## Crestline Sanitation District Annual Report



**Ground Breaking Ceremony 2021** 

## CRESTLINE SANITATION DISTRICT ANNUAL REPORT

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## Crestline Sanitation District Annual Report Summation 2021

Crestline Sanitation District collected, treated, and discharged 198.4 million gallons of wastewater in 2021. We had a total of 5 flow violations in 2021 in which all 5 were 24 hour violations. These violations were due to storm events which occurred in December of 2021 in which the District received 21.55 inches of rain out of the annual rainfall of 39.99 inches.

Throughout 2021 the Districts' Maintenance Crew systematically televised 6.3 miles of pipe. During 2021 the District Hydroed 20.9 miles of pipeline exceeding the Sanitary Sewer Management Plan (SSMP) mark of 15.2 miles for the year.

In 2021, The District with the help of Dudek Engineering & Environmental services received the SFR funding to begin construction on the upgrades and deficiencies identified by the Districts Master Plan.

CSD issued the notices of Award to Dudek Engineering & Environmental services, for the engineering on the Huston Creek construction project as well as Web and Associates for the Construction Management for this project.

Over the course of the Summer the CSD maintenance crew focused on raising manholes to grade. The District was able to raise 83 manholes to grade.

An Annual Audit of the District was performed in 2021 by Smith Marion & CO. This accounting firm did a thorough job finding Crestline Sanitation's records to be well prepared, which allowed the audit to be completed in a timely manner and concluded with no findings.

## **ANNUAL REPORT**

## **Treatment Facility Total Volume Flows**

YEAR:

Site	Huston Plant	Seeley Plant	Cleghorn Plant	Las Flores	Las Flore	es Ponds
Readings	daily	daily	daily	daily	daily	monthly
Violations						
Design	0.7 mg/d	0.5 mg/d	0.2 mg/d			
limits	design	design	design			
	total volume	total volume	total volume	total volume	total volume	free
	month	month	month	to irrigation	to ponds	board
		All flow	rates in million gallo	ons		feet
	Huston Creek	Seeley Creek	Cleghorn	District Effluent	District Effluent	Flow to ponds
JANUARY	12.71	5.53	0.100	16.74	0.00	empty
<b>FEBRUARY</b>	12.85	6.64	0.090	18.33	0.00	empty
MARCH	14.23	7.07	0.108	20.21	0.00	empty
APRIL	11.72	5.72	0.165	16.30	0.00	empty
MAY	11.37	5.11	0.295	15.99	0.00	empty
JUNE	10.36	4.62	0.470	14.97	0.00	empty
JULY	10.91	4.00	0.850	15.65	0.00	empty
AUGUST	10.43	3.13	0.666	14.35	0.00	empty
SEPTEMBER	10.11	3.03	0,666	13,09	0.00	empty
OCTOBER	11.19	3.62	0.023	14.12	0.00	empty
NOVEMBER	11.00	3.54	0.010	14.47	0.00	empty
DECEMBER	15.75	7.34	0.182	24.19	0.00	empty
		2021 Treatment	Facility Total Volu	me Flow		
Totals	142.63	59.35	3.63	198.40	0.00	

<sup>\*</sup> Las Flores Total flows are represented by the addition of the Huston Creek, Seeley Creek, Cleghorn and Pilot Rock plant flow as measured as the flow discharges to the district outfall.

## CRESTLINE SANITATION DISTRICT ANNUAL REPORT

## Treatment Facility Maximum Instantaneous Flow Rates

Year:

Site	Huston Creek	Seeley Creek	Cleghorn	Las Flores	Las Flores
Reading	daily	daily	daily	daily	daily
Violations					***************************************
Design	2.5 mg	1.0 mg	0.4 mg	hoda hoda da da	
limits	maximum	maximum	maximum		
	max flow rate	max flow rate	max flow rate	max flow rate	max flow rate
	month	month	month	month	month
		All flow rates in	million gallons		
	Huston	Seeley	Cleghorn	District Effluent	Flow to ponds
JANUARY	0.630	0.355	0.100	0.960	empty
<b>FEBRUARY</b>	0.810	0.665	0.050	1.060	empty
MARCH	0.750	0.410	0.040	1.160	empty
APRIL	0.610	0.375	0.085	1.020	empty
MAY	0.580	0.345	0.080	0.940	empty
JUNE	0.530	0.330	0.060	0.860	empty
JULY	0.600	0.300	0.210	0.980	empty
AUGUST	0.582	0.280	0.100	0.880	empty
SEPTEMBER	0.580	0.280	0.100	0.860	empty
OCTOBER	0.810	0.375	0.340	1.400	empty
NOVEMBER	0.660	0.285	0.015	0.940	empty
DECEMBER	1.410	0.765	0.080	2.911	empty
	2021 Treatme	ent Facility Maxin	num Instantaneo	us Flow Rate	
		•			
Maximum	1.410	0.765	0.340	2.911	

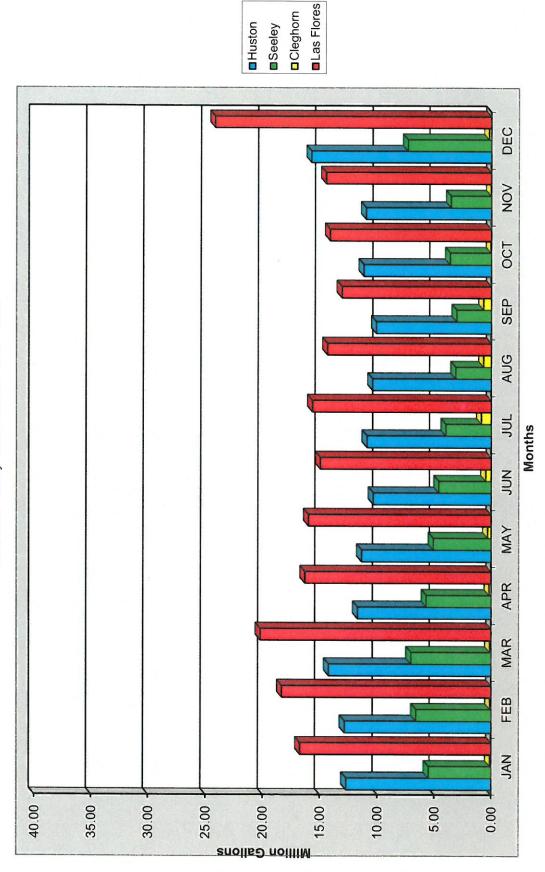
## **ANNUAL REPORT**

## **Treatment Facility Average Flow Rates**

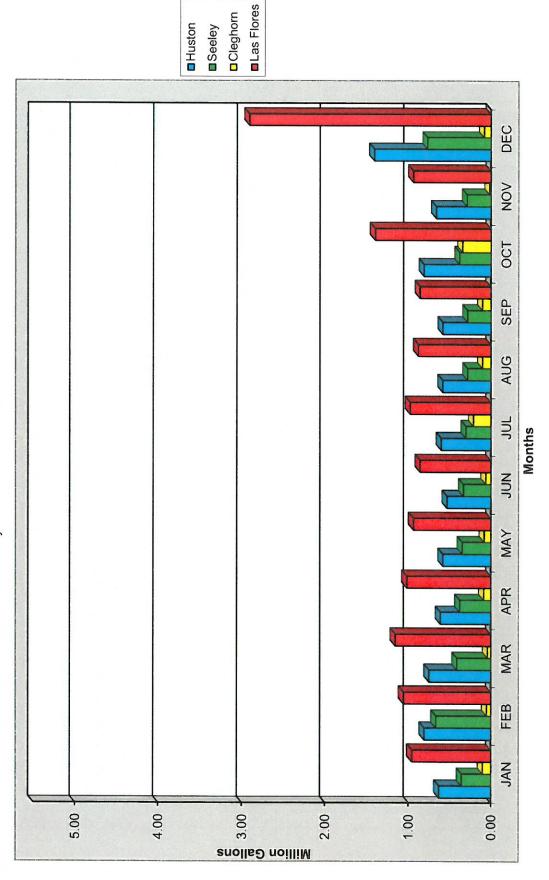
Year:

Site	Huston Creek	Seeley Creek	Cleghorn	Las Flores	Las Flores
Readings	daily	daily	daily	daily	daily
Violetians					
Violations	0.7				
Design	0.7 mg/d	0.5 mg/d	0.2 mg/d		
limits	average	average	average	200	
	average flow	average flow	average flow	average flow	average flow
98098080000000000000000000000000000000	month	month	month	month	month
		All flows in million	gallons per day		
	Huston	Seeley	Cleghorn	District Effluent	Flow to ponds
JANUARY	0.410	0.178	0.003	0.540	empty
<b>FEBRUARY</b>	0.459	0.237	0.003	0.655	empty
MARCH	0.459	0.228	0.003	0.652	empty
APRIL	0.391	0.191	0.006	0.543	empty
MAY	0.367	0.165	0.010	0.516	empty
JUNE	0.345	0.154	0.016	0.499	empty
JULY	0.352	0.129	0.027	0.505	empty
AUGUST	0.336	0.101	0.021	0.463	empty
SEPTEMBER	0.337	0.101	0.022	0.422	empty
<b>OCTOBER</b>	0.361	0.117	0.001	0.455	empty
NOVEMBER	0.367	0.118	0.000	0.467	empty
DECEMBER	0.508	0.237	0.006	0.780	empty
	2021 7	reatment Facilit	y Average Flow	Rate	
Average	0.391	0.163	0.010	0.541	
7	0,001	0.100	0.010	0.541	

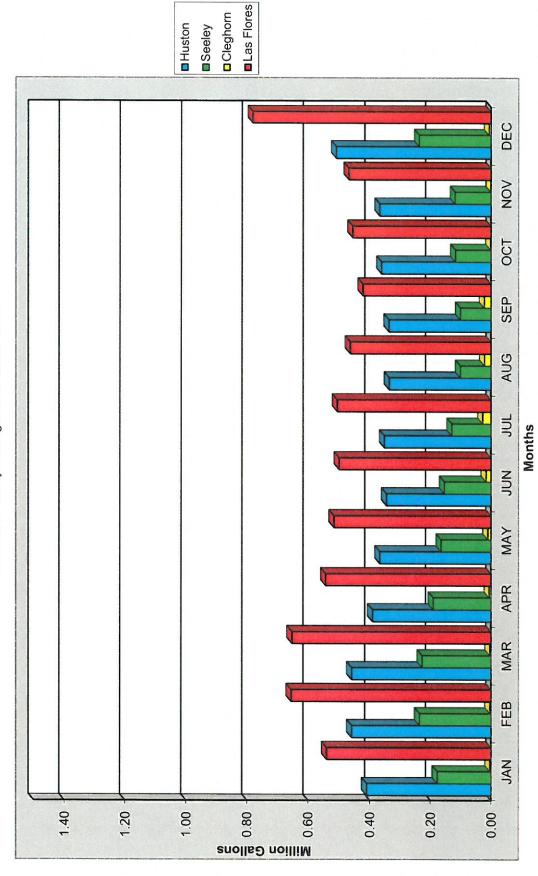
Treatment Facility Total Volume Flows - 2021



Treatment Facility Maximum Instantaneous Flow Rate - 2021



Treatment Facility Average Flow Rates - 2021



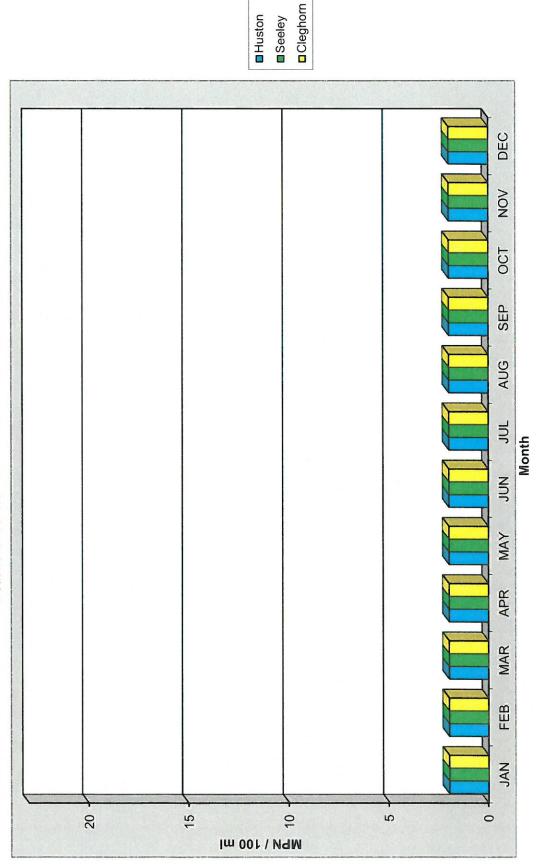
		CRESTLII Effluent Mo	CRESTLINE SANITATION DISTRICT ANNUAL REPORT Effluent Monitoring - Treatment Facilities Monthly Median / Averages	DISTRICT nt Facilities ages		
		•			Year:	2021
Site	Husto	Huston Creek	Seeley	Seeley Creek	Cleg	Cleghorn
Sample	Disinfected Final	Final Effluent	Disinfected	Final Effluent	Disinfected F	Disinfected Final Effluent
Frequency	2 / week	daily	2 / week	daily	2 / week	daily
Requirement	23 / 100 ml *		23 / 100 ml *		23 / 100 ml *	
Purpose	О	Σ	О	Σ	Q	Σ
Poct	Total Coilform	Chlorine Recidual	Total Coilform	Chlorino Bocidus	Total Coilform	Obloring Deciding
		פווסווס		O IIO II G I CONTO		O III O III G DESIGNAI
month	MPN	l/bm	MPN	l/gm	MPN	l/gm
JANUARY	2	15.1	2	6.4	2	10.1
FEBRUARY	2	16.2	2	8.0	2	11.4
MARCH	2	11.8	2	6.2	2	10.7
APRIL	2	8.6	5	0.0	2	6.6
JUNE	2 6	13.4	2 6	υ, α Ω	2 2	7. S. 7. 5.
JULY	_ 2	15.9		7.4	2	7.4
AUGUST	2	14.9	2	10.0	2	10.3
SEPTEMBER	2	16.1	2	8.4	2	12.6
OCTOBER	2	18.0	2	10.3	2	10.4
NOVEMBER	2	16.9	2	8.6	2	13.8
DECEMBER	2	18.0	2	4.2	2	13.7

D - Sample has Effluent / Discharge Limitations

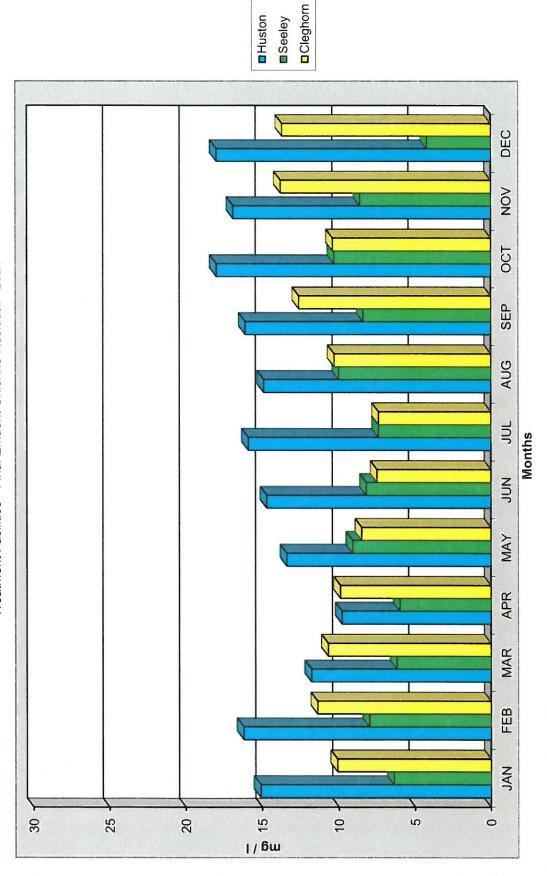
M - Sample has Effleuent Monitoring Requirements

\* median does not exceed 23/100 milileters and does not exceed 240/100 militers in any two consecutive samples

