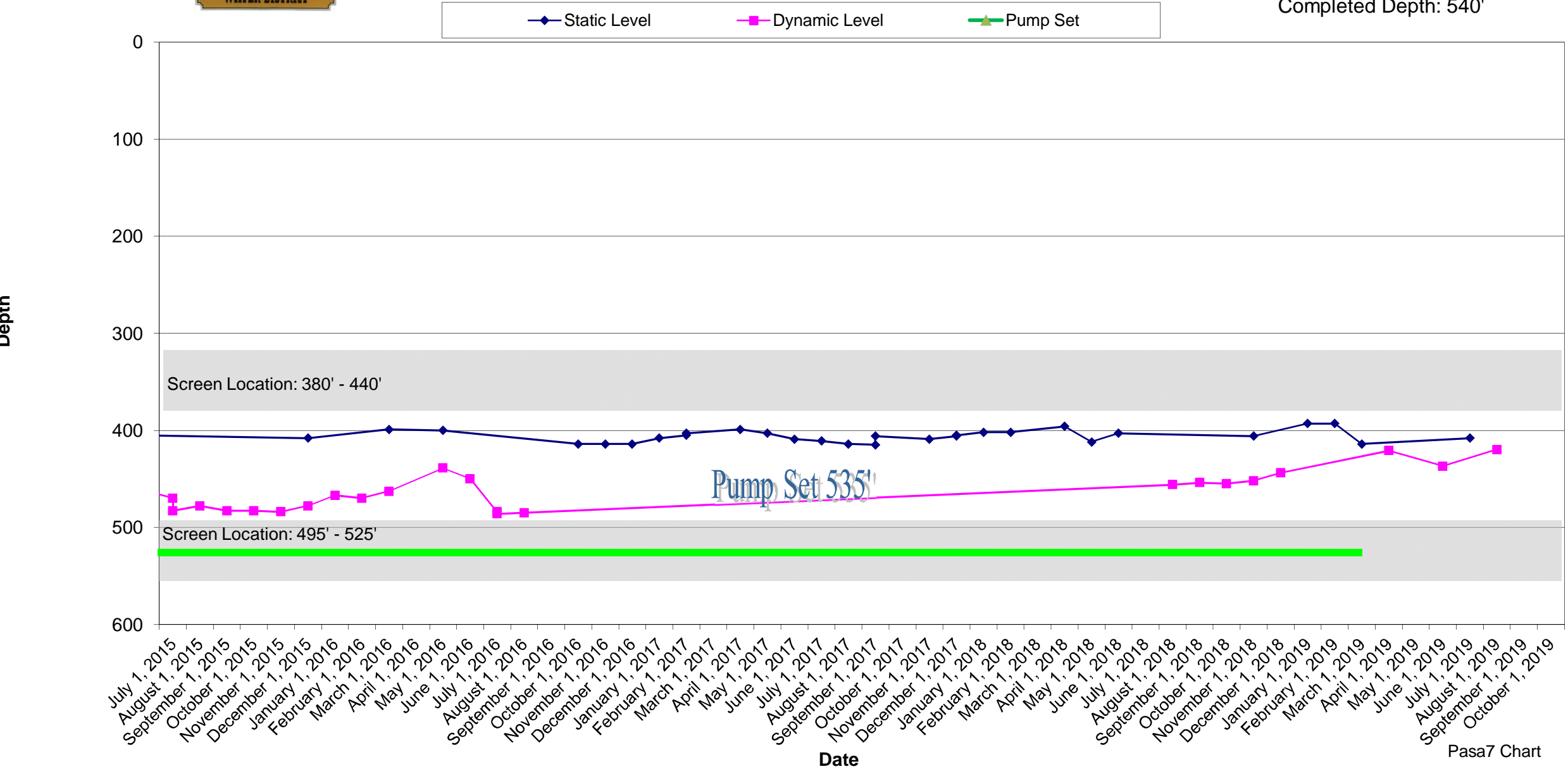


SAN LORENZO VALLEY WATER DISTRICT

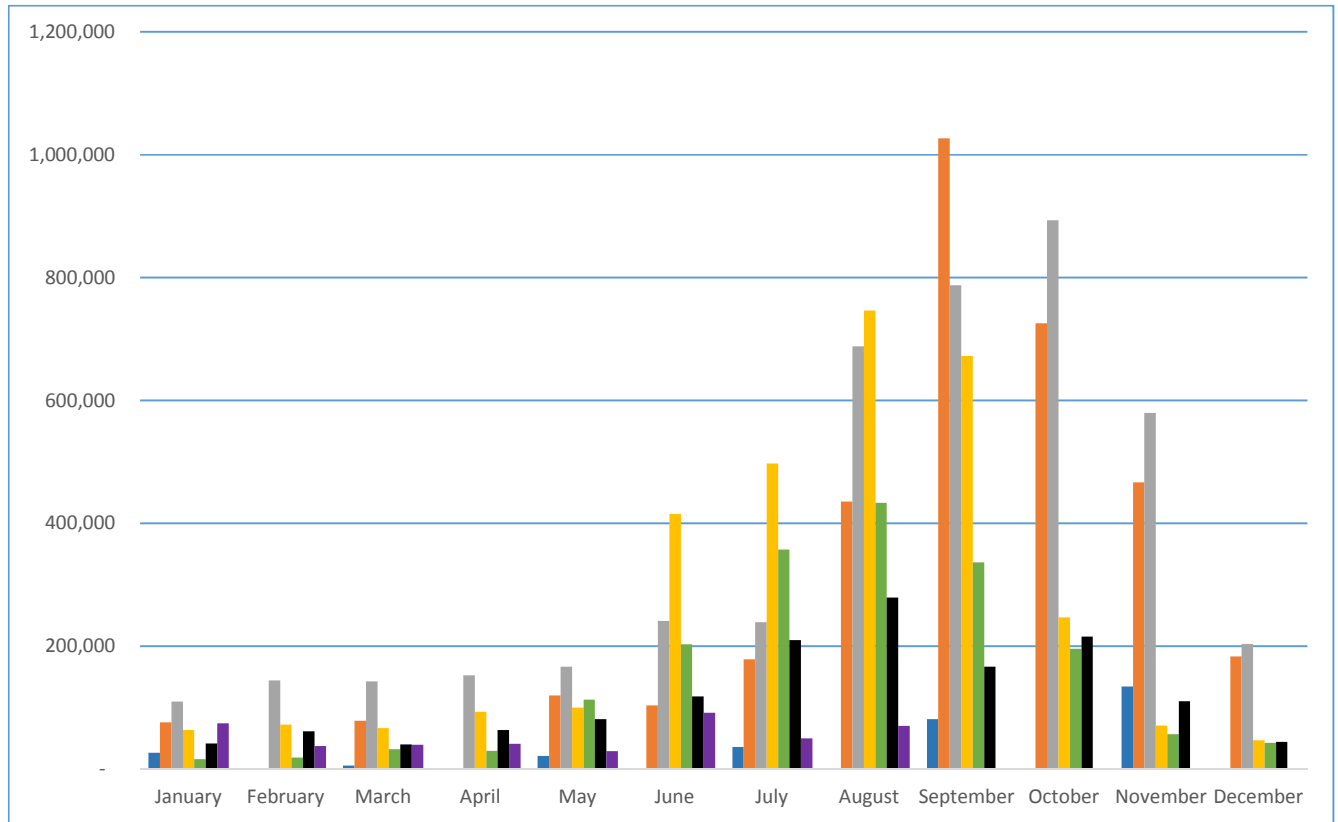
Well Drawdown Report

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
BULK WATER SALES
GALLONS
August 2019



<u>Month</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
January	26,928	76,296	109,965	63,850	16,456	41,888	74,800
February			144,364	72,556	18,700	61,366	37,400
March	5,984	78,540	142,868	66,572	32,164	40,392	39,644
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	
October		725,560	893,112	246,840	195,976	215,424	
November	134,640	466,752	579,700	71,060	56,848	110,704	
December		183,260	203,456	47,124	42,636	44,132	
Totals	306,500	3,394,424	4,349,008	3,092,981	1,836,033	1,433,198	434,588