Treatment Facilites - Final Effluent Total Coliform - 2021



Treatment Facilities - Final Effluent Chlorine Residual - 2021



Sample Frequency					CRES	TLINE	CRESTLINE SANITATION		DISTRICT				
Las Flores Ranch Irrigation / Percolation					Distr	ANN Efflu rict Final E	NUAL REPO Ient Monito	ORT oring onitoring l	Data				
ST   ST   ST   ST   ST   ST   ST   ST					Las F	Flores Ran	ıch Irrigatik	on / Percol	ation			Year:	2021
Test	Sample Frequency	2 / Week	_	Weekly	Weekly	Weekly	2 / Month			2 / Month	Monthly	Monthly	Monthly
Test	Violations												
Lim         0.5 mil/l         < 9	Sample Type	*		DΜ	ΜQ	DM	DM	Σ	M	Σ	Σ	Σ	Σ
Alinimum         23 / 100 *         > 1.0         > 6         30.0         1.0           Test         Total         CL2         Settleable         D. O.         pH         BOD         COD         MBAS           Units         MPN         mg/l         ml/l         mg/l         units         mg/l         mg/l         mg/l           Nuukry         2         6.7         <0.10         9.6         7.4         23.8         111.0         ND           SRUARY         2         4.5         <0.10         9.6         7.4         23.8         111.0         ND           APRIL         2         4.5         <0.10         9.6         7.4         23.8         111.0         ND           APRIL         2         4.5         <0.10         7.9         7.3         25.0         89.0         ND           JULY         2         4.5         <0.10         7.9         7.3         25.0         89.0         ND           JULY         2         2.1         7.4         2.2         10.0         ND           JULY         2         4.3         <0.10         7.4         22.9         10.5         ND           JULY	Maximum			0.5 ml/l			45.0		2.0		A	A	A
Test         Coliform         Res         Solids         D. O.         pH         BOD         COD         MBAS           Units         MPN         mg/l         ml/l         mg/l         units         mg/l         mg/l <td< th=""><th>Mean/Minimum</th><td></td><td></td><td></td><td>&gt; 1.0</td><td>9 &lt;</td><td>30.0</td><td></td><td>1.0</td><td></td><td></td><td></td><td></td></td<>	Mean/Minimum				> 1.0	9 <	30.0		1.0				
Total         CL2         Settleable Solids         D. O.         pH         BOD         COD         MBAS           Coliform         Res         Solids         D. O.         pH         BOD         COD         MBAS           MPN         mg/l         ml/l         mg/l         units         mg/l         mg/l         mg/l           2         6.7         <0.10         9.6         7.4         22.8         111.0         ND           2         4.5         <0.10         9.6         7.4         22.0         72.0         ND           2         4.5         <0.10         9.6         7.4         22.0         72.0         ND           2         4.5         <0.10         9.6         7.4         22.0         72.0         ND           2         4.5         <0.10         8.9         7.3         26.0         89.0         ND           2         5.1         <0.10         7.6         7.5         18.8         75.5         ND           2         4.8         <0.10         7.3         7.4         22.9         105.0         ND           2         4.3         <0.10         7.3         7.4         22.	Median	23 / 100 *											
Coliform         Kes         Solids         mg/l	Test	Total	CL2		D. O.	Н	ВОБ	COD	MBAS	S IIO	TKN	NO3-N	NH3-N
MPN         mg/l         ml/l         mg/l         units         mg/l         mg/l <th< th=""><th></th><td>Colitorm</td><td>Res</td><td>Solids</td><td></td><td></td><td></td><td></td><td></td><td>Grease</td><td></td><td></td><td></td></th<>		Colitorm	Res	Solids						Grease			
2 6.7 <0.10 9.2 7.4 23.8 111.0 ND 2 4.5 <0.10 9.6 7.4 22.0 72.0 ND 2 4.5 <0.10 7.9 7.3 18.8 59.5 ND 2 5.1 <0.10 8.9 7.3 25.0 89.0 ND 2 5.1 <0.10 8.4 7.3 20.8 110.5 ND 2 2.8 <0.10 7.6 7.5 18.8 75.5 ND 2 3.6 <0.10 7.1 7.4 22.9 105.0 ND 2 4.3 <0.10 7.3 7.4 20.8 56.5 ND 2 4.4 <0.10 7.4 7.5 20.1 60.5 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	Units	MPN	l/gm	l/lm	l/gm	units	l/bm	l/bm	l/bm	l/bm	l/bm	l/bm	ma/l
2       6.7       <0.10       9.2       7.4       23.8       111.0       ND         2       4.5       <0.10       9.6       7.4       22.0       72.0       ND         2       4.5       <0.10       7.9       7.3       18.8       59.5       ND         2       5.1       <0.10       8.9       7.3       25.0       89.0       ND         2       5.1       <0.10       8.4       7.3       25.0       89.0       ND         2       2.8       <0.10       7.6       7.5       18.8       75.5       ND         2       4.8       <0.10       7.1       7.4       22.9       105.0       ND         2       4.3       <0.10       7.3       7.4       20.8       56.5       ND         2       4.5       <0.10       7.4       7.5       20.1       60.5       ND         2       4.6       <0.10       7.4       7.5       23.0       86.0       ND         2       4.6       <0.10       7.4       7.5       20.7       61.5       ND         2       4.4       <0.10       9.0       7.4       20.7       61.5 </th <th>Month</th> <th></th> <th>)</th> <th>)</th>	Month											)	)
2 4.5 <0.10 9.6 7.4 22.0 72.0 ND 2 5.1 <0.10 8.9 7.3 18.8 59.5 ND 2 5.1 <0.10 8.4 7.3 25.0 89.0 ND 2 2 2.8 <0.10 7.6 7.5 18.8 75.5 ND 2 2 4.8 <0.10 7.1 7.4 22.9 105.0 ND 2 4.8 <0.10 7.3 7.4 20.8 56.5 ND 2 4.5 <0.10 7.3 7.4 20.8 86.0 ND 2 4.5 <0.10 7.4 7.5 20.1 60.5 ND 2 4.6 <0.10 8.4 7.2 23.0 86.0 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	JANUARY	2	2.9	<0.10	9.2	7.4	23.8	111.0	QN	QN	19.00	10.80	18.40
2 5.1 <0.10 8.9 7.3 18.8 59.5 ND 2 5.1 <0.10 8.9 7.3 25.0 89.0 ND 2 5.1 <0.10 8.4 7.3 20.8 110.5 ND 2 2.8 <0.10 7.6 7.5 18.8 75.5 ND 2 4.8 <0.10 7.1 7.4 22.9 105.0 ND 2 4.8 <0.10 7.3 7.4 20.8 56.5 ND 2 4.6 <0.10 7.3 7.4 20.8 56.5 ND 2 4.6 <0.10 7.4 7.5 20.1 60.5 ND 2 4.6 <0.10 8.4 7.2 23.0 86.0 ND 2 4.6 <0.10 8.4 7.2 23.0 86.0 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	FEBRUARY	2	4.5	<0.10	9.6	7.4	22.0	72.0	2	2	15.80	15.00	11.50
2 5.1 <0.10 8.9 7.3 25.0 89.0 ND 2 5.1 <0.10 8.4 7.3 20.8 110.5 ND 2 2.8 <0.10 7.6 7.5 18.8 75.5 ND 2 4.8 <0.10 7.1 7.4 22.9 105.0 ND 2 4.3 <0.10 7.3 7.4 20.8 56.5 ND 2 4.5 <0.10 7.3 7.4 20.8 56.5 ND 2 4.6 <0.10 7.4 7.5 20.1 60.5 ND 2 4.6 <0.10 7.4 7.5 20.1 60.5 ND 2 4.6 <0.10 8.4 7.2 23.0 86.0 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	MARCH	2	4.5	<0.10	7.9	7.3	18.8	59.5	QN	R	14.80	11.50	14.00
2 5.1 <0.10 8.4 7.3 20.8 110.5 ND 2 2.8 <0.10 7.6 7.5 18.8 75.5 ND 2 3.6 <0.10 7.1 7.4 22.9 105.0 ND 2 4.8 <0.10 7.3 7.4 20.8 56.5 ND 2 4.3 <0.10 7.3 7.4 20.8 56.5 ND 2 5.8 <0.10 7.4 7.5 20.1 60.5 ND 2 4.6 <0.10 7.4 7.5 23.0 86.0 ND 2 4.6 <0.10 8.4 7.2 23.0 86.0 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	APRIL	2	5.1	<0.10	8.9		25.0	89.0	2	2	14.50	14.00	10.40
2 2.8 <0.10 7.6 7.5 18.8 75.5 ND 2 3.6 <0.10 7.1 7.4 22.9 105.0 ND 2 4.8 <0.10 7.3 7.4 20.8 56.5 ND 2 4.3 <0.10 7.3 7.4 20.8 56.5 ND 2 5.8 <0.10 7.4 7.5 20.1 60.5 ND 2 4.6 <0.10 8.4 7.2 23.0 86.0 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	MAY	7	5.1	<0.10		7.3	20.8	110.5	2	Q	14.80	08.6	14.00
2 3.6 <0.10 7.1 7.4 22.9 105.0 ND 2 4.8 <0.10 7.3 7.4 20.8 56.5 ND 2 4.3 <0.10 7.3 7.4 20.8 56.5 ND 2 5.8 <0.10 7.4 7.5 20.1 60.5 ND 2 4.6 <0.10 8.4 7.2 23.0 86.0 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	JUNE	7	2.8	<0.10	9.7		18.8	75.5	2	2	15.10	11.90	14.80
2 4.8 <0.10 7.3 7.4 20.8 56.5 ND 2 4.3 <0.10 7.3 7.4 20.8 56.5 ND 2 5.8 <0.10 7.4 7.5 20.1 60.5 ND 2 4.6 <0.10 8.4 7.2 23.0 86.0 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	\.\JOL	2	3.6	<0.10	7.1		22.9	105.0	2	Q	14.60	11.70	14.00
2 4.3 <0.10 7.3 7.4 21.7 61.0 ND 2 5.8 <0.10 7.4 7.5 20.1 60.5 ND 2 4.6 <0.10 8.4 7.2 23.0 86.0 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	AUGUST	7	4.8	<0.10	7.3	7.4	20.8	56.5	2	2	19.20	12.60	18.50
2 5.8 <0.10 7.4 7.5 20.1 60.5 ND 2 4.6 <0.10 8.4 7.2 23.0 86.0 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	SEPTEMBER	7	4.3	<0.10	7.3	7,4	21.7	61.0	9	2	15.50	10.20	14.80
2 4.6 <0.10 8.4 7.2 23.0 86.0 ND 2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	OCTOBER	7	5.8	<0.10	7.4	7.5	20.1	60.5	2	9	16.10	11.90	15.80
2 4.4 <0.10 9.0 7.4 20.7 61.5 ND	NOVEMBER	2	4 6.6	<0.10	8.4	7.2	23.0	86.0	2	9	16.80	11.90	16.20
	DECEMBER	2	4.4	<0.10	9.0	7.4	20.7	61.5	Q.	2	15.00	10.20	14.80

D - Sample has Effluent / Discharge Limitations

M - Sample has Effluent Monitoring Requirements

15.93

Q

2

79.0

21.5

8.2

< 0.10

**AVERAGES** 

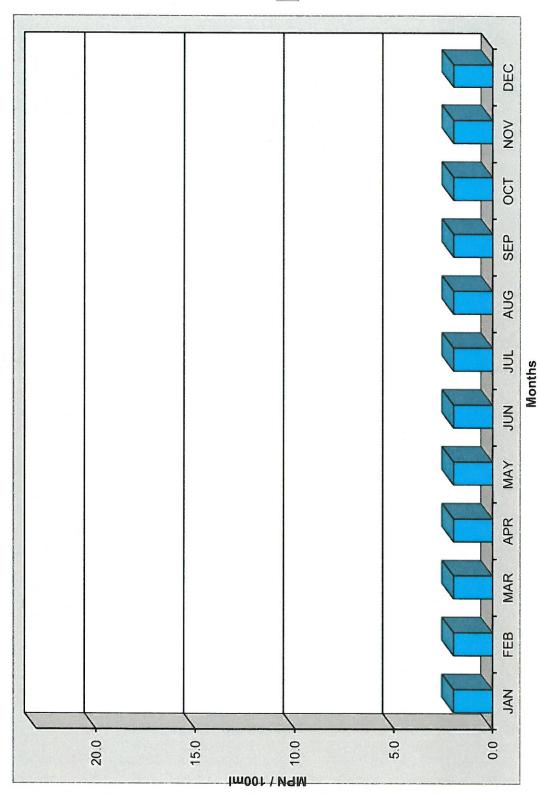
A - Result not an average (only one sample collected per month)
\* median does not exceed 23/100 milliters and does not exceed 240/100 milliters in any two consecutive samples

			Ö	RESTL	INE S.	ANITAT	CRESTLINE SANITATION DISTRICT	TRICT			
			_	District Las Flor	ANN Efflue Final Ef	ANNUAL REPORT Effluent Monitoring nal Effluent - Monito Ranch Irrigation / P	ANNUAL REPORT Effluent Monitoring District Final Effluent - Monitoring Data Las Flores Ranch Irrigation / Percolation	Data lation			
e-,						9				Year:	2021
Sample Frequency			Semiannual Testing	inal Test	fing				Annu	Annual Testing	DL BL
Violations											
Sample Type	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ
Mean/Minimum	A	A	A	А	A	A	A	A	А	A	A
Median											
Test	TDS	Chloride	Chloride Sodium	Sulfate	Boron	Flouride	Total Total Cyanides Phenols	Total Phenols	Base/Neutral/Acid Extractable Organics	Heavy Metals	Total Petroleum Hydrocarbons
Units	mg/l	mg/l	l/lm	mg/l	mg/l	l/gm	l/gm	l/gm	l/gn	l/gn	l/gn
Month											
JANUARY FEBRUARY MARCH APRIL MAY JUNE	560.0	134.0	110.0	148.0	0.29	0.55					
AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER	725	160.0	130.0	170.0	0.46	0.21	∢	∢	∢	٨	∢

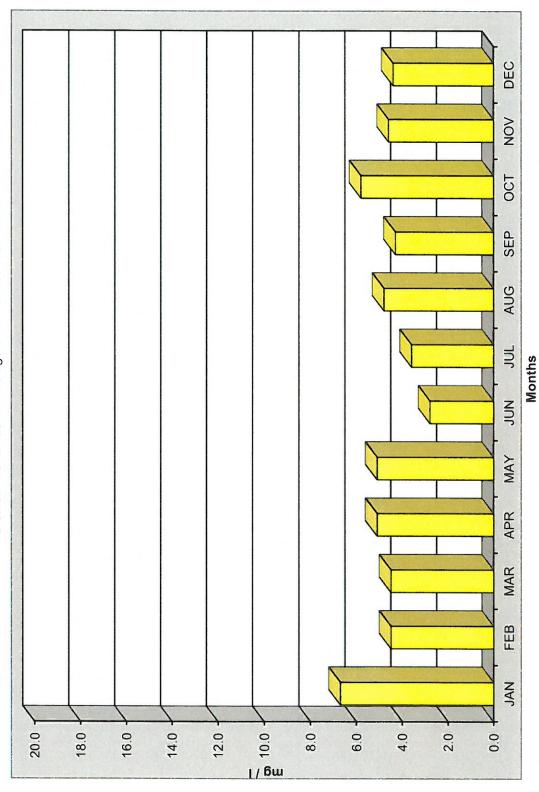
D - Sample has Effluent / Discharge Limitations M - Sample has Effleuent Monitoring Requirements

A - For Sample Results see Appendix "A"

## **CRESTLINE SANITATION DISTRICT**District Final Effluent - Median Total Coliform - 2021

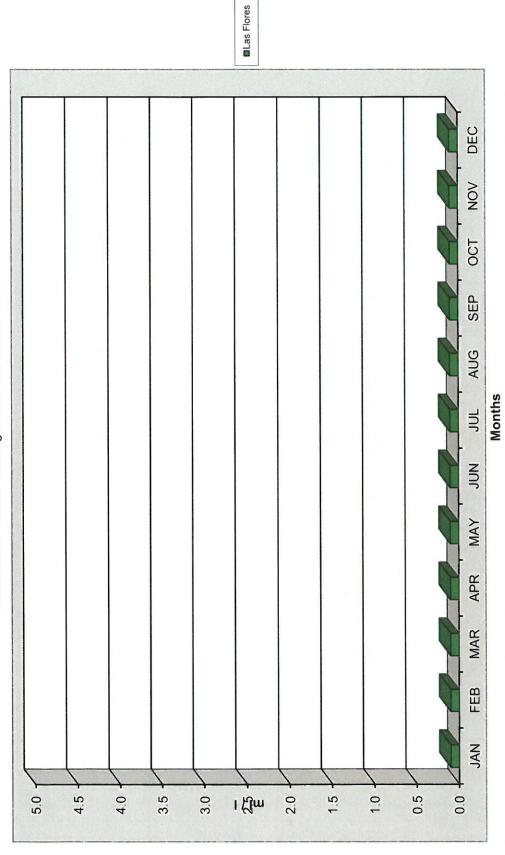


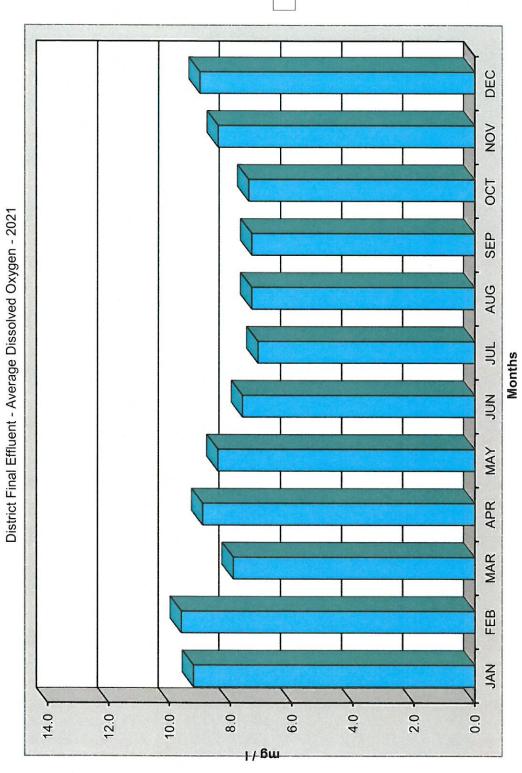
CRESTLINE SANITATION DISTRICT
District Final Effluent - Average Chlorine Residual - 2021



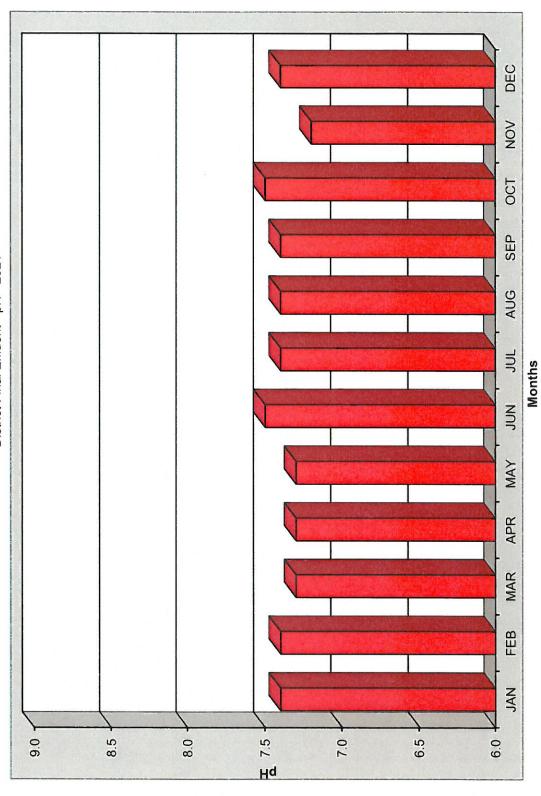
Las Flores

# **CRESTLINE SANITATION DISTRICT**District Final Effluent - Average Settleable Solids - 2021

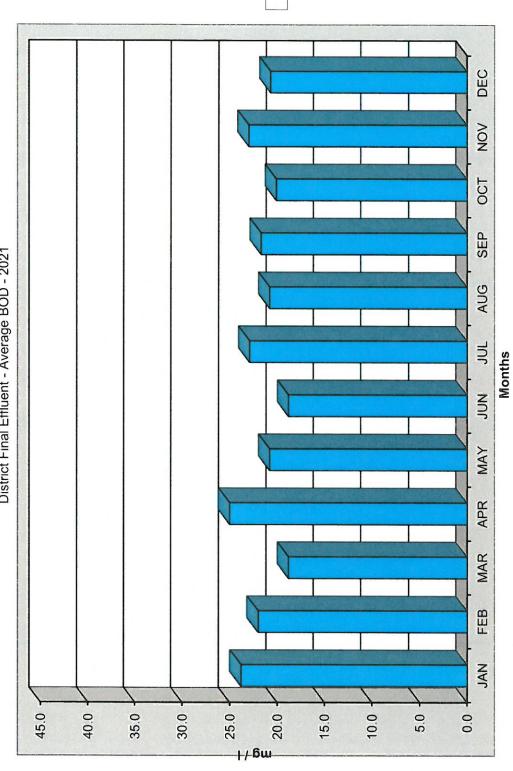


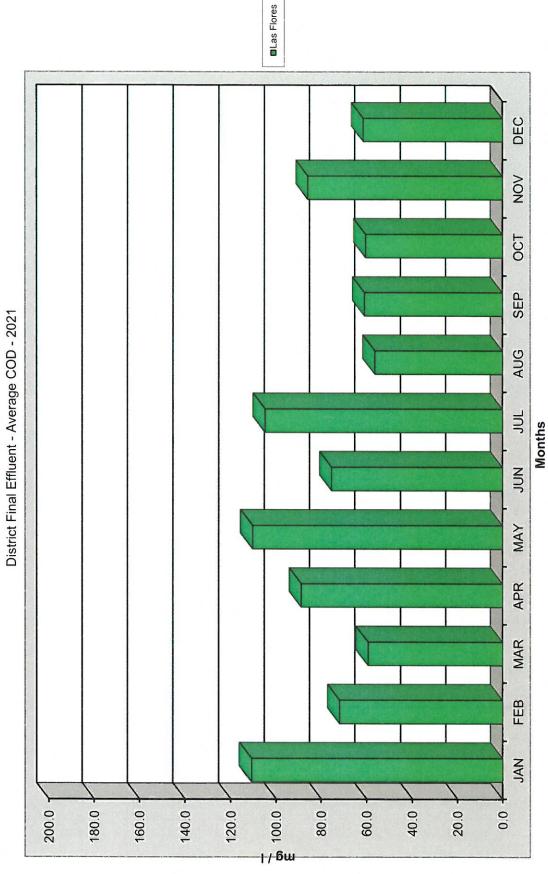


## CRESTLINE SANITATION DISTRICT District Final Effluent - pH - 2021

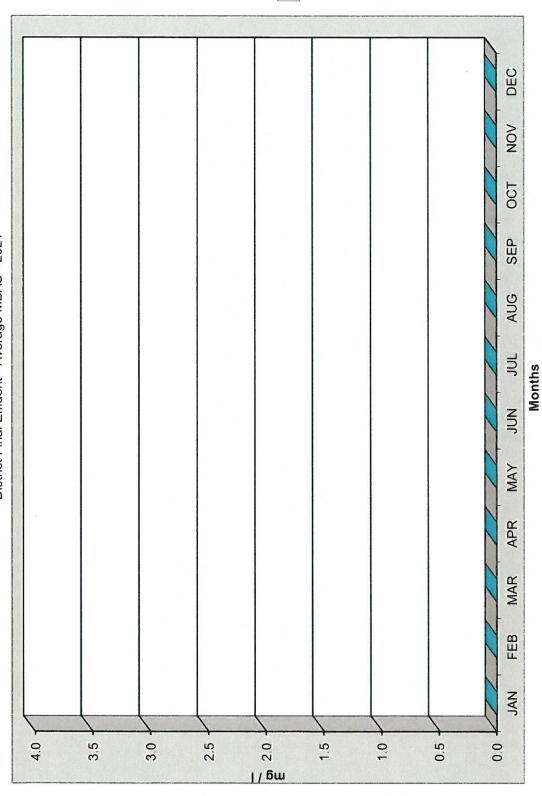


District Final Effluent - Average BOD - 2021



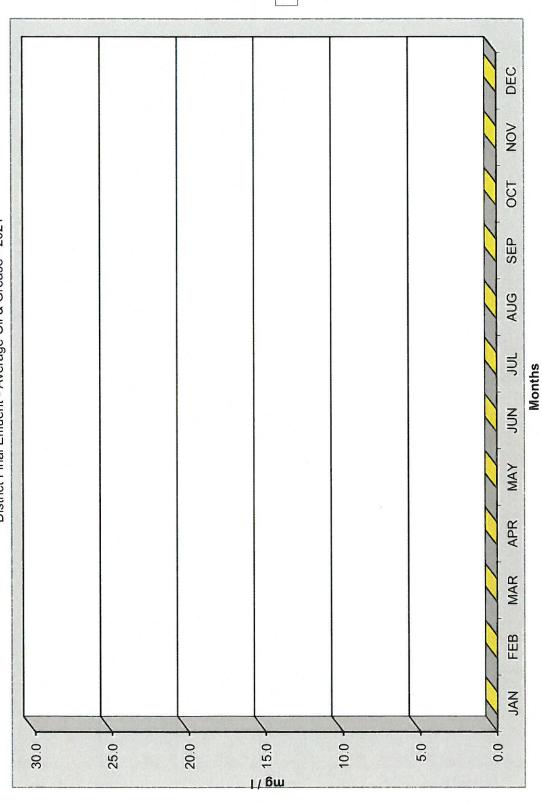


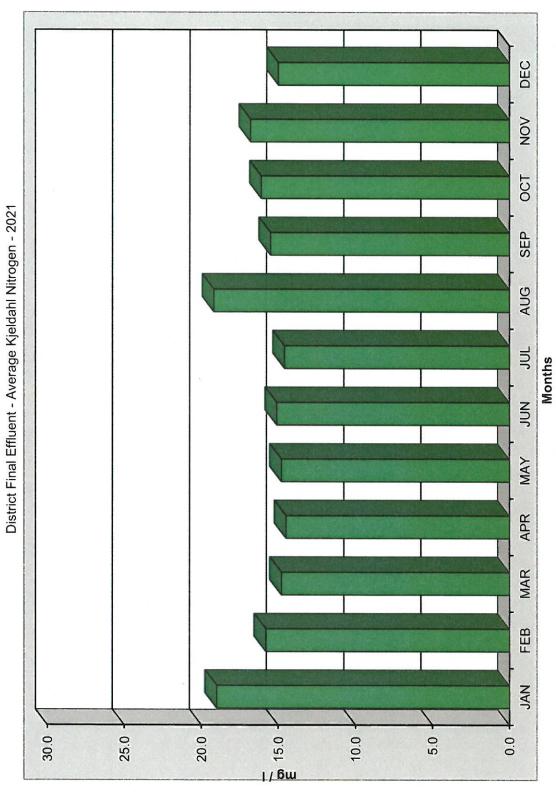
## CRESTLINE SANITATION DISTRICT District Final Effluent - Average MBAS - 2021



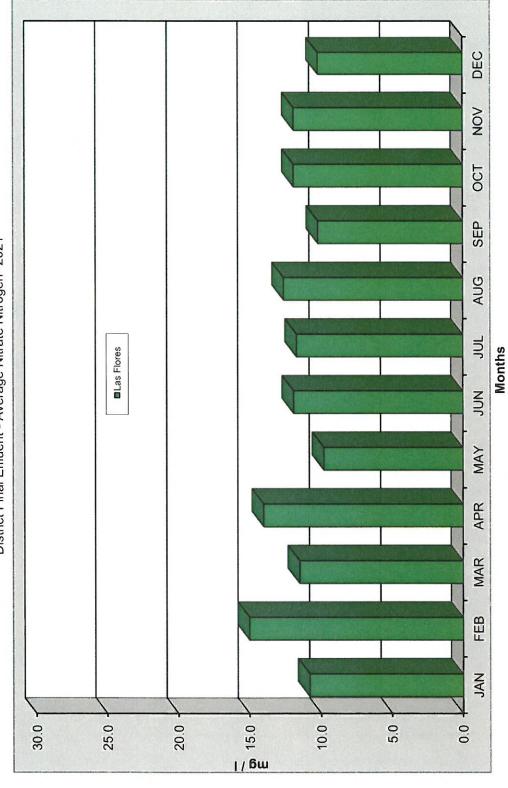
■Las Flores

## CRESTLINE SANITATION DISTRICT District Final Effluent - Average Oil & Grease - 2021

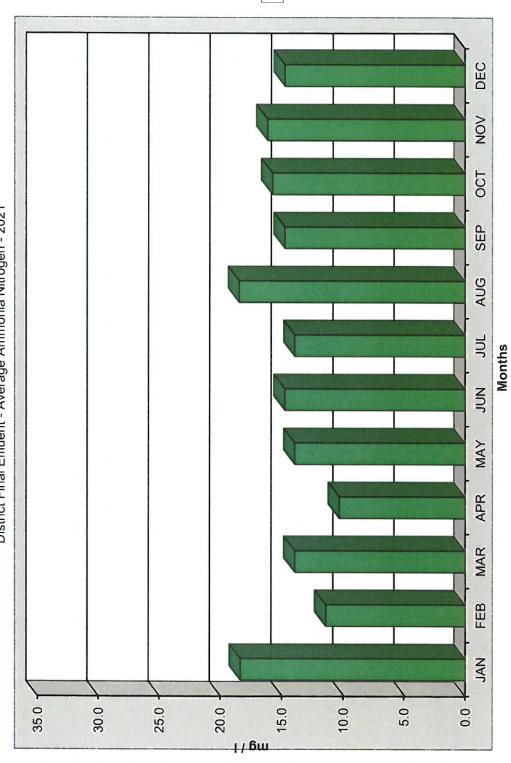




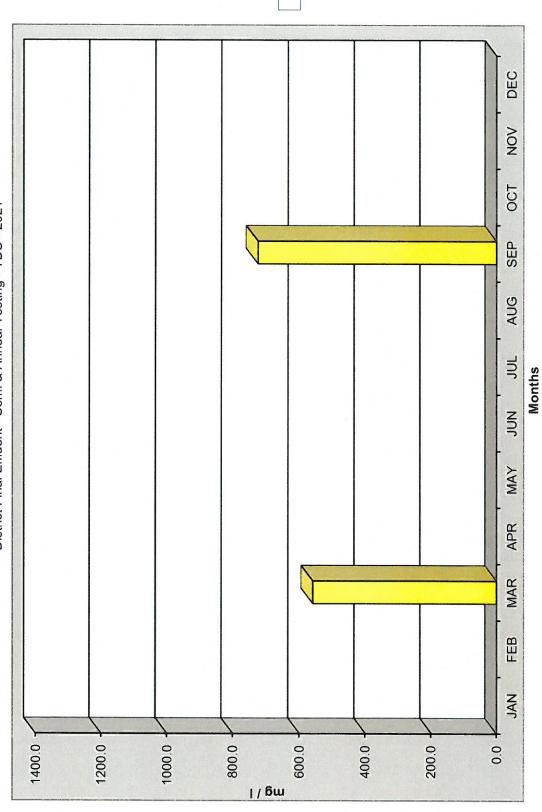
**CRESTLINE SANITATION DISTRICT**District Final Effluent - Average Nitrate Nitrogen -2021



# **CRESTLINE SANITATION DISTRICT**District Final Effluent - Average Ammonia Nitrogen - 2021

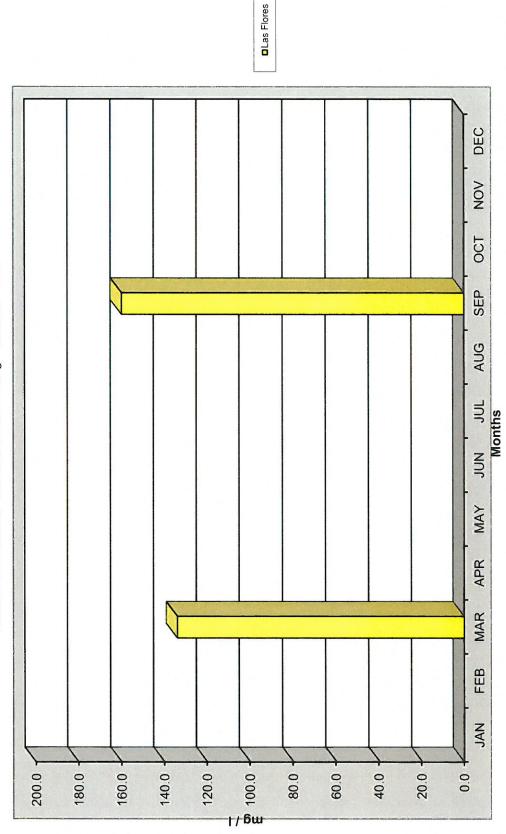


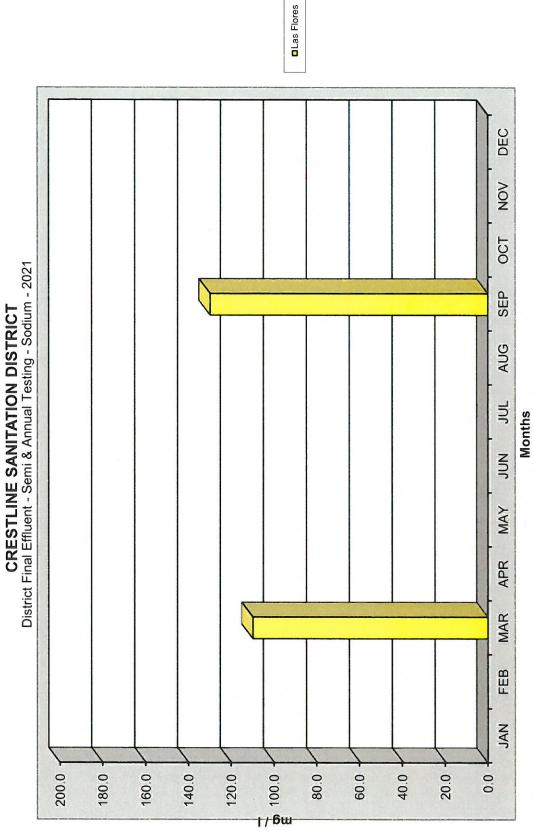
CRESTLINE SANITATION DISTRICT
District Final Effluent - Semi & Annual Testing - TDS - 2021

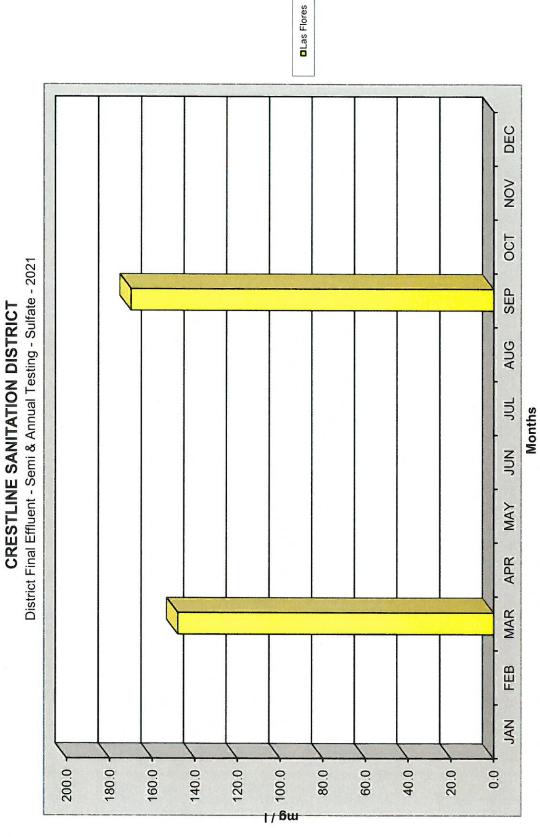


□Las Flores

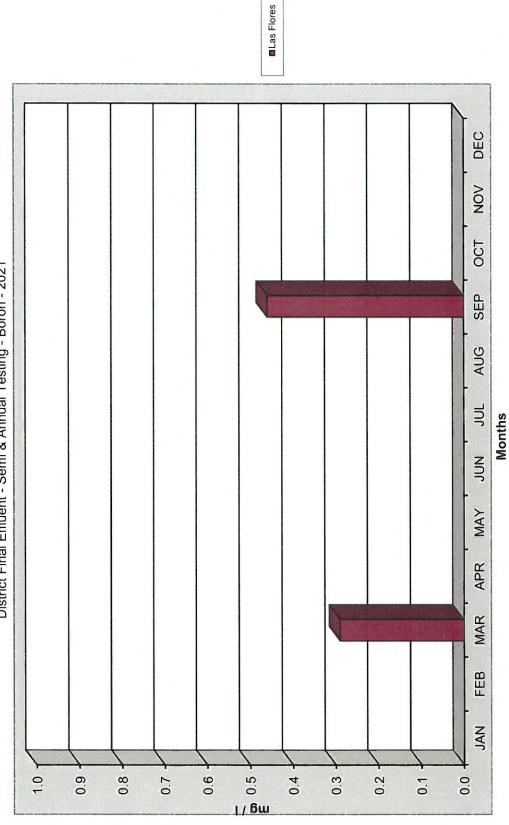
CRESTLINE SANITATION DISTRICT District Final Effluent - Semi & Annual Testing - Chloride - 2021

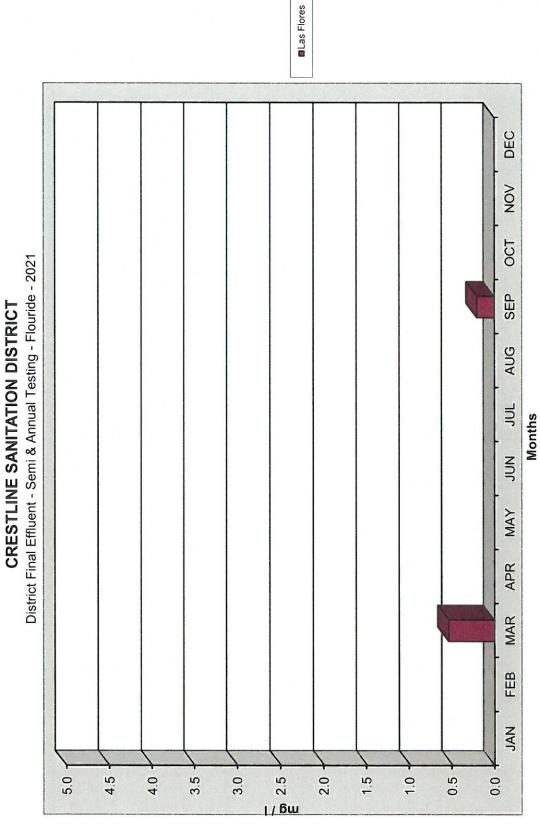






District Final Effluent - Semi & Annual Testing - Boron - 2021





## CRESTLINE SANITATION DISTRICT ANNUAL REPORT

## **Sludge Monitoring**

Year: 2021

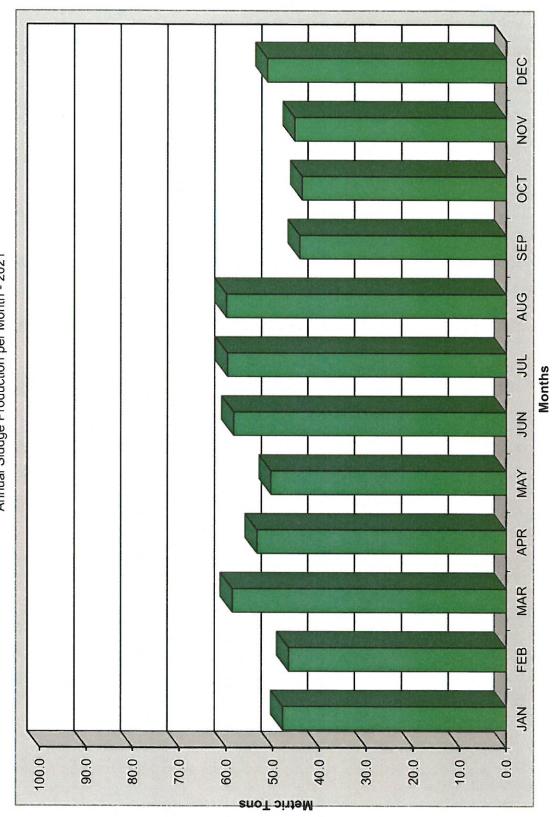
	Sludge Generated	Sludge Removed from Site	Sludge Disposal Method	Sludge Stockpiled on Site
Month				
January	48.0 tons	48.0 Tons	(a)	0.0 Tons
February	46.7 tons	46.7 Tons	(a)	0.0 Tons
March	58.8 tons	58.8 Tons	(a)	0.0 Tons
April	53.5 tons	53.5 Tons	(a)	0.0 Tons
May	50.5 tons	50.5 Tons	(a)	0.0 Tons
June	58.5 tons	58.5 Tons	(a)	0.0 Tons
July	59.8 tons	59.8 Tons	(a)	0.0 Tons
August	60.0 tons	60.0 Tons	(a)	0.0 Tons
September	44.3 tons	44.3 Tons	(a)	0.0 Tons
October	43.8 tons	43.8 Tons	(a)	0.0 Tons
November	45.4 tons	45.4 Tons	(a)	0.0 Tons
December	51.3 tons	51.3 Tons	(a)	0.0 Tons
TOTAL	<b>620.6</b> tons	<b>620.6</b> Tons	(a)	0.0 Tons

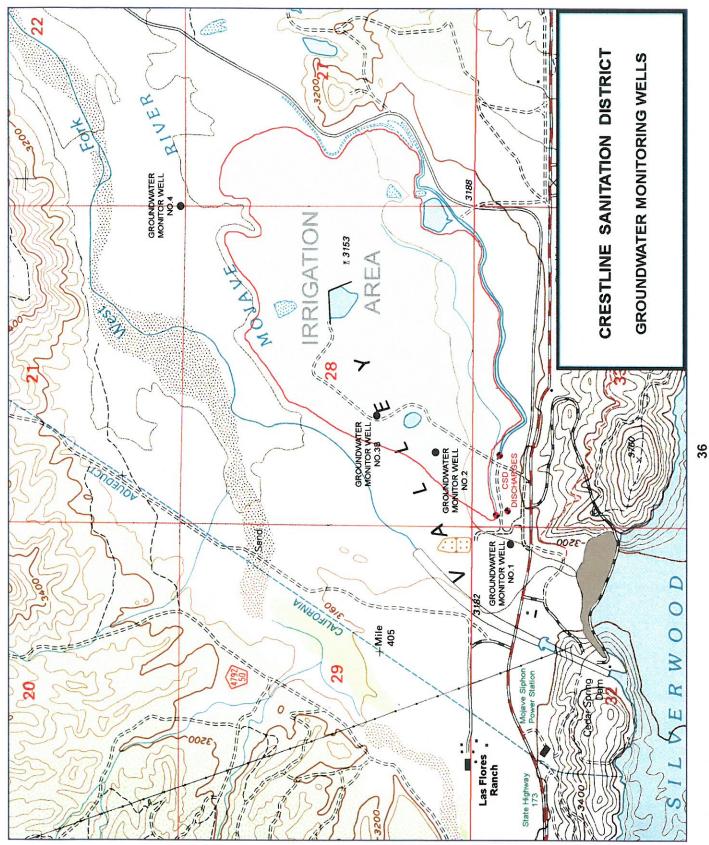
 (a) Sludge is collected from Crestline's three treatment plants and Pilot Rock, mixed and pressed at the Huston Creek Treatment Plant. After pressing; the solids are disposed of at One Stop Landscape
 (13024 San Timoteo Canyon Road, Redlands, CA 92373) for composting and eventual recycling.