SAN LORENZO VALLEY WATER DISTRICT
MONTHLY LEAK REPORT
August 2019

Leak Type	Location - NORTH SYSTEM	Town	Gallons Lost
400 MAIN LEAKING	212 RIVERSIDE PARK DR	BEN LOMOND	50
400 MAIN LEAKING	BETWEEN 8215 -8225 GLEN ARBOR ROAD	BEN LOMOND	14400
400 MAIN LEAKING	SCENIC WAY & GREENBANK DR	BEN LOMOND	2,340
400 MAIN LEAKING	SCENIC WAY & HILLCREST	BEN LOMOND	7,200
400 MAIN LEAKING	SCENIC WAY	BEN LOMOND	7,200
400 MAIN LEAKING	230 Brackney Road	BEN LOMOND	500
400 MAIN LEAKING	10341 CALIFORNIA DR	BEN LOMOND	23,040
400 MAIN LEAKING	1610 JACKSON AVE	BEN LOMOND	10,000
400 MAIN LEAKING	609 redwood dr	BEN LOMOND	2,880
400 MAIN LEAKING	240 Main St	BEN LOMOND	2,160
400 MAIN LEAKING	8195 OAK AVE	BEN LOMOND	25,920
400 MAIN LEAKING	555 COOK WAY	BEN LOMOND	10,080
400 MAIN LEAKING	BLUE RIDGE DR	BOULDER CREEK	11,520
400 MAIN LEAKING	12704 HWY 9	BOULDER CREEK	50
400 MAIN LEAKING	14320 BIG BASIN WAY	BOULDER CREEK	51,840
400 MAIN LEAKING	315 ST FRANCIS	BOULDER CREEK	1,800
400 MAIN LEAKING	123 BAYWOOD RD	BOULDER CREEK	30
400 MAIN LEAKING	225 Brier Dr	BOULDER CREEK	500
400 MAIN LEAKING	255 GLENWOOD RD	BOULDER CREEK	14
400 MAIN LEAKING	100 BROOKSIDE	BOULDER CREEK	2,880
400 MAIN LEAKING	280 Mesa dr	BOULDER CREEK	21,600
400 MAIN LEAKING	320 BLUE RIDGE DR	BOULDER CREEK	2,880
400 MAIN LEAKING	12520 Boulder St	BOULDER CREEK	1,800
400 MAIN LEAKING	415 Fairview ave	BOULDER CREEK	11,250
400 MAIN LEAKING	498 RALSTON RIDGE	BOULDER CREEK	32,400
400 MAIN LEAKING	12704 HWY 9	BOULDER CREEK	500
Total North			244,834
FELTON SYSTEM			
400 MAIN LEAKING	1191 LAUREL AVE	FELTON	60,480
400 MAIN LEAKING	5995 PLAEAU DR.	FELTON	2,160
400 MAIN LEAKING	WEST ZAYANTE & STORM	FELTON	-
Total Felton			62,640
LOMPICO			
Total Lompico			-
SCOTTS VALLEY			
400 MAIN LEAKING	455 LOCKWOOD LANE	SCOTTS VALLEY	50.00
Total Scotts Valley			50
Total All Systems			307,524