Note:

Laboratory Analysis of the sludge is not required at this time in recognition that there are no significant industrial waste imputs to the sewer system, and because sludge sampling is required by the disposal facility that accepts the Discharger's sludge. The Regional Board may require qualitative labroratory testing of the sludge if sludge disposal practices and/or locations, as disclosed in the waste discharge requirements, are altered. (Monitoring and Reporting Program 94-57)

CRESTLINE SANITATION DISTRICT Annual Sludge Production per Month - 2021





## ANNUAL REPORT

Pasture Monitoring Well Number 1 Laboratory Monitoring Data

Year:

2021

Frequency	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	
Sample Type	Α	Α	Α	Α	Α	Α	Α	Α	Α	
Sample	Sulfate	Sodium	MBAS	Chloride	TDS	TKN	NH3-N	NO3-N	Water Depth	Well
Units	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	feet *	Number
JANUARY FEBRUARY MARCH APRIL MAY JUNE	130.0	89.0 150.0	ND ND	18.8 19.6	280 280	0.18	0.16	1.70	3149.5 3149.5	1
JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER	11 / 10 / 10 / 10 / 10 / 10 / 10 / 10 /	85.0 88.0	ND ND	18.8 18.6	290 290	0.21	0.20	1.70 2.10	3143.9 3146.9	1

A - Monitoring Requirement

<sup>\* =</sup> Depth in feet from surface to groundwater

## Pasture Monitoring Well Number 2 Laboratory Monitoring Data

Year: 2021

Frequency	Quarterly									
Sample Type	Α	Α	Α	Α	Α	Α	Α	Α	Α	
Sample	Sulfate	Sodium	MBAS	Chloride	TDS	TKN	NH3-N	NO3-N	Water Depth	Well
Units	mg/l	feet *	Number							
JANUARY FEBRUARY										
MARCH	125.0	110.0	ND	132.0	560	0.32	0.30	7.30	3151.1	2
APRIL MAY JUNE JULY	128.0	130.0	ND	129.0	490	0.32	0.29	7.60	3152.9	2
AUGUST SEPTEMBER OCTOBER	100.0	75.0	ND	103.0	400	0.30	0.28	6.30	3146.7	2
NOVEMBER DECEMBER	91.0	80.0	ND	85.6	370	0.30	0.29	7.20	3148.2	2

A - Monitoring Requirement

<sup>\* =</sup> Depth in feet from surface to groundwater

## **ANNUAL REPORT**

## Pasture Monitoring Well Number 3 Laboratory Monitoring Data

Year: 2021

Frequency	Quarterly									
Sample Type	Α	Α	Α	Α	Α	Α	Α	Α	Α	
Sample	Sulfate	Sodium	MBAS	Chloride	TDS	TKN	NH3-N	NO3-N	Water Depth	Well
Units	mg/l	feet *	Number							
JANUARY FEBRUARY MARCH APRIL	104.0	83.0	ND	111.0	430	0.30	0.28	6.90	3148.4	3
MAY JUNE JULY	130.0	180.0	ND	126.0	520	0.28	0.26	6.50	3145.8	3
AUGUST SEPTEMBER OCTOBER	126.0	79.0	ND	118.0	510	0.25	0.23	6.30	3143.0	3
NOVEMBER DECEMBER		92.0	ND	136.0	540	0.24	0.22	6.30	3145.4	3

A - Monitoring Requirement

<sup>\* =</sup> Depth in feet from surface to groundwater

## **ANNUAL REPORT**

## Pasture Monitoring Well Number 4 Laboratory Monitoring Data

Year:

2021

Frequency	Quarterly									
Sample Type	Α	Α	Α	Α	Α	Α	Α	Α	A	
Sample	Sulfate	Sodium	MBAS	Chloride	TDS	TKN	NH3-N	NO3-N	Water Depth	Well
Units	mg/l	feet *	Number							
JANUARY FEBRUARY MARCH APRIL MAY	160.0	61.0	ND	130.0	600	0.33	0.31	4.80	3110.0	4
JUNE JULY	148.0	120.0	ND	114.0	550	0.33	0.31	5.60	3111.7	4
AUGUST SEPTEMBER OCTOBER		57.0	ND	122.0	600	0.43	0.40	5.00	3106.5	4
NOVEMBER DECEMBER		57.0	ND	134.0	600	0.32	0.31	4.90	3109.0	4

A - Monitoring Requirement

<sup>\* =</sup> Depth in feet from surface to groundwater

### **ANNUAL REPORT**

## Pasture Monitoring Wells Labroratory Monitoring Data

## **Annual Samples**

2021

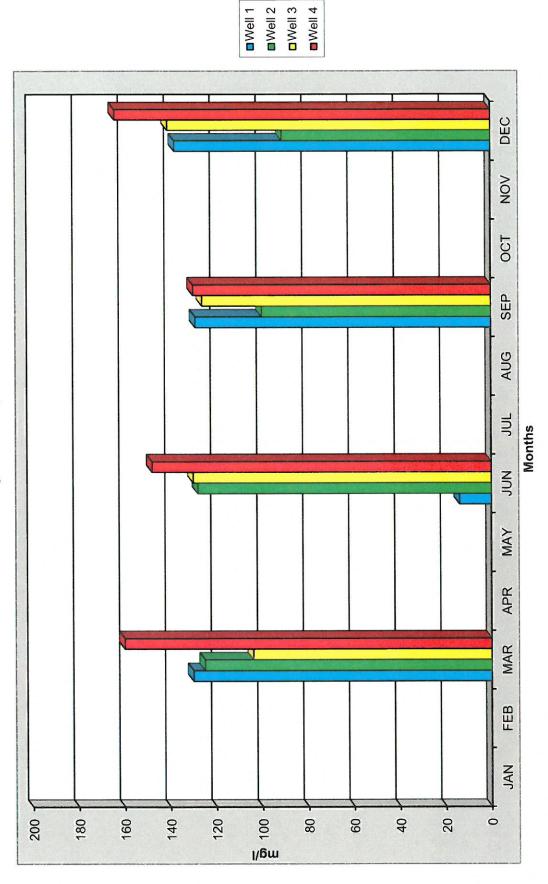
Frequency		Annual		
Sample Type	Α	Α	A	
Sample	Purgable Halocarbons *	Purgable Aromatics	Base/Neutral/Acid Extractable Organics	Well Numbe
Units	ug/l	ug/l	ug/l	
Month				
	В	В	В	1
			В	1 2
September	В	В		

A - Monitoring Requirement

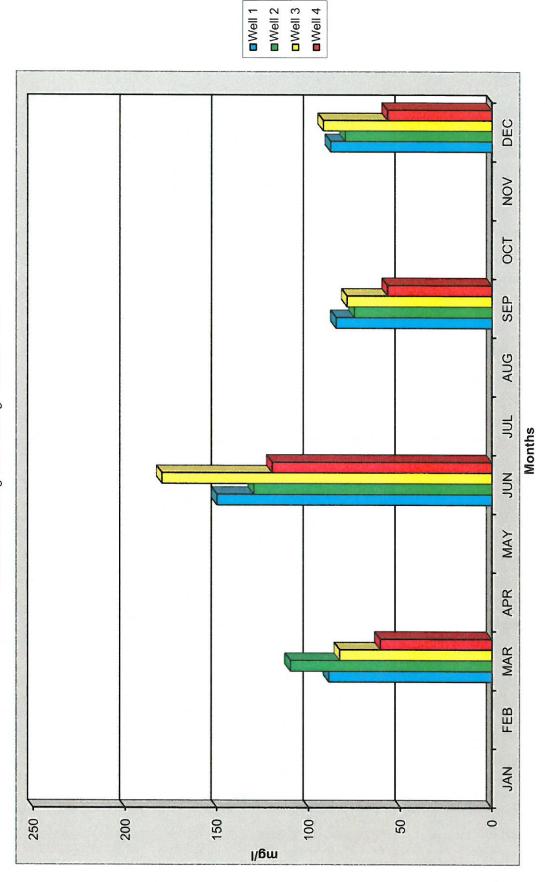
B - For Sample Results see Appendix "B"

<sup>\*</sup> Analysis shall be conducted for those substances included on the EPA list of priority pollutants and all other toxic substances known to be discharged to the Discharger's system using EPA test methods 603, 608, 624, 625 and other appropriate tests for heavy metals.

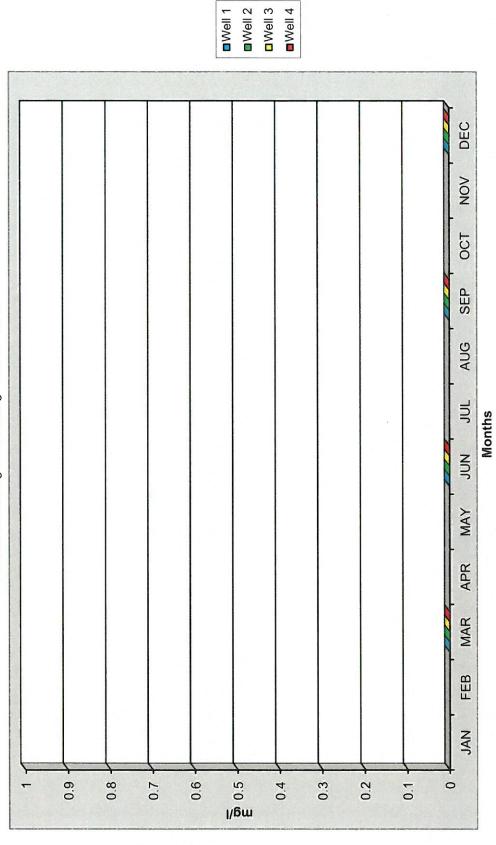
CRESTLINE SANITATION DISTRICT Pasture Monitoring Well Testing - Sulfate - 2021



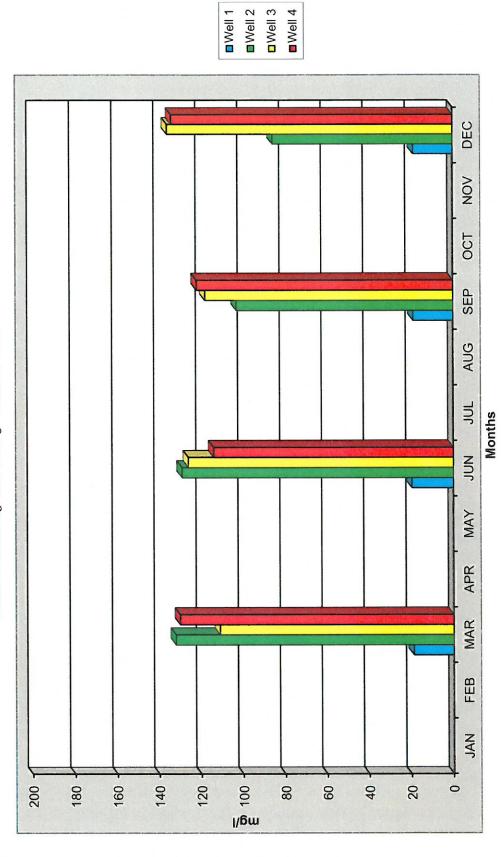
Pasture Monitoring Well Testing - Sodium - 2021



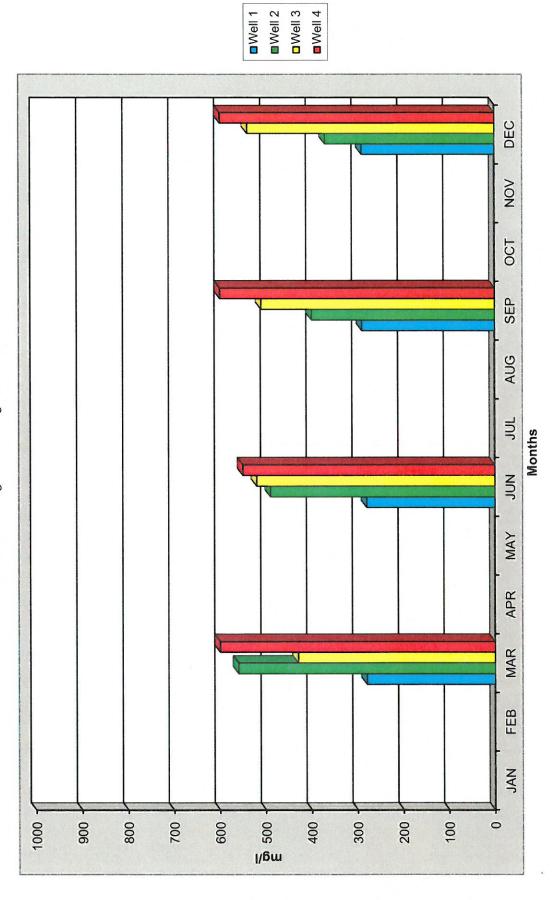
CRESTLINE SANITATION DISTRICT Pasture Monitoring Well Testing - MBAS - 2021



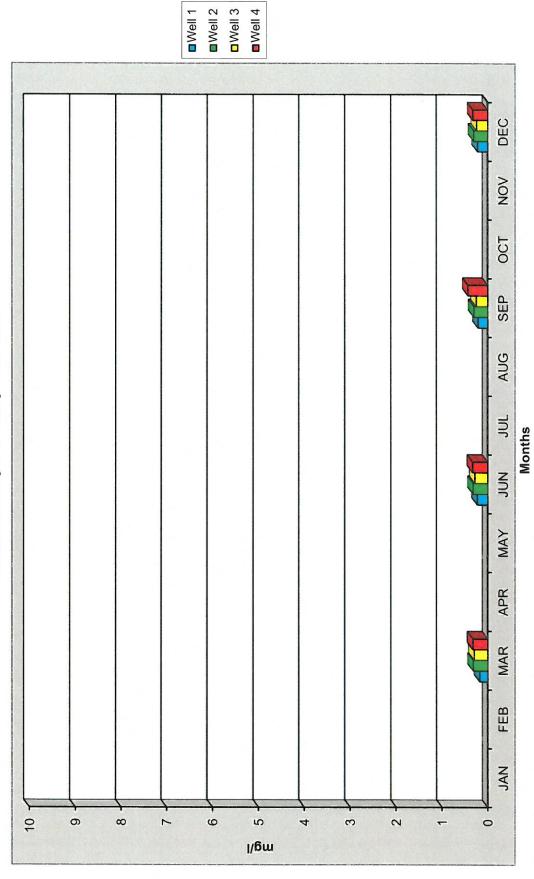
Pasture Monitoring Well Testing - Chloride - 2021



**CRESTLINE SANITATION DISTRICT**Pasture Monitoring Well Testing - TDS - 2021

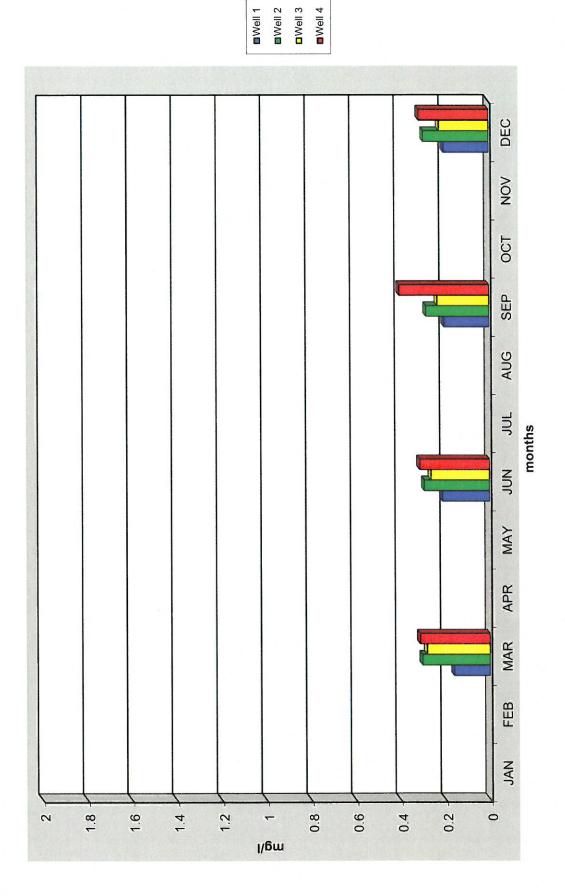


Pasture Monitoring Well Testing - TKN - 2021

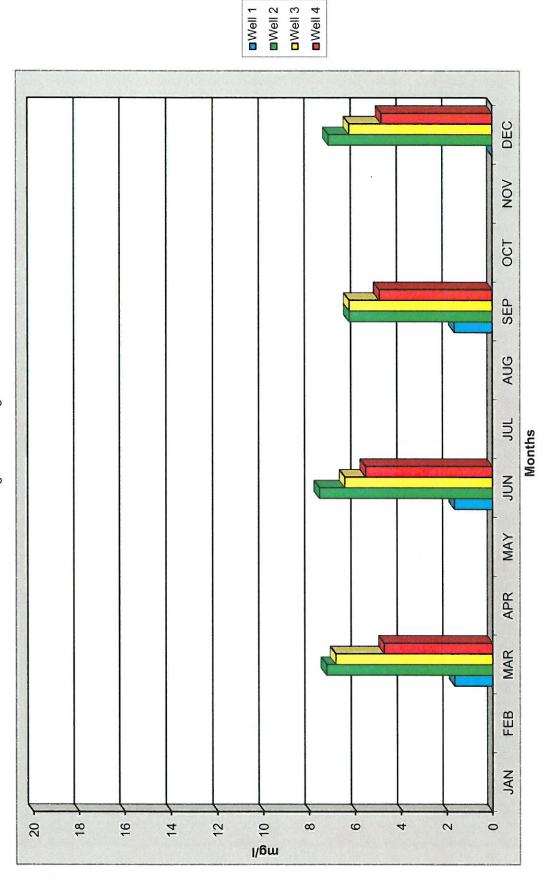


01/02 des

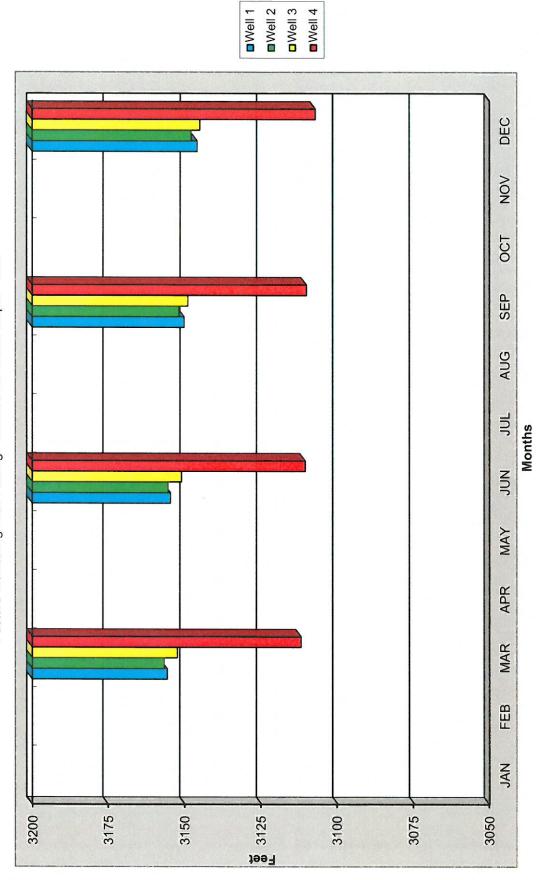
**CRESTLINE SANITATION DISTRICT**Pasture Monitoring Well Testing - NH3-N - 2021



Pasture Monitoring Well Testing - NO3-N - 2021



Pasture Monitoring Well Testing - Elevation of Water Depth - 2021



CRESTLINE SANITATION DISTRICT	Semi Annual Supply Water Monitoring Data

Semi-	
Semi-	
Semi-	-
Semi-	
Frequency	

2021

Year:

Crestline Lake Arrownead         3/10/2021         MIG/L         400         106.0         57.0         79.0           Water Agency (Silverwood)         POUNDS         30,991         8,213         4,416         6,121
Crestline Village         3/16/2021         MG/L         180         32.8         59.0         20.0           Water District         POUNDS         190,652         34,741         62,492         21,184
Valley of Enchantment         3/9/2021         MG/L         340         82.0         48.0         80.0           Mutual Water Company         POUNDS         79,936         19,279         11,285         18,808
Calculated Constituent         MG/L         219.8         45.4         57.0         33.6           Concentrations         POUNDS         301,579         62,232         78,193         46,113

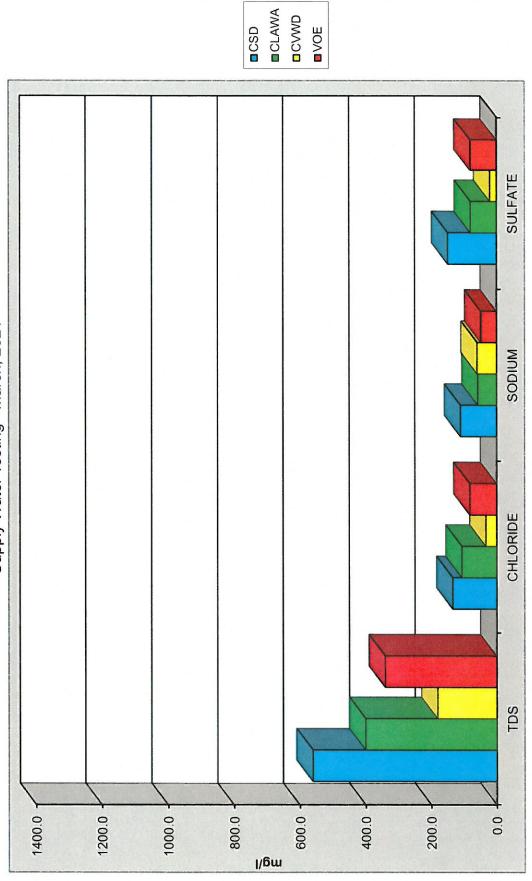
"CALCULATED CONSTITUENT CONCENTRATIONS" above, were mathematically calculated on samples collected from the three water purveyors contributing to the sewer system.

Samples collected in March

Flow Dates: October 1, 2020 thru March 31, 2021

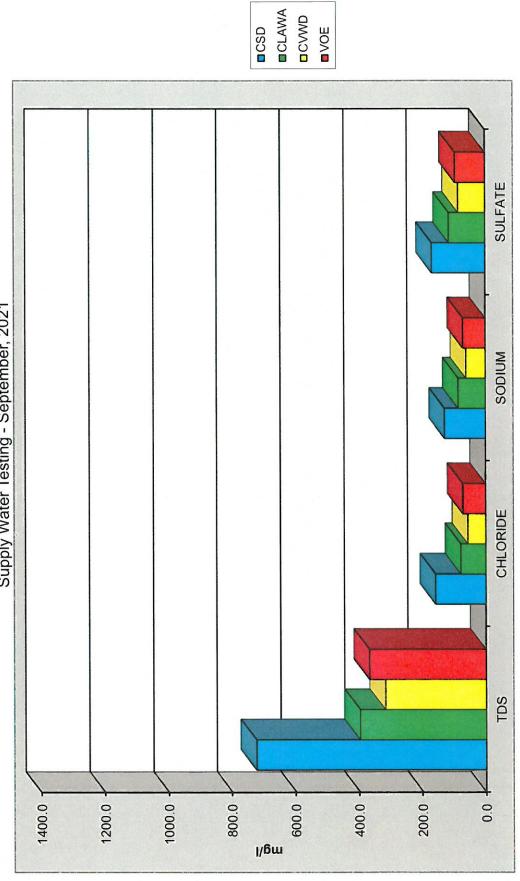
**CRESTLINE SANITATION DISTRICT**Supply Water Testing - March, 2021





		CRESTLINE SANITATION DISTRICT Semi Annual Supply Water Monitoring Data	CRESTLINE SANITATION DISTRICT ii Annual Supply Water Monitoring	ION DISTRI er Monitorir	ICT ng Data			Year:	2021
		Frequency	Semi- Annual	Semi- Annual	Semi- Annual	Semi- Annual			
		Violations							
	Sample	Sample type	Monitor	Monitor	Monitor	Monitor	Total	Local	Purchased
		Maximum					Flow	Water	Water
	Dates	Mean/Min.					.⊑	119	
		Median					MG		
			TDS	Chloride	Sodium	Sulfate			
Crestline Sanitation District	09/09/21	MG/L	725.0	160.0	130.0	170.0	90.30		
(Final Effluent)		POUNDS	545,999	120,496	97,903	128,027			
Crestline Lake Arrowhead	09/09/21	MG/L	400.0	79.2	86.0	115.0	13.18		
Water Agency (Silverwood)		POUNDS	43,968	8,706	9,453	12,641			
Crestline Village	09/16/21	MG/L	320.0	56.6	61.0	85.0	130.11	53.39	76.72
Water District		POUNDS	347,238	61,418	66,192	92,235			
Valley of Enchantment	09/14/21	MG/L	370.0	72.2	71.0	95.0	30.26	5.07	25.19
Mutual Water Company		POUNDS	93,376	18,221	17,918	23,975			
Calculated Constituent		MG/L	220.2	40.1	42.5	58.6	263.9		
Concentrations		POUNDS	484,644	88,257	93,539	128,974			
	"CALCULATEI collected from	"CALCULATED CONSTITUENT CONCENTRATIONS" above, were mathematically calculated on samples collected from the three water purveyors contributing to the sewer system.	CONCENTRA	ATIONS" abovibuting to the	/e, were math sewer system	ematically cal ı.	culated on s	amples	
	Samples col	Samples collected in SEPTEMBER	MBER		Flow Dates:	Flow Dates: April 1, 2021 thru September 30, 2021	thru Septer	nber 30, 20)	21

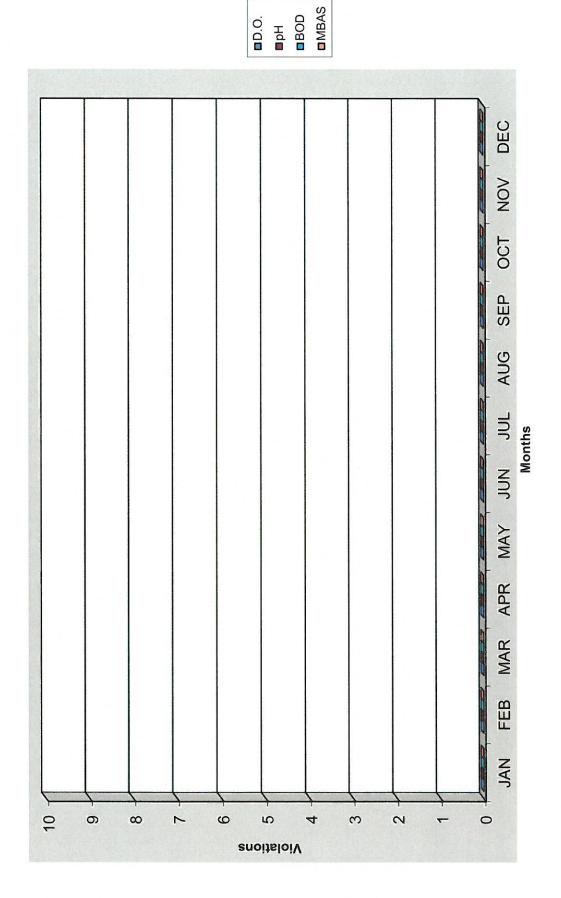
CRESTLINE SANITATION DISTRICT Supply Water Testing - September, 2021



	Vear. 2021	Г	yly monthly monthly		Σ				NO3-N NH3-N	l/gm l/gm		1	1	1	1	,	1	1	,	,	,	1	0 0
	lations		2 month monthly		M			Oil &	Grease TKN	l/gm   l/gm	i.	1		i	į,	1	1	ř	1	1	•	1	0 0
DISTRICT	ANNUAL REPORT Final Effluent Disposal Site (Las Flores) Constituent Violations		2 month		D/M	2.0	1.0		MBAS	l/gm	r	ī	1	Î	ř	1	'	ı	ı	1	ì	1	0
1	PORT ores) Cor		2 month		Σ				COD	l/gm	. L	ı	1	ı	Ē	1	1	ſ.	1	J	,	ı	0
SANITA	ANNUAL REPORT al Site (Las Flores)		2 month		D/M	45.0	30.0		BOD	l/gm	1	r	ı	Ī	ij	1	1	1	1	,	1	1	0
CRESTLINE SANITATION	ANI isposal Si		weekly		D/M	6 >	9 <		ЬH	Hd	i	1	ı	ï	ī	1	1	ı	E	1	ı	-	0
CRES	Effluent D		weekly		D/M		>1		D.O.	mg/l	1	1	ñ	ı	î	1	1	i	1	1	î	-	0
	Final		weekly		D/M	0.5 ml/l		Settleable	Solids	mI/I	ı		ı	ı	ı	1	ì	ī	1	1	ī	ı	0
			2 week		D/M		23.0 *	Total	Coliform	NAM	ı		ı	ı	D.	1	1	Į.	1	1	ı	•	0
			Frequency	Violations	Sample Type	Maximum	Mean/Min.*				January	February	March	April	May	June	July	August	September	October	November	December	Year Total

D - Has Effluent / Discharge Limitations M - Has Effluent Monitoring Requirements

**CRESTLINE SANITATION DISTRICT**Final Effluent Constituent Violations - 2021



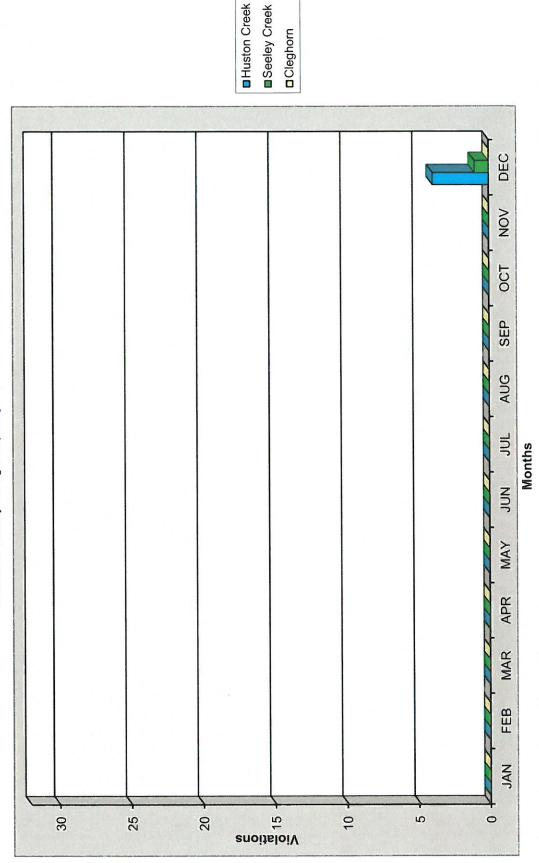
## ANNUAL REPORT

## **Treatment Facilities Flow Violations**

Year: 2021

					Year:	2021
Facility name	Huston	Plant	Seeley	Plant	Cleghorn	Plant
Reading	daily	daily	daily	daily	daily	
Average	monthly		monthly		monthly	
Design	design	maximum	design	maximum	design	maximum
limits	0.7 mg/d	2.50 mg	0.5 mg/d	1.00 mg	0.2 mg/d	0.4 mg
	design capacity	instantaneous peak	design capacity	instantaneous peak	design capacity	instantaneou peak
	Huston	HC peak	Seeley	SC peak	Cleghorn	CH peak
Months	violations	violations	violations	violations	violations	violations
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December	4		1			
Year Total	4	0	1	0	0	0

Treatment Facility Design Capacity Flow Violations - 2021



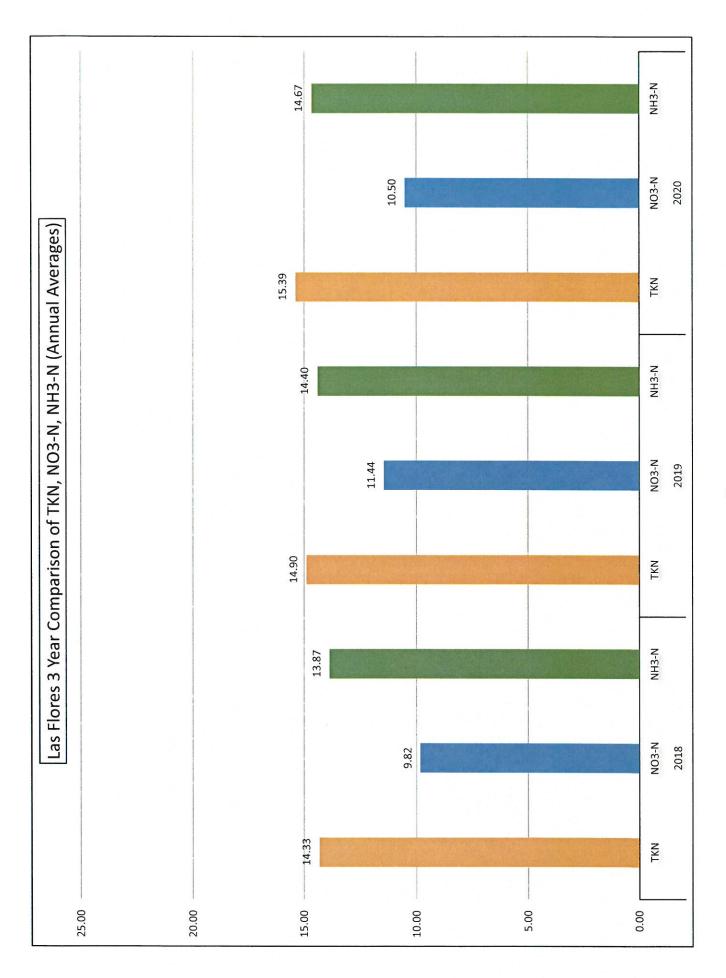
Treatment Facility Instantaneous Flow Violations - 2021



**Crestline Sanitation District** 

3 Year TKN, NO3-N, NH3-N Comparison

Year		2019			2020			2021	
Test	TKN	NO3-N	NH3-N	TKN	N-EON	NH3-N	TKN	NO3-N	NH3-N
Units	l/gm								
Month									
JANUARY	15.00	2.90	14.30	15.00	9.40	14.30	19.00	10.80	18.40
FEBRUARY	13.70	9.90	13.30	15.00	10.40	14.30	15.80	15.00	11.50
MARCH	14.60	12.40	14.30	14.80	10.40	14.20	14.80	11.50	14.00
APRIL	17.70	7.40	17.30	12.20	10.60	12.00	14.50	14.00	10.40
MAY	12.00	9.80	11.80	16.00	12.70	15.30	14.80	9.80	14.00
JUNE	13.80	10.40	13.00	14.80	11.80	14.60	15.10	11.90	14.80
JULY	14.60	10.40	14.30	14.50	12.50	14.00	14.60	11.70	14.00
AUGUST	12.50	8.90	12.00	15.00	10.80	14.50	19.20	12.60	18.50
SEPTEMBER	14.90	8.70	14.60	15.00	11.90	14.30	15.50	10.20	14.80
OCTOBER	15.80	10.40	15.50	15.00	12.50	14.50	16.10	11.90	15.80
NOVEMBER	12.30	08.6	11.30	16.00	11.90	15.60	16.80	11.90	16.20
DECEMBER	15.00	11.80	14.70	15.50	12.40	15.20	15.00	10.20	14.80
AVERAGES	14.33	9.82	13.87	14.90	11.44	14.40	15.93	11.79	14.77



## CRESTLINE SANITATION DISTRICT ANNUAL REPORT

## **APPENDIX "A"**

Sample Results
Las Flores Stand Pipe
District Final Effluent

**Annual Testing** 

Tests Results for:
Purgable Organics
Base / Neutral / Acid Extractable Organics
Heavy Metals



Project: Las Flores Ranch

P.O. Box 3395

Project Number: Annual Testing Outfall 2021

Crestline CA, 92325-3395 Project Manager: Ron Scriven

Reported: 09/28/21 17:10

## Conventional Chemistry Parameters by APHA/EPA Methods

## Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
L.F09-02-A.B.C.D.E.F. (2109041-01) Liquid	Sampled: 09/02/2	1 09:00 Re	ceived: 09	/02/21 14:4:	5				
Phenolics	ND	0.250	mg/L	5	B110502	09/02/21	09/02/21 17:30	SM 5530 B/C	



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Annual Testing Outfall 2021

Project Manager: Ron Scriven

Reported: 09/28/21 17:10

## Metals by EPA 200 Series Methods

## Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
L.F09-02-A.B.C.D.E.F. (2109041-01) Liquid	Sampled: 09/02/	21 09:00 Re							
Silver	ND	0.010	mg/L	1	B1I0801	09/08/21	09/08/21 14:50	EPA 200.7	
Cadmium	ND	0.010	"		"	"		900	
Chromium	ND	0.015	**			**	100		
Copper	ND	0.080	**	11	**	H		н	
Nickel	ND	0.019	11	11	"	**	. н	н	
Lead	ND	0.010	n.	11	"	"	n	n	
Zinc	0.055	0.030	.11	an an	**	"			