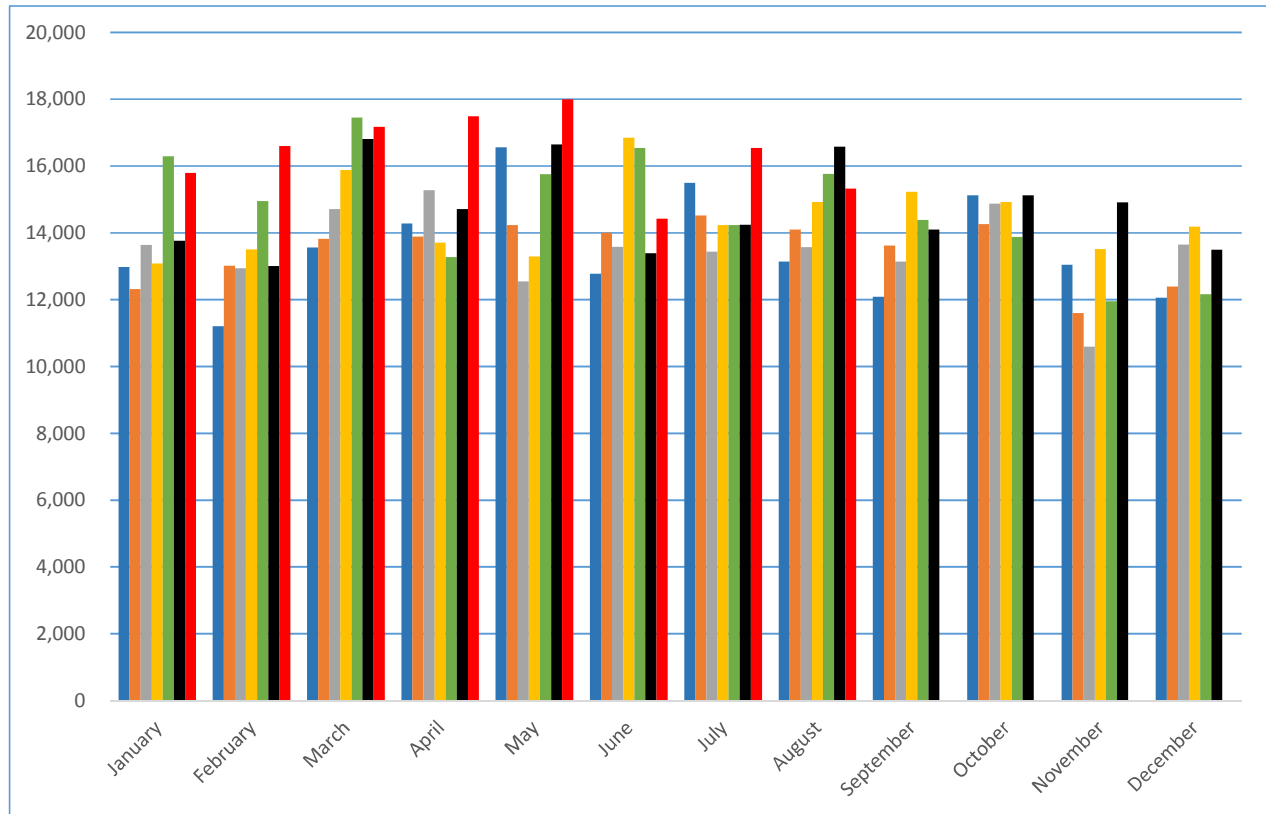
SLV Monthly Water Quality Service Order Summary

				Water Quality Complaint List						
Date Received	Type Of Complaint							Address	Conclusion	System
	Taste/ Odor	Color	Turbidity/ Particles	Worms/ Other Visible Organisms	Pressure (High/Low)	Illness (Waterborne)	Other (Specify)			
8/13/2019	X						Customer complained of heavy chlorine odor.	6338 Cooper St	Upon investigation by SLVWD staff at customers residence, water quality results appeared to be normal and within range at customers front hose bib. Free chlorine was 1.0 mg/L. Customer was notified of results.	SLVWD- Felton
8/20/2019	X						Customer compained of cloudy, smelly water	10121 E. Zayante Rd	Upon investigation by SLVWD staff, water quality results were normal and within range. At customers front hose bib, free chlorine was 0.8 mg/L, turbidity was 0.32 NTU and no odor was observed in a field odor test. Customer was informed of results and told to call back with any future concerns.	SLVWD- North
8/21/2019			X				Customer reported sand appearing in his toilet tank	275 Bobs Ln	Upon investigation by SLVWD staff, water quality results were normal and within range. At customers front hose bib, free chlorine was 0.8 mg/L, turbidity was 0.36 NTU and no sand or discolorization of the water was observed. In addition, the fire hydrant closest to customers home was spot flushed, no color or sand was observed during flushing of hydrant. Customer was informed of the results and will call back with any future concerns.	SLVWD- North