P.O. Box 3395

Crestline CA, 92325-3395

Project: Las Flores Ranch

Project Number: Annual Testing Outfall 2021

Project Manager: Ron Scriven

Reported: 09/28/21 17:10

## Volatile Organics by EPA Method 624.1

## Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
L.F09-02-A.B.C.D.E.F. (2109041-01) Liquid	Sampled: 09/02/2	21 09:00 Red	ceived: 09	/02/21 14:45		(8)			1-02
Surrogate: Dibromofluoromethane		99.9 %	86-	-118	B111401	09/13/21	09/14/21 10:28	EPA 624.1	
Surrogate: Toluene-d8		92.4 %	88-	-110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.3 %	86-	-115	"	"	,,	"	
Acrolein	ND	5.0	•	u	"	"	•	"	
Acrylonitrile	ND	2.0	**	"	"			"	
Benzene	ND	1.0		H	"	,,	n		
Bromobenzene	ND	1.0	н	"	п	n	н	"	
Bromodichloromethane	10	1.0	•	"	"	11		н	
Bromoform	ND	1.0	•	"	"	11	H	"	
Bromomethane	ND	1.0	**	11	**	310	m.	"	
Carbon tetrachloride	ND	1.0	19	10		31	и	"	
Chlorobenzene	ND	1.0	н		н.	n.	o	п	
Chloroethane	ND	1.0			.0		n		
2-Chloroethylvinyl ether	ND	1.0	**		"	**	Ħ.		
Chloroform	59	1.0		н		н	"	9	
Chloromethane	ND	1.0	"	u	11	"	•	"	
Dibromochloromethane	ND	1.0		u	**	**	"	"	
1,2-Dichlorobenzene	ND	1.0		**	**	**	"		
1,3-Dichlorobenzene	ND	1.0			**				
1,4-Dichlorobenzene	ND	1.0		"	"	11		н	
1,1-Dichloroethane	ND	1.0		"		"	**		
1,2-Dichloroethane	ND	1.0	,,		11	n		ar.	
1,1-Dichloroethene	ND	1.0	**	,,	11	и			
cis-1,2-Dichloroethene	ND	1.0			н	· m	n	**	
	ND	1.0	**		"			н	
trans-1,2-Dichloroethene	ND	1.0		11		"			
1,2-Dichloropropane	ND	1.0		11	11		,	11	
1,1-Dichloropropene	ND	1.0	,	,,	,,			11	
cis-1,3-Dichloropropene	ND	1.0						н	
trans-1,3-Dichloropropene				"		**			
Ethylbenzene	ND	1.0		,,	**				
Methylene chloride	ND	1.0			н		,,	"	
1,1,2,2-Tetrachloroethane	ND	1.0				,,	,	"	
Tetrachloroethene	ND	1.0		11		,,	"		
Toluene	4.3	1.0		"				u.	
1,1,1-Trichloroethane	ND	1.0							
1,1,2-Trichloroethane	ND	1.0			"				
Trichloroethene	ND	1.0				,,			
Trichlorofluoromethane	ND	1.0	"	"					
Vinyl chloride	ND	1.0	"	"	"				
m,p-Xylene	ND	1.0	**		"				
o-Xylene	ND	1.0	н			"		"	



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Annual Testing Outfall 2021

Project Manager: Ron Scriven

Reported:

09/28/21 17:10

## Volatile Organics by EPA Method 624.1

## Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
L.F09-02-A.B.C.D.E.F. (2109041-01) Liquid Sampled: 09/02/21 09:00 Received: 09/02/21 14:45									
Methyl tert-butyl ether	ND	1.0	μg/L	1	B111401	09/13/21	09/14/21 10:28	EPA 624.1	



P.O. Box 3395

Crestline CA, 92325-3395

Project: Las Flores Ranch

Project Number: Annual Testing Outfall 2021

Project Manager: Ron Scriven

Reported: 09/28/21 17:10

## Semivolatile Organics by EPA Method 625.1

## Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
L.F09-02-A.B.C.D.E.F. (2109041-01) Liquid	Sampled: 09/02/2	1 09:00 Re	ceived: 0	9/02/21 14:45					
Surrogate: 2-Fluorophenol		116 %	25	i-121	B111608	09/07/21	09/16/21 12:25	EPA 625.1	
Surrogate: Phenol-d6		71.6 %	24	1-113	"	"	"	"	
Surrogate: Nitrobenzene-d5		109 %	23	3-120	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		77.3 %	30	0-115	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		63.6 %	19	7-122	"	"	"	"	
Surrogate: Terphenyl-d14		103 %	18	3-137	"	"	"	"	
Acenaphthene	ND	5.0	n	"	11	"	•		
Acenaphthylene	ND	5.0		"	n	"	"	и	
Anthracene	ND	5.0	"	"	"	"	n	**	
Benzidine	ND	5.0	"	u	"	U	n	н	
Benzo (a) anthracene	ND	5.0		n	11	"	**	n n	
Benzo (b) fluoranthene	ND	5.0		**	"	"	H	0	
Benzo (k) fluoranthene	ND	5.0	11	300	**	"		"	
Benzo (a) pyrene	ND	5.0	н	300	11	"	•		
Benzo (g,h,i) perylene	ND	5.0	**		"	11	•	n	
Butyl benzyl phthalate	ND	5.0	m		"	,,		u	
Bis(2-chloroethyl)ether	ND	5.0			"		•	"	
Bis(2-chloroethoxy)methane	ND	5.0	n		ä	.,		н	
Bis(2-ethylhexyl)phthalate	ND	5.0	**			9	**	н	
Bis(2-chloroisopropyl)ether	ND	5.0	,,				,,		
4-Bromophenyl phenyl ether	ND	5.0			"	"		,,	
2-Chlorophenol	ND	1.0	n	n n	34			"	
and the second s	ND	5.0	н	**	,,	u		н	
4-Chloro-3-methylphenol	ND	5.0		"	,,	"	N.		
2-Chloronaphthalene	ND	5.0			,,			,,	
4-Chlorophenyl phenyl ether	ND ND	5.0	.,	v	и		n		
Chrysene		5.0	н	11	**			,,	
Dibenz (a,h) anthracene	ND		**		u	**			
1,3-Dichlorobenzene	ND	5.0			,,				
1,2-Dichlorobenzene	ND	5.0		,,	,,	17	,		
1,4-Dichlorobenzene	ND	5.0				,,		н	
3,3'-Dichlorobenzidine	ND	5.0	,,	"	,,				
2,4-Dichlorophenol	ND	1.0			,,			,	
Diethyl phthalate	ND	5.0	"	"	"	"		,	
2,4-Dimethylphenol	ND	1.0	"	,	"	,	,	,	
Dimethyl phthalate	ND	5.0							
Di-n-butyl phthalate	ND	5.0	"			"			
2,4-Dinitrophenol	ND	1.0			"				
2,4-Dinitrotoluene	ND	5.0	"		"	"			
2,6-Dinitrotoluene	ND	5.0	"	,,	n	11	"	3 <b>1</b> 1	
Di-n-octyl phthalate	ND	5.0	"	"	н	**	"	"	
1,2-Diphenylhydrazine	ND	5.0	n	"	n	н			



Crestline CA, 92325-3395

P.O. Box 3395

Project: Las Flores Ranch

Project Number: Annual Testing Outfall 2021

Project Manager: Ron Scriven

Reported:

09/28/21 17:10

## Semivolatile Organics by EPA Method 625.1

## Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
L.F09-02-A.B.C.D.E.F. (2109041-01) Liquid	Sampled: 09/02/2	1 09:00 Re	ceived: 09	/02/21 14:45					
Fluoranthene	ND	5.0	μg/L	1	B111608	09/07/21	09/16/21 12:25	EPA 625.1	
Fluorene	ND	5.0		(90)		"	•	"	
Hexachlorobenzene	ND	5.0	(11)	"	"		•	•	
Hexachlorobutadiene	ND	5.0	, m		**	11	н	n	
Hexachlorocyclopentadiene	ND	5.0		**	11	11	H	**	
Hexachloroethane	ND	5.0		"	U	**	"	"	
Indeno (1,2,3-cd) pyrene	ND	5.0		н			"	"	
Isophorone	ND	5.0		w	"	u	"	"	
2-Methyl-4,6-dinitrophenol	ND	5.0		"		"	•		
Naphthalene	ND	5.0		"	"	"	"	"	
Nitrobenzene	ND	5.0	••	**		"	"	"	
2-Nitrophenol	ND	1.0	**	н	11	· u	"	"	
4-Nitrophenol	ND	1.0	*	U	#	11	"	"	
N-Nitrosodimethylamine	ND	5.0	**	**	н.	эн э	*	"	
Diphenylamine	ND	5.0	n	н	U	ж	•		
N-Nitrosodi-n-propylamine	ND	5.0	н	н	n.	.11	•	n	
Pentachlorophenol	ND	1.0	**				"	11	
Phenanthrene	ND	5.0		u.	H	"	"	"	
Phenol	ND	1.0	n	**	11	н		н	
Pyrene	ND	5.0	"	"	ti.	If		н	
1,2,4-Trichlorobenzene	ND	5.0	•		"	**		"	
2,4,6-Trichlorophenol	ND	1.0	*		*	"		"	



Crestline CA, 92325-3395

Project: Las Flores Ranch

P.O. Box 3395

Project Number: Annual Testing Outfall 2021 Project Manager: Ron Scriven

Reported: 09/28/21 17:10

Total Petroleum Hydrocarbons Carbon Range Analysis by GC-FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
L.F09-02-A.B.C.D.E.F. (2109041-01) Liquid	Sampled: 09/02/	21 09:00 Red	ceived: 09						
Surrogate: o-Terphenyl		121 %	60-	175	B111513	09/15/21	09/15/21 12:40	EPA 8015B	
HC < C8	ND	0.010	n	**	n	"	n	"	
C8 <= HC < C9	ND	0.010	•	**	"	n	•	11	
C9 <= HC < C10	ND	0.010	"	11	"		"	"	
C10 <= HC < C11	ND	0.010			**	· ·	•		
C11 <= HC < C12	ND	0.010	•	"	•	"	"	**	
C12 <= HC < C14	ND	0.010	н	**	11	"	n	w	
C14 <= HC < C16	ND	0.010	**	н	"	n n	**	11	
C16 <= HC < C18	ND	0.010	**	**		**	n.	(MC	
C18 <= HC < C20	ND	0.010	11	v	**	"	н	an .	
C20 <= HC < C24	ND	0.010	0	n	11	"		OM:	
C24 <= HC < C28	0.013	0.010	n	н	**	н	11	"	
C28 <= HC < C32	0.043	0.010	**	н	,,	"	•	"	
HC >= C32	ND	0.010	**	н		"	n	**	
Total Petroleum Hydrocarbons (C7-C36)	0.056	0.050		n	"	U	н	н	



25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Sierra Analytical

26052 Merit Cir. Ste. 105

Laguna Hills CA, 92653

Project: 2109041

Project Number: 2109041

Reported:

09/15/21 08:52

### **DETECTIONS SUMMARY**

Project Manager: Rick Forsyth

Sample ID: L.F.-09-02-A.B.C.D.E.F. (2109041-01) Laboratory ID: T212757-01 Reporting Notes Result Limit Units Method Analyte ug/l EPA 335.4 5.0 Cyanide, Total 6.7

SunStar Laboratories, Inc.

H



25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Sierra Analytical

26052 Merit Cir. Ste. 105 Laguna Hills CA, 92653 Project: 2109041

Project Number: 2109041

Project Manager: Rick Forsyth

Reported:

09/15/21 08:52

## L.F.-09-02-A.B.C.D.E.F. (2109041-01)

T212757-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
и		Weck La	boratorie	s, Inc.					
Conventional Chemistry/Phys	sical Parameters by APHA/E	PA/ASTM M	ethods						
Cyanide, Total	6.7	5.0	ug/l	1	W1I0682	09/10/21	09/13/21	EPA 335.4	

SunStar Laboratories, Inc.

H



25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Sierra Analytical

Project: 2109041

26052 Merit Cir. Ste. 105 Laguna Hills CA, 92653 Project Number: 2109041 Project Manager: Rick Forsyth

Reporting

Reported:

09/15/21 08:52

RPD

## Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods - Quality Control

## Weck Laboratories, Inc.

Spike

Source

%REC

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch W110682 - NONE (WETCHEM)									(11102)	
Blank (W110682-BLK1)				Prepared:	09/10/21 A	nalyzed: 09	9/13/21			
Cyanide, Total	ND	5.0	ug/l							
LCS (W110682-BS1)				Prepared:	09/10/21 A	nalyzed: 09	9/13/21			
Cyanide, Total	95.7	5.0	ug/l	100		96	90-110			
Matrix Spike (W110682-MS1)	Sourc	e: 1102062-0	2	Prepared:	09/10/21 A					
Cyanide, Total	187	5.0	ug/l	200	ND	94	90-110			
Matrix Spike Dup (W110682-MSD1)	Source	e: 1102062-0	2	Prepared:	09/10/21 A	nalyzed: 0	9/13/21			
Cyanide, Total	181	5.0	ug/l	200	ND	90	90-110	3	20	

SunStar Laboratories, Inc.

# CRESTLINE SANITATION DISTRICT ANNUAL REPORT

### **APPENDIX "B"**

Sample Results
Ground Water Monitoring Wells
Final Effluent Disposal Site

**Annual Testing** 

Tests Results for:
Purgable Halocarbons and Aromatics
Base / Neutral / Acid Extractable Organics

**Special Quarterly Testing** 

Disinfection Bi-products
Trihalomethanes (EPA Method 524.2)
Haloacetic Acids (EPA Method 552.2)



P.O. Box 3395

Crestline CA, 92325-3395

Project: Las Flores Ranch

Project Number: Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

03/23/21 17:20

#### Trihalomethanes by EPA Method 524.2

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1-3-11 (2103177-01) Water S	ampled: 03/11/21 10:20	Received: 03/11/2	21 15:10						
Surrogate: Dibromofluoromethane		100 %	86-1	18	B1C1803	03/18/21	03/18/21 11:15	EPA 524.2	
Surrogate: Toluene-d8		101 %	88-1	10		"	"	"	
Surrogate: 4-Bromofluorobenzene		110 %	86-1	15	"	"	"	"	
Bromodichloromethane	ND	0.500	11	**	"	"			
Bromoform	ND	0.500	н		н	**	α		
Chloroform	ND	0.500	н	п	10	**		"	
Dibromochloromethane	ND	0.500			"	"	"	n	
Total Trihalomethanes	ND	0.500	"	u		"	н .	н	
MW-2-3-11 (2103177-02) Water S	Sampled: 03/11/21 10:35	Received: 03/11/2	21 15:10						
Surrogate: Dibromofluoromethane		103 %	86-1	118	B1C1803	03/18/21	03/18/21 11:15	EPA 524.2	
Surrogate: Toluene-d8		96.1 %	88-1	110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		114 %	86-1	115	"	"	n.	"	
Bromodichloromethane	ND	0.500	Tr.	н	н	n	n		
Bromoform	ND	0.500		0		н	"		
Chloroform	ND	0.500	н		v	**	"	"	
Dibromochloromethane	ND	0.500				"		"	
Total Trihalomethanes	ND	0.500	11	н	W	и	n	н	
MW-3-3-11 (2103177-03) Water S	Sampled: 03/11/21 10:50	Received: 03/11/	21 15:10					10	
Surrogate: Dibromofluoromethane		105 %	86-	118	B1C1803	03/18/21	03/18/21 11:15	EPA 524.2	
Surrogate: Toluene-d8		96.5 %	88-	110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		113 %	86-	115	"	"	"	"	
Bromodichloromethane	ND	0.500		,	"	"		"	
Bromoform	ND	0.500			"	"	н	н	
Chloroform	ND		"	11	10	"	0	**	
	ND		н	н		17	"		
Dibromochloromethane									



P.O. Box 3395

Crestline CA, 92325-3395

Project: Las Flores Ranch

Project Number: Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

03/23/21 17:20

#### Trihalomethanes by EPA Method 524.2

Analyte	Resul	Reporting t Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4-3-11 (2103177-04) Water	Sampled: 03/11/21 11:00	Received: 03/11/	21 15:10						
Surrogate: Dibromofluoromethane		105 %	86-	-118	B1C1803	03/18/21	03/18/21 11:15	EPA 524.2	
Surrogate: Toluene-d8		96.9 %	88-	-110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		113 %	86-	-115	n	n	n	"	
Bromodichloromethane	ND	0.500		0			н	н	
Bromoform	ND	0.500	10	"	п		n	n	
Chloroform	ND	0.500		"		**		н	
Dibromochloromethane	ND	0.500	305	"	н	"	n.		
Total Trihalomethanes	ND	0.500	.00	.00	"		н	n	



P.O. Box 3395

Crestline CA, 92325-3395

Project: Las Flores Ranch

Project Number: Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

03/23/21 17:20

#### Haloacetic Acids (GC/ECD) by EPA Method 552.2

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1-3-11 (2103177-01) Water	Sampled: 03/11/21 10:20	Received: 03/11/2	21 15:10				-40 As 2000		10
Surrogate: 2,3-Dibromopropionic 2	4cid	99.2 %	60	-150	B1C2303	03/19/21	03/19/21 09:37	EPA 552.2	
Monochloroacetic Acid	ND	2.00	"	36	11	"	"	n	
Dichloroacetic Acid	ND	1.00	"		"	"	"		
Trichloroacetic Acid	ND	1.00	н	n	н	"		11	
Monobromoacetic Acid	ND	1.00	н	- *	16	- 11	н	n.	
Dibromoacetic Acid	ND	1.00		н	0	"	"	**	
Total Haloacetic Acids	ND	1.00	0	30		"	"	"	
MW-2-3-11 (2103177-02) Water	Sampled: 03/11/21 10:35	Received: 03/11/	21 15:10						
Surrogate: 2,3-Dibromopropionic	Acid	60.4 %	60	-150	B1C2303	03/19/21	03/19/21 09:37	EPA 552.2	
Monochloroacetic Acid	ND	2.00		. 112		"	= 0		
Dichloroacetic Acid	ND	1.00	"	11	"	"	"	10	
Trichloroacetic Acid	ND	1.00	"	"	11	u	"	S#	
Monobromoacetic Acid	ND	1.00	"		0	н	"	н	
Dibromoacetic Acid	ND	1.00					"	"	
Total Haloacetic Acids	ND	1.00	U	"	н	н	"		
MW-3-3-11 (2103177-03) Water	Sampled: 03/11/21 10:50	Received: 03/11/	21 15:10						
Surrogate: 2,3-Dibromopropionic	Acid	115 %	60	1-150	B1C2303	03/19/21	03/19/21 09:37	EPA 552.2	
Monochloroacetic Acid	ND	2.00				n	"	"	
Dichloroacetic Acid	ND	1.00	**	"	**	11	n	**	
Trichloroacetic Acid	ND	1.00	n	н	U	OHC.	380	n	
Monobromoacetic Acid	ND	1.00	н	"		н	u.	n	
Dibromoacetic Acid	ND	1.00	.00				**		
Total Haloacetic Acids	ND	1.00	,,	"	н		н	"	



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

03/23/21 17:20

#### Haloacetic Acids (GC/ECD) by EPA Method 552.2

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4-3-11 (2103177-04) Water	Sampled: 03/11/21 11:00	Received: 03/11/2	1 15:1	10					
Surrogate: 2,3-Dibromopropionic 2	Acid	124 %		60-150	B1C2303	03/19/21	03/19/21 09:37	EPA 552.2	
Monochloroacetic Acid	ND	2.00	"	н				"	
Dichloroacetic Acid	ND	1.00			*	"		"	
Trichloroacetic Acid	ND	1.00		н	н	и		u	
Monobromoacetic Acid	ND	1.00	"	,,		"			
Dibromoacetic Acid	ND	1.00	.,	н	n		•	"	
Total Haloacetic Acids	ND	1.00			"			"	



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

06/23/21 11:42

#### Trihalomethanes by EPA Method 524.2

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1-6-10 (2106161-01) Water Sa	ampled: 06/10/21 10:25	Received: 06/10/	21 15:00		ever c				
Surrogate: Dibromofluoromethane		91.5 %	86	-118	B1F1701	06/16/21	06/17/21 07:10	EPA 524.2	
Surrogate: Toluene-d8		96.6 %	88	-110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.0 %	86	-115	"	"	"	"	
Bromodichloromethane	ND	0.500	n.	11				н	
Bromoform	ND	0.500	н	11	n	н	"	n	
Chloroform	ND	0.500	н	"	"	н	n	"	
Dibromochloromethane	ND	0.500		"	"	н	"	u	
Total Trihalomethanes	ND	0.500	и	"	n	310	т.	u.	
MW-2-6-10 (2106161-02) Water Sa	ampled: 06/10/21 10:40	Received: 06/10/	21 15:00						
Surrogate: Dibromofluoromethane		94.7 %	86	-118	B1F1701	06/16/21	06/17/21 07:10	EPA 524.2	
Surrogate: Toluene-d8		91.2 %	88	-110	n	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.4 %	86	-115	"	"	"	n	
Bromodichloromethane	ND	0.500	"		,,	"	н	**	
Bromoform	ND	0.500		**	71	"	н	**	
Chloroform	1.12	0.500	ж.	31	**		0.0	**	
Dibromochloromethane	ND	0.500	н			n		"	
Total Trihalomethanes	1.12	0.500	**	"	и	u	п	n	
MW-3-6-10 (2106161-03) Water S	ampled: 06/10/21 11:00	Received: 06/10/	21 15:00						
Surrogate: Dibromofluoromethane		89.3 %	86	-118	B1F1701	06/16/21	06/17/21 07:10	EPA 524.2	III
Surrogate: Toluene-d8		90.5 %	88	-110	"	n	"	"	
Surrogate: 4-Bromofluorobenzene		87.6 %	86	-115	"	"	<i>n</i>	"	
Bromodichloromethane	ND	0.500	н		n	"	н	**	
Bromoform	ND	0.500	. 10	n	n.	ű.	n		
Chloroform	ND	0.500	**			v	"	ï.	
Dibromochloromethane	ND	0.500	"		"	11	n		
Total Trihalomethanes	ND	0.500				,,		,	



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

06/23/21 11:42

#### Trihalomethanes by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4-6-10 (2106161-04) Water	Sampled: 06/10/21 11:15	Received: 06/10/2	1 15:00						
Surrogate: Dibromofluoromethane		96.9 %	86-	118	B1F1701	06/16/21	06/17/21 07:10	EPA 524.2	
Surrogate: Toluene-d8		93.9 %	88-	110	"	"	-11	2#	
Surrogate: 4-Bromofluorobenzene		89.7 %	86-	115	"	"	"	"	
Bromodichloromethane	ND	0.500	"	**	"	и	н	н	
Bromoform	ND	0.500		n	"	"	"	30	
Chloroform	ND	0.500		"	**			OR.	
Dibromochloromethane	ND	0.500	U	31	ж	,,	"	n	
Total Trihalomethanes	ND	0.500	31.7	n	- 0				



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Monitoring Wells 1,2,3,4

Reported:

Project Manager: Ron Scriven

06/23/21 11:42

#### Haloacetic Acids (GC/ECD) by EPA Method 552.2

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1-6-10 (2106161-01) Water	Sampled: 06/10/21 10:25	Received: 06/10/	21 15:00						
Surrogate: 2,3-Dibromopropionic	Acid	111 %	60-	150	B1F2107	06/17/21	06/21/21 12:43	EPA 552.2	
Monochloroacetic Acid	ND	2.00		0	.0.	"	U	н	
Dichloroacetic Acid	ND	1.00	u		"	"	"	"	
Trichloroacetic Acid	ND	1.00	"	н	n	"	"	3 <b>n</b> 3	
Monobromoacetic Acid	ND	1.00	н	и		81	н		
Dibromoacetic Acid	ND	1.00		.11	0.	и	u u		
Total Haloacetic Acids	ND	1.00	"	u	n	,,	"	"	
MW-2-6-10 (2106161-02) Water	Sampled: 06/10/21 10:40	Received: 06/10/	21 15:00			4-200			
Surrogate: 2,3-Dibromopropionic	Acid	79.6 %	60-	150	B1F2107	06/17/21	06/21/21 12:43	EPA 552.2	
Monochloroacetic Acid	ND	2.00	"		"	"	"	"	
Dichloroacetic Acid	ND	1.00		"		n		n	
Trichloroacetic Acid	ND	1.00	0	11	н	н		n e	
Monobromoacetic Acid	ND	1.00	30	н	300			"	
Dibromoacetic Acid	ND	1.00	**		v			u	
Total Haloacetic Acids	ND	1.00		n	"	"	"	u .	
MW-3-6-10 (2106161-03) Water	Sampled: 06/10/21 11:00	Received: 06/10/	21 15:00						
Surrogate: 2,3-Dibromopropionic	Acid	81.0 %	60-	150	B1F2107	06/17/21	06/21/21 12:43	EPA 552.2	
Monochloroacetic Acid	ND	2.00	н	n.	"	"	u	**	
Dichloroacetic Acid	ND	1.00		11	н	н	п	n	
Trichloroacetic Acid	ND	1.00	п	11	н	н	н		
Monobromoacetic Acid	ND	1.00	0	"	ii.	**	n	n	
Dibromoacetic Acid	ND	1.00	**		"	"	**	"	
Total Haloacetic Acids	ND	1.00			**	н		11	



P.O. Box 3395

Crestline CA, 92325-3395

Project: Las Flores Ranch

Project Number: Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

06/23/21 11:42

#### Haloacetic Acids (GC/ECD) by EPA Method 552.2

#### Sierra Analytical Labs, Inc.

Monochloroacetic Acid ND 2.00 " " " Dichloroacetic Acid ND 1.00 " " " Trichloroacetic Acid ND 1.00 " " "				
Monochloroacetic Acid ND 2.00 " " " Dichloroacetic Acid ND 1.00 " " " Trichloroacetic Acid ND 1.00 " " "			5,776	
Dichloroacetic Acid ND 1.00 " " " Trichloroacetic Acid ND 1.00 " " "	06/17/21	06/21/21 12:43	EPA 552.2	
Trichloroacetic Acid ND 1.00 " " "	н	"	0	
	*	"		
Monobromoacetic Acid ND 1.00 " "	**	n	o	
			o	
Dibromoacetic Acid ND 1.00 " "	n		o.	
Total Haloacetic Acids ND 1.00 " "		n	"	



P.O. Box 3395

Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Reported: 09/21/21 15:56 Project Manager: Ron Scriven

Crestline CA, 92325-3395

#### Trihalomethanes by EPA Method 524.2

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1-09-09 (2109121-01) Water	Sampled: 09/09/21 08:40	Received: 09/09	/21 14:56						
Surrogate: Dibromofluoromethane		112 %	86-	118	B111515	09/15/21	09/16/21 07:41	EPA 524.2	
Surrogate: Toluene-d8		107 %	88-	110	"	"	"	n	
Surrogate: 4-Bromofluorobenzene		89.2 %	86-	115	"	"	"	"	
Bromodichloromethane	ND	0.500	"	"	"	u.	"		
Bromoform	ND	0.500	н	œ	v	н			
Chloroform	ND	0.500	1.00	n		"		н	
Dibromochloromethane	ND	0.500		n n	"	"	"	9	
Total Trihalomethanes	ND	0.500	11	"	n n		n	н	
MW-2-09-09 (2109121-02) Water	Sampled: 09/09/21 09:00	Received: 09/09	9/21 14:56						
Surrogate: Dibromofluoromethane		113 %	86-	118	B111515	09/15/21	09/16/21 07:41	EPA 524.2	
Surrogate: Toluene-d8		107 %	88-	110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.1 %	86-	115	H	"	"	"	
Bromodichloromethane	ND	0.500	н	"	910	"	"	н	
Bromoform	ND	0.500		n		"	n		
Chloroform	ND	0.500	**	n	"		11	"	
Dibromochloromethane	ND	0.500	н	· ·	n	и	(10)	,,	
Total Trihalomethanes	ND	0.500	н	n.	н	н	"		
MW-3-09-09 (2109121-03) Water	Sampled: 09/09/21 09:15	Received: 09/0	9/21 14:56						
Surrogate: Dibromofluoromethane		116 %	86-	118	B111515	09/15/21	09/16/21 07:41	EPA 524.2	
Surrogate: Toluene-d8		103 %	88-	110	"	"	n	n	
Surrogate: 4-Bromofluorobenzene		90.8 %	86-	115	"	"	"	"	
Bromodichloromethane	ND	0.500	n n	н	"	"	U	"	
Bromoform	ND	0.500	n	·	п	"	n		
Chloroform	ND	0.500	н		н		"	"	
Dibromochloromethane	ND	0.500		н	10	11	"	n.	
Total Trihalomethanes	ND	0.500		n	•	"			



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported: 09/21/21 15:56

#### Trihalomethanes by EPA Method 524.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4-09-09 (2109121-04) Water	Sampled: 09/09/21 09:3	5 Received: 09/0	9/21 14:56						
Surrogate: Dibromofluoromethane		115 %	86-	-118	B111515	09/15/21	09/16/21 07:41	EPA 524.2	
Surrogate: Toluene-d8		98.9 %	88	-110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.5 %	86	-115	"	"	"	"	
Bromodichloromethane	ND	0.500	11		**	0			
Bromoform	ND	0.500	"	11	n	**		u	
Chloroform	ND	0.500	н	11	· · ·	н		3.00	
Dibromochloromethane	ND	0.500	000	"	"				
Total Trihalomethanes	ND	0.500			n	**	н	"	



P.O. Box 3395

Crestline CA, 92325-3395

Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

09/21/21 15:56

#### Haloacetic Acids (GC/ECD) by EPA Method 552.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1-09-09 (2109121-01) Water	Sampled: 09/09/21 08:40	Received: 09/09	9/21 14:56	6					
Surrogate: 2,3-Dibromopropionic A	cid	71.6 %	60-	150	B111702	09/17/21	09/18/21 09:34	EPA 552.2	
Monochloroacetic Acid	ND	2.00	11	ж	110		"	11	
Dichloroacetic Acid	ND	1.00	.0			"	"	"	
Trichloroacetic Acid	ND	1.00	"	ū	"	"			
Monobromoacetic Acid	ND	1.00	н	**		ti		- Он	
Dibromoacetic Acid	ND	1.00	100	н	п	11	H	"	
Total Haloacetic Acids	ND	1.00	0	"	"	"	n		
MW-2-09-09 (2109121-02) Water	Sampled: 09/09/21 09:00	Received: 09/0	9/21 14:50	5					
Surrogate: 2,3-Dibromopropionic A	lcid	92.7 %	60	-150	B111702	09/17/21	09/18/21 09:34	EPA 552.2	
Monochloroacetic Acid	ND	2.00	110		н	н	"	"	
Dichloroacetic Acid	ND	1.00	11	ti	н	н	"	"	
Trichloroacetic Acid	ND	1.00	n	n	"	11	311	н	
Monobromoacetic Acid	ND	1.00	n	й	10	0	н		
Dibromoacetic Acid	ND	1.00	311	"		*	n	10	
Total Haloacetic Acids	ND	1.00	**	"	н	"	17	"	
MW-3-09-09 (2109121-03) Water	Sampled: 09/09/21 09:15	Received: 09/0	9/21 14:5	6					
Surrogate: 2,3-Dibromopropionic A	1cid	68.3 %	60	-150	B111702	09/17/21	09/18/21 09:34	EPA 552.2	
Monochloroacetic Acid	ND	2.00	u	"	"	"	w.		
Dichloroacetic Acid	ND	1.00	**	"	"	"		н	
Trichloroacetic Acid	ND	1.00	n	н	10%	u.	n.		
Monobromoacetic Acid	ND	1.00			**	"	•	u	
Dibromoacetic Acid	ND	1.00	0	н	н	"	ű	"	
Total Haloacetic Acids	ND	1.00	**	u	"	"	"	"	



Crestline CA, 92325-3395

P.O. Box 3395

Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Reported:

Project Manager: Ron Scriven

09/21/21 15:56

#### Haloacetic Acids (GC/ECD) by EPA Method 552.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4-09-09 (2109121-04) Water	Sampled: 09/09/21 09:35	Received: 09/09	0/21 14:50	5					
Surrogate: 2,3-Dibromopropionic Ac	cid	80.1 %	60	-150	B111702	09/17/21	09/18/21 09:34	EPA 552.2	
Monochloroacetic Acid	ND	2.00		"	"	"	н	"	
Dichloroacetic Acid	ND	1.00	300	n	н	0	.11	**	
Trichloroacetic Acid	ND	1.00	.00	и		.0.		n	
Monobromoacetic Acid	ND	1.00	U	м	n n	"	**	u u	
Dibromoacetic Acid	ND	1.00	"	*	0 -	*	"		
Total Haloacetic Acids	ND	1.00	**	н	"	100	W	"	



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported: 09/21/21 15:56

#### Volatile Organics by EPA Method 624.1

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1-09-09 (2109121-01) Water	Sampled: 09/09/21 08:40	Received: 09/09	9/21 14:56						1-02
Surrogate: Dibromofluoromethane		96.7 %	86-		B111401	09/13/21	09/14/21 10:28	EPA 624.1	
Surrogate: Toluene-d8		91.8 %	88-	110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.9 %	86-	115	"	"	"	"	
Acrolein	ND	5.0	н	10		311.	30.5	0.00	
Acrylonitrile	ND	2.0	**	"	**	н	30	3.103	
Benzene	ND	1.0	н	"	"	n	u	11	
Bromobenzene	ND	1.0	"	v.	"	н	"	n	
Bromodichloromethane	ND	1.0	NH.	"		310	10	0	
Bromoform	ND	1.0	н	0.			11	0.	
Bromomethane	ND	1.0	н	0	н	н	"		
Carbon tetrachloride	ND	1.0	"	"	"	"		u	
Chlorobenzene	ND	1.0	н	Ü	н	"	n	u.	
Chloroethane	ND	1.0	ж	0		н	п		
2-Chloroethylvinyl ether	ND	1.0	н	"		**	n	3.90	
Chloroform	ND	1.0	н	o ·		"	н	"	
Chloromethane	ND	1.0		"	"	"	n	"	
Dibromochloromethane	ND	1.0	311	v.	- 10	.0	n.		
1,2-Dichlorobenzene	ND	1.0	n	11	п	31		n	
1,3-Dichlorobenzene	ND	1.0	м	n		11	н	n	
1,4-Dichlorobenzene	ND	1.0	n	11		"	"		
1,1-Dichloroethane	ND	1.0	H.	"		**	**	n .	
1,2-Dichloroethane	ND	1.0	и =	"		31	,,	н	
1,1-Dichloroethene	ND	1.0	н	0	n	v.	n	n .	
cis-1,2-Dichloroethene	ND	1.0	n	"		11			
trans-1,2-Dichloroethene	ND	1.0	н	U	и	***	"		
1,2-Dichloropropane	ND	1.0	н	· ·	н	0	п		
1,1-Dichloropropene	ND	1.0	н	v		**	н	n.	
cis-1,3-Dichloropropene	ND	1.0	н	2	n.	"		"	
trans-1,3-Dichloropropene	ND	1.0	,,			"	н		
Ethylbenzene	ND	1.0	316	"		n	w		
Methylene chloride	ND	1.0	"	"	"		963		
1,1,2,2-Tetrachloroethane	ND	1.0	н			"	н		
Tetrachloroethene	ND	1.0	**	**		п		**	
Toluene	ND	1.0	н	n	п	п	m.	н	
1,1,1-Trichloroethane	ND	1.0	m	"			DK.	п	
1,1,2-Trichloroethane	ND	1.0	"	**	- 11	н	n		
Trichloroethene	ND	1.0		"	n	н	н		
Trichlorofluoromethane	ND	1.0	н	"		н		"	
Vinyl chloride	ND	1.0	н	11		n	in:	**	
m,p-Xylene	ND	1.0	н	"				**	
o-Xylene	ND	1.0		,,		"			



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported: 09/21/21 15:56

#### Volatile Organics by EPA Method 624.1

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1-09-09 (2109121-01) Water	Sampled: 09/09/21 08:40	Received: 09/09	9/21 14:56						I-02
Methyl tert-butyl ether	ND	1.0	$\mu g/L$	1	B111401	09/13/21	09/14/21 10:28	EPA 624.1	
MW-2-09-09 (2109121-02) Water	Sampled: 09/09/21 09:00	Received: 09/09	9/21 14:56					4 14	I-02
Surrogate: Dibromofluoromethane	11.50	109 %	86-1	118	B111401	09/13/21	09/14/21 10:28	EPA 624.1	
Surrogate: Toluene-d8		91.5 %	88-1	110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.1 %	86-1	115	"	"	"	"	
Acrolein	ND	5.0	н	"		"	"	"	
Acrylonitrile	ND	2.0	н	**	11	и	"		
Benzene	ND	1.0	"	"			n		
Bromobenzene	ND	1.0		"	"	n			
Bromodichloromethane	ND	1.0		'n	"	**		*	
Bromoform	ND	1.0	200	. "	11		и	н	
Bromomethane	ND	1.0	n	n	,,	-0	, m		
Carbon tetrachloride	ND	1.0	-0	"	**	O	н	n n	
Chlorobenzene	ND	1.0			n	**	"		
Chloroethane	ND	1.0	- 0	,	н	**	,		
2-Chloroethylvinyl ether	ND	1.0	.0.	"	,,	n.	310		
Chloroform	ND	1.0	n		н	"	n	11	
Chloromethane	ND	1.0	0		Ĭ	n			
Dibromochloromethane	ND	1.0	"	"	,,		"		
1,2-Dichlorobenzene	ND	1.0	310				Su	"	
1,3-Dichlorobenzene	ND	1.0		,,		"			
1,4-Dichlorobenzene	ND	1.0	n	,,	ñ	н	"	n	
1,1-Dichloroethane	ND	1.0	n	"	,,		"		
1,2-Dichloroethane	ND	1.0	н		**	н	**	w	
1,1-Dichloroethene	ND	1.0	3.00	"			"		
cis-1,2-Dichloroethene	ND	1.0	,,		0	,,	,,		
trans-1,2-Dichloroethene	ND	1.0						н	
1,2-Dichloropropane	ND	1.0	п	,,	11	w	и		
1,1-Dichloropropene	ND	1.0	и	,,	,,		н		
cis-1,3-Dichloropropene	ND	1.0		,,	,,	,,	,,		
trans-1,3-Dichloropropene	ND ND	1.0	n	,,	,,		,,	,,	
Ethylbenzene	ND	1.0	i.	,,	,,	,,	,,		
				n			,,		
Methylene chloride	ND	1.0	,,		,,				
1,1,2,2-Tetrachloroethane	ND	1.0			,,		,		
Tetrachloroethene	ND	1.0			,,			"	
Toluene	ND	1.0		,	,,			"	
1,1,1-Trichloroethane	ND	1.0						"	
1,1,2-Trichloroethane	ND	1.0	.0.	-	,,		"	"	
Trichloroethene	ND	1.0			"		"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"			