SAN LORENZO VALLEY WATER DISTRICT

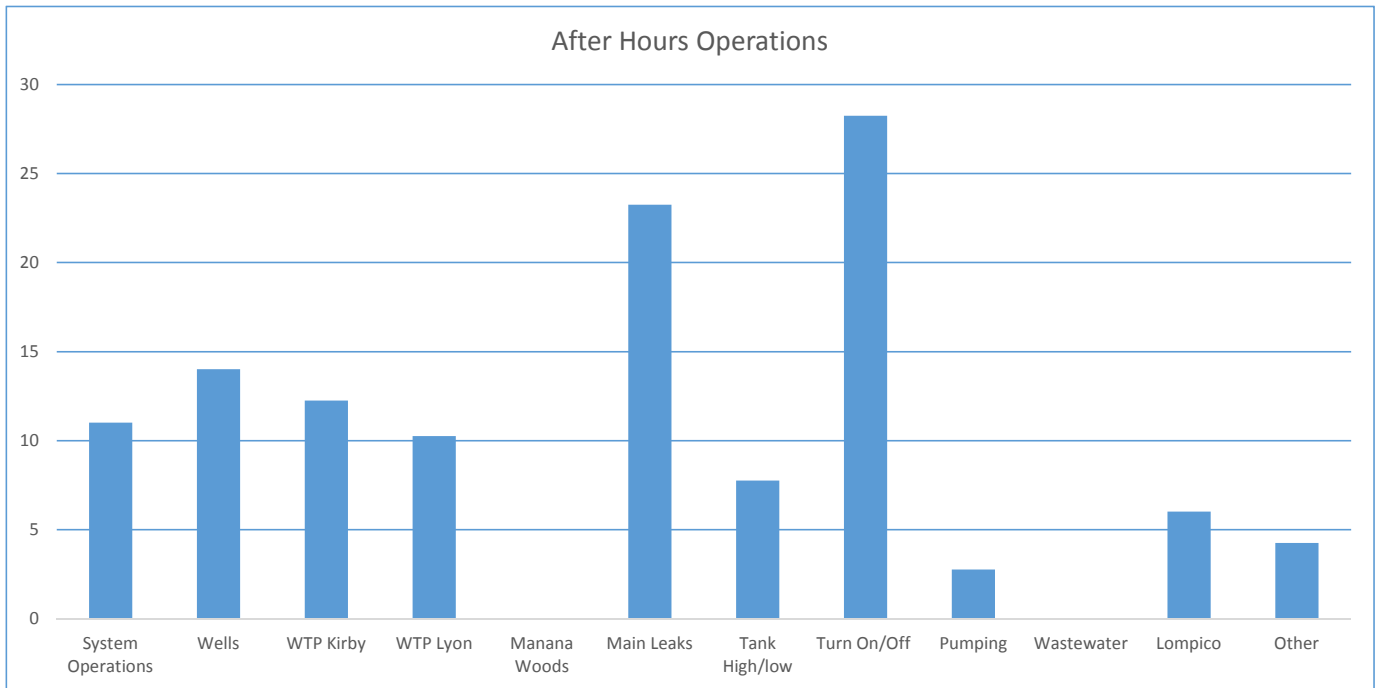
VEHICLE MILEAGE

August 2019



<u>Month</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
January	12,976	12,317	13,633	13,082	16,286	13,763	15,790
February	11,201	13,015	12,934	13,505	14,945	13,003	16,599
March	13,558	13,817	14,714	15,882	17,451	16,809	17,167
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	17,998
June	12,780	14,000	13,582	16,841	16,534	13,390	14,420
July	15,497	14,519	13,441	14,228	14,229	14,242	16,541
August	13,136	14,096	13,569	14,923	15,761	16,576	15,319
September	12,087	13,622	13,137	15,229	14,388	14,094	
October	15,120	14,261	14,868	14,924	13,880	15,126	
November	13,046	11,594	10,591	13,510	11,952	14,908	
December	12,060	12,394	13,648	14,187	12,158	13,492	
Totals	162,304	161,746	161,946	173,305	176,611	176,760	131,322

SAN LORENZO VALLEY WATER DISTRICT
OPERATIONS DEPARTMENT
 August 2019

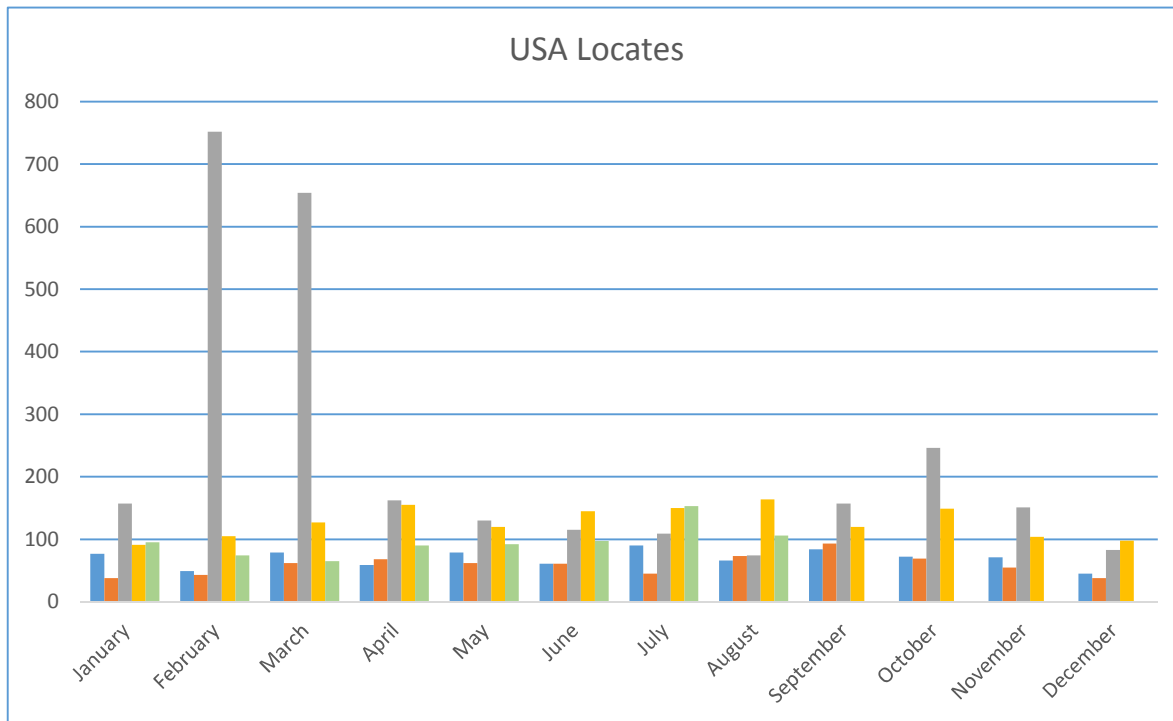


Description	Hours		2015	2016	2017	2018	2019
System Operations	11	January	N/A	145.00	280.75	90.50	96.50
Wells	14	February	N/A	86.50	192.25	72.00	180.00
WTP Kirby	12.25	March	N/A	153.75	105.75	80.25	106.25
WTP Lyon	10.25	April	82.50	72.00	128.75	156.75	76.25
Manana Woods	0	May	104.75	49.25	132.75	105.5	82.5
Main Leaks	23.25	June	172.50	83.25	112.75	89.00	136.75
Tank High/low	7.75	July	124.25	80.25	162.00	145.25	158.3
Turn On/Off	28.25	August	111.75	81.25	141.25	134.5	119.75
Pumping	2.75	September	230.25	175.00	201.25	155.25	
Wastewater	0	October	128.25	78.50	104.00	111.5	
Lompico	6	November	114.25	96.25	122.50	197.5	
Other	4.25	December	186.25	130.75	134.00	220.25	
Total	119.75		1254.75	1231.75	1818.00	1558.25	956.30

SAN LORENZO VALLEY WATER DISTRICT

OPERATIONS DEPARTMENT

August 2019



<u>Month</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
January	77	38	157	91	95
February	49	43	752	105	74
March	79	62	654	127	65
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	
October	72	69	246	149	
November	71	55	151	104	
December	45	38	83	98	
Total to Date	832	707	2,790	1528	772