Crestline CA, 92325-3395

P.O. Box 3395

Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

09/21/21 15:56

#### Volatile Organics by EPA Method 624.1

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2-09-09 (2109121-02) Water	Sampled: 09/09/21 09:00	Received: 09/09	9/21 14:56	(					1-02
Vinyl chloride	ND	1.0	μg/L	1	B111401	09/13/21	09/14/21 10:28	EPA 624.1	
m,p-Xylene	ND	1.0	н	"	"		"	"	
o-Xylene	ND	1.0	n	"	"	"			
Methyl tert-butyl ether	ND	1.0	н	"		u	**		
MW-3-09-09 (2109121-03) Water	Sampled: 09/09/21 09:15	Received: 09/09	9/21 14:56						1-02
Surrogate: Dibromofluoromethane		114 %	86-	118	B111401	09/13/21	09/14/21 10:28	EPA 624.1	
Surrogate: Toluene-d8		93.5 %	88-	110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.4 %	86-	115	"	n	"	H.	
Acrolein	ND	5.0	н		н		"	**	
Acrylonitrile	ND	2.0			,,	"	**	0	
Benzene	ND	1.0	н	w	"	"	н	"	
Bromobenzene	ND	1.0	н		,,	н	en.	10	
Bromodichloromethane	ND	1.0	11	u	,,		н	"	
Bromoform	ND	1.0	11	11	,,	н		,,	
Bromomethane	ND	1.0		,,					
Carbon tetrachloride	ND	1.0	11				ж		
Chlorobenzene	ND	1.0		,,	,,			n	
Chloroethane	ND	1.0		"		н	н	,,	
2-Chloroethylvinyl ether	ND	1.0	11				,,	,,	
Chloroform	ND	1.0	н			**		,,	
Chloromethane	ND	1.0	.,			n:	эн.	**	
Dibromochloromethane	ND	1.0		"	n	н			
1,2-Dichlorobenzene	ND ND	1.0	n	,,		n	,,		
1,3-Dichlorobenzene	ND			,,	u		•		
1,4-Dichlorobenzene		1.0		н	,,				
50 × 0 50 000 000 000 000 000 000 000 00	ND	1.0		,,	,,				
1,1-Dichloroethane	ND	1.0				20			
1,2-Dichloroethane	ND	1.0		,,	"		"		
1,1-Dichloroethene	ND	1.0							
cis-1,2-Dichloroethene	ND	1.0							
trans-1,2-Dichloroethene	ND	1.0							
1,2-Dichloropropane	ND	1.0		"	11		"		
1,1-Dichloropropene	ND	1.0	.0	*	**	**	"	"	
cis-1,3-Dichloropropene	ND	1.0	200	н	'n	**	"	"	
trans-1,3-Dichloropropene	ND	1.0	200		(11.2)	"	"	"	
Ethylbenzene	ND	1.0	v	"	"	"		"	
Methylene chloride	ND	1.0	"	"	"	н	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	U	н	n	н	"	u	
Tetrachloroethene	ND	1.0	-11	,11	н	н	"	0	
Toluene	ND	1.0	"		"	"	"		
1,1,1-Trichloroethane	ND	1.0	11	н	"	"	н		



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported: 09/21/21 15:56

#### Volatile Organics by EPA Method 624.1

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3-09-09 (2109121-03) Water	Sampled: 09/09/21 09:15	Received: 09/09	9/21 14:56						I-02
1,1,2-Trichloroethane	ND	1.0	$\mu g/L$	1	B111401	09/13/21	09/14/21 10:28	EPA 624.1	
Trichloroethene	ND	1.0	11	"		н	u u	n .	
Trichlorofluoromethane	ND	1.0	10	**	н	ж	**	н	
Vinyl chloride	ND	1.0	11	"			*	н	
m,p-Xylene	ND	1.0	"	0	н	"	**		
o-Xylene	ND	1.0	н	•	й	11	"		
Methyl tert-butyl ether	ND	1.0		II.	и	"		u	
MW-4-09-09 (2109121-04) Water	Sampled: 09/09/21 09:35	Received: 09/09	9/21 14:56						I-02
Surrogate: Dibromofluoromethane		102 %	86-	118	B111401	09/13/21	09/14/21 10:28	EPA 624.1	
Surrogate: Toluene-d8		91.3 %	88-	110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.8 %	86-	115	"	"	"	"	
Acrolein	ND	5.0			n	"	"		
Acrylonitrile	ND	2.0	.0	n	н		n	м	
Benzene	ND	1.0	11	**	н	17	n.	n	
Bromobenzene	ND	1.0		u	11	***	H	н	
Bromodichloromethane	ND	1.0		"	"				
Bromoform	ND	1.0		11	v	н	**		
Bromomethane	ND	1.0		n (	"	*	"	**	
Carbon tetrachloride	ND	1.0	н	n	11	н		"	
Chlorobenzene	ND	1.0	100	"	"	"	w		
Chloroethane	ND	1.0	,,					H	
2-Chloroethylvinyl ether	ND	1.0		,,	n 1	"	н		
Chloroform	ND	1.0		n	н	N.	n	н	
Chloromethane	ND	1.0	.0	,,		.10	n		
Dibromochloromethane	ND	1.0	**	,,		"	n		
1,2-Dichlorobenzene	ND	1.0						"	
1,3-Dichlorobenzene	ND	1.0	n	11		n		"	
1,4-Dichlorobenzene	ND	1.0	n	"	0	н		**	
1,1-Dichloroethane	ND	1.0		. ,	,,	"	,,	,,	
1,2-Dichloroethanc	ND	1.0	,,	,,	**	**		9	
1,1-Dichloroethene	ND	1.0		,,	**				
cis-1,2-Dichloroethene	ND	1.0	и	н	н	u	30	,	
trans-1,2-Dichloroethene	ND	1.0				11	.m.	n	
1,2-Dichloropropane	ND	1.0		,,		,,	н		
1,1-Dichloropropene	ND	1.0		,,	,,			"	
cis-1,3-Dichloropropene	ND ND	1.0	u		,,		"	107	
trans-1,3-Dichloropropene	ND ND	1.0	0				:31		
Ethylbenzene	ND ND	1.0	"		"	н	"	11	
Methylene chloride	ND ND	1.0		,	0			,,	
			"						
1,1,2,2-Tetrachloroethane	ND	1.0		- #70	100		***	200	



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Seriven

Reported:

09/21/21 15:56

#### **Volatile Organics by EPA Method 624.1**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4-09-09 (2109121-04) Water	Sampled: 09/09/21 09:35	Received: 09/0	9/21 14:56						1-02
Tetrachloroethene	ND	1.0	μg/L	1	B111401	09/13/21	09/14/21 10:28	EPA 624.1	
Toluene	ND	1.0	"	11					
1,1,1-Trichloroethane	ND	1.0		**	206	*	*		
1,1,2-Trichloroethane	ND	1.0	n .	"	.00	"			
Trichloroethene	ND	1.0		n		n		n	
Trichlorofluoromethane	ND	1.0		и	71				
Vinyl chloride	ND	1.0	n	н	n	11	n	10	
m,p-Xylene	ND	1.0	**	(M)	316	H	,,		
o-Xylene	ND	1.0	"		"	и	,,		
Methyl tert-butyl ether	ND	1.0	,,	u		"	"		



Crestline CA, 92325-3395

P.O. Box 3395

Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

09/21/21 15:56

#### Semivolatile Organics by EPA Method 625.1

#### Sierra Analytical Labs, Inc.

Analyte	Danula	Reporting Limit	Unite	Dilution	Batch	Prepared	Analyzed	Method	Note
Analyte	Result		Units	Dilution	Daten	riepared	Anatyzeu	Memon	Note
MW-1-09-09 (2109121-01) Water	Sampled: 09/09/21 08:40	Received: 09/09	/21 14:56						
Surrogate: 2-Fluorophenol		93.1 %	25-1	21	B111608	09/15/21	09/16/21 12:25	EPA 625.1	
Surrogate: Phenol-d6		44.1 %	24-1		n	"	"	"	
Surrogate: Nitrobenzene-d5		23.0 %	23-1	20	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		76.1 %	30-1	115	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		66.3 %	19-1	22	"	n	"	n	
Surrogate: Terphenyl-d14		48.9 %	18-1	37	"	"	"	"	
Acenaphthene	ND	5.0		u.	"	"	"	"	
Acenaphthylene	ND	5.0		"	"	н	"	"	
Anthracene	ND	5.0	11	"	"	"	и	11	
Benzidine	ND	5.0	11	н	**	п	11	u.	
Benzo (a) anthracene	ND	5.0	и	"	"		11	**	
Benzo (b) fluoranthene	ND	5.0		u		н	"	"	
Benzo (k) fluoranthene	ND	5.0	"	"	"	*	н		
Benzo (a) pyrene	ND	5.0	0	n	Ü	н	н	н	
Benzo (g,h,i) perylene	ND	5.0	n	н	11	н	0	**	
Butyl benzyl phthalate	ND	5.0	.11	"		17	"		
Bis(2-chloroethyl)ether	ND	5.0	n	"	"	"	*	<u>"</u>	
Bis(2-chlorocthoxy)methane	ND	5.0	W	"	"	н	in .	"	
Bis(2-ethylhexyl)phthalate	ND	5.0	10	н	U	н	n	"	
Bis(2-chloroisopropyl)ether	ND	5.0		н	**	"	0		
4-Bromophenyl phenyl ether	ND	5.0	11	,	,,	u	"		
2-Chlorophenol	ND	1.0		"		"	n	"	
4-Chloro-3-methylphenol	ND	5.0	н	u		н	· n	n	
2-Chloronaphthalene	ND	5.0	н				n		
4-Chlorophenyl phenyl ether	ND	5.0	0	н	"	"	"		
Chrysene	ND	5.0	11	н.		0	u	"	
Dibenz (a,h) anthracene	ND	5.0	"			"	н	"	
1,3-Dichlorobenzene	ND	5.0	н	11	31	"	н	*	
1,2-Dichlorobenzene	ND	5.0	н		"		н	n	
1,4-Dichlorobenzene	ND	5.0	"		11	"	"	"	
3,3'-Dichlorobenzidine	ND	5.0			"		"	"	
2,4-Dichlorophenol	ND	1.0	**	т.	ж	"	и	400	
Diethyl phthalate	ND	5.0	н			n			
2,4-Dimethylphenol	ND	1.0		**	11	"	"	н	
Dimethyl phthalate	ND	5.0	"	"	"		"		
Di-n-butyl phthalate	ND	5.0	,,		**	v	"	m.	
2,4-Dinitrophenol	ND	1.0		: N	an.				
2,4-Dinitrotoluene	ND	5.0	n		**	9			
2,6-Dinitrotoluene	ND	5.0	n	**	"	,,		н	
Di-n-octyl phthalate	ND	5.0	"	"	"		· ·	OHS.	
1,2-Diphenylhydrazine	ND	5.0	n	"	**				



Crestline CA, 92325-3395

P.O. Box 3395

Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported: 09/21/21 15:56

#### Semivolatile Organics by EPA Method 625.1

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1-09-09 (2109121-01) Water	Sampled: 09/09/21 08:40	Received: 09/09	9/21 14:56		****	10100			
Fluoranthene	ND	5.0	μg/L	1	B111608	09/15/21	09/16/21 12:25	EPA 625.1	
Fluorene	ND	5.0		n	"	11	и	"	
Hexachlorobenzene	ND	5.0	н	"		"	"	"	
Hexachlorobutadiene	ND	5.0	н	н	0	u	**	"	
Hexachlorocyclopentadiene	ND	5.0	н	н		0.	SM 5	n	
Hexachloroethane	ND	5.0	н	н	"	"	"	n	
Indeno (1,2,3-cd) pyrene	ND	5.0	H	"	"	"		н	
Isophorone	ND	5.0	н	"	**	u		"	
2-Methyl-4,6-dinitrophenol	ND	5.0	2002	n		n	n	и	
Naphthalene	ND	5.0	H	н	n	**	n.	п	
Nitrobenzene	ND	5.0	н		11		n	н	
2-Nitrophenol	ND	1.0	н	"	"	,,			
4-Nitrophenol	ND	1.0	000	н	*	н	16		
N-Nitrosodimethylamine	ND	5.0				н		н	
Diphenylamine	ND	5.0	н	"			**	п	
N-Nitrosodi-n-propylamine	ND	5.0		"		*	· ·		
Pentachlorophenol	ND	1.0	н	"		н	**		
Phenanthrene	ND	5.0	, M	"	м	м			
Phenol	ND	1.0	n	"		н	"	**	
Pyrene	ND	5.0	н	"	н			,,	
1,2,4-Trichlorobenzene	ND	5.0	н	11	н			n	
2,4,6-Trichlorophenol	ND	1.0	н		"		w	"	
MW-2-09-09 (2109121-02) Water	Sampled: 09/09/21 09:00	Received: 09/09	9/21 14:56						
Surrogate: 2-Fluorophenol		115 %	25-12	1	B111608	09/15/21	09/16/21 12:25	EPA 625.1	
Surrogate: Phenol-d6		67.7 %	24-11.		"	"	"	"	
Surrogate: Nitrobenzene-d5		57.2 %	23-12		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		90.1 %	30-11.		"	,,	"	n	
Surrogate: 2,4,6-Tribromophenol		75.9 %	19-12		"	"	"	"	
Surrogate: Terphenyl-d14		89.6 %	18-13		"	,,	"	"	
Acenaphthene	ND	5.0	10 15	"			n		
Acenaphthylene	ND	5.0		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,		н	or or	
Anthracene	ND	5.0		11		11	н	11	
Benzidine	ND	5.0	n	**			н	"	
Benzo (a) anthracene	ND	5.0	,,	,,	,,		,,	,,	
Benzo (b) fluoranthene	ND	5.0		,,	,	,,	н	,,	
Benzo (k) fluoranthene	ND ND	5.0		,,		11	н	"	
Benzo (a) pyrene	ND ND	5.0		"	-11		и		
Benzo (g,h,i) perylene	ND ND	5.0		,,	,,		н	,,	
			.,	"		,,	,		
Butyl benzyl phthalate	ND ND	5.0		,,			,,		
Bis(2-chloroethyl)ether	ND	5.0	100	15			8.00		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

09/21/21 15:56

#### Semivolatile Organics by EPA Method 625.1

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-2-09-09 (2109121-02) Water	Sampled: 09/09/21 09:00	Received: 09/09	9/21 14:56	10.310					
Bis(2-chloroethoxy)methane	ND	5.0	$\mu g/L$	1	B111608	09/15/21	09/16/21 12:25	EPA 625.1	
Bis(2-ethylhexyl)phthalate	ND	5.0	0	н	11	n	"		
Bis(2-chloroisopropyl)ether	ND	5.0	.0	"	-11	"			
4-Bromophenyl phenyl ether	ND	5.0		"	н	"	"	"	
2-Chlorophenol	ND	1.0	н	"	11	н	"	"	
4-Chloro-3-methylphenol	ND	5.0	*	u.	.,	**	"		
2-Chloronaphthalene	ND	5.0	, N. E	111	300				
4-Chlorophenyl phenyl ether	ND	5.0	30		.0	"	"	"	
Chrysene	ND	5.0	**	"	.,	"		u	
Dibenz (a,h) anthracene	ND	5.0	0	"	**	, ,	11		
1,3-Dichlorobenzene	ND	5.0	11	н	10	ж	n	THE STATE OF THE S	
1,2-Dichlorobenzene	ND	5.0	11.	н	п			"	
1,4-Dichlorobenzene	ND	5.0	н	"	"	"		"	
3,3'-Dichlorobenzidine	ND	5.0	н	u	0	"	"	"	
2,4-Dichlorophenol	ND	1.0	n	n	u u	n	11	4	
Diethyl phthalate	ND	5.0	н	н		н	0	U.	
2,4-Dimethylphenol	ND	1.0	.00	"	"	n	"	"	
Dimethyl phthalate	ND	5.0	.0	н	"	"	"	"	
Di-n-butyl phthalate	ND	5.0			"	"	"	"	
2,4-Dinitrophenol	ND	1.0	и	**	**	9	н	н	
2,4-Dinitrotoluene	ND	5.0	н	u	.0	***	n.		
2,6-Dinitrotoluene	ND	5.0	,,	"	u	n	"		
Di-n-octyl phthalate	ND	5.0	"		"	н	"	0	
1,2-Diphenylhydrazine	ND	5.0	H .	н	11	н	**	n	
Fluoranthene	ND	5.0	.0.	н	н	.0			
Fluorene	ND	5.0	11	"	Ü	"	n	n	
Hexachlorobenzene	ND	5.0	n	8	**	U	"	"	
Hexachlorobutadiene	ND	5.0	н	"			200	"	
Hexachlorocyclopentadiene	ND	5.0	н	0	39	"			
Hexachloroethane	ND	5.0			"		,		
Indeno (1,2,3-cd) pyrene	ND	5.0	"	n		n	н	"	
Isophorone	ND	5.0	•	,,	**	"		"	
2-Methyl-4,6-dinitrophenol	ND	5.0	50	"	**	rr rr		н	
Naphthalene	ND	5.0	3.00	n	0.0	"		"	
Nitrobenzene	ND	5.0	11	"	11	н	n	n	
2-Nitrophenol	ND	1.0	**	n	"	н	н	n .	
4-Nitrophenol	ND	1.0		"	н	н	"	100	
N-Nitrosodimethylamine	ND	5.0	11	"	,,		*		
Diphenylamine	ND	5.0	0	"		11	H.		
N-Nitrosodi-n-propylamine	ND	5.0	Ü	n	"	"	0		
Pentachlorophenol	ND	1.0	11	н		"	tr.	THE STATE OF THE S	



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported: 09/21/21 15:56

#### Semivolatile Organics by EPA Method 625.1

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-2-09-09 (2109121-02) Water	Sampled: 09/09/21 09:00	Received: 09/09	0/21 14:56				W0000		
Phenanthrene	ND	5.0	μg/L	1	B111608	09/15/21	09/16/21 12:25	EPA 625.1	
Phenol	ND	1.0		"	0	,,	"	"	
Pyrene	ND	5.0	1967	**	"	- 00	"	0	
1,2,4-Trichlorobenzene	ND	5.0	.01	"	11	ж.	"	0	
2,4,6-Trichlorophenol	ND	1.0	11	u	Ü	n	н	"	
MW-3-09-09 (2109121-03) Water	Sampled: 09/09/21 09:15	Received: 09/09	0/21 14:56	1	2000	20.0270			
Surrogate: 2-Fluorophenol		69.5 %	25-1	21	B111608	09/15/21	09/16/21 12:25	EPA 625.1	
Surrogate: Phenol-d6		82.7 %	24-1	113	"	"	"	"	
Surrogate: Nitrobenzene-d5		88.0 %	23-1	20	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		78.8 %	30-1	15	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		49.2 %	19-1	22	"	"	"	"	
Surrogate: Terphenyl-d14		90.0 %	18-1	37	"	"	"	"	
Acenaphthene	ND	5.0	n	"		"	"	**	
Acenaphthylene	ND	5.0		"	"	· u	н	n	
Anthracene	ND	5.0	30	**	,,	.0		*	
Benzidine	ND	5.0	.0			"	"		
Benzo (a) anthracene	ND	5.0	u		"	"	11	и	
Benzo (b) fluoranthene	ND	5.0	W	"	n		11	"	
Benzo (k) fluoranthene	ND	5.0	H	"	11	н	эн	и	
Benzo (a) pyrene	ND	5.0		"	U	"	n	n .	
Benzo (g,h,i) perylene	ND	5.0		,	"	**	11		
Butyl benzyl phthalate	ND	5.0	"	"	"		н		
Bis(2-chloroethyl)ether	ND	5.0	и		н	**	н	m ·	
Bis(2-chloroethoxy)methane	ND	5.0	"			**	300		
Bis(2-ethylhexyl)phthalate	ND	5.0	"	"	**	"	u		
Bis(2-chloroisopropyl)ether	ND	5.0	11			"	u	н	
4-Bromophenyl phenyl ether	ND	5.0		11	н	"	"		
2-Chlorophenol	ND	1.0	11			и		ж	
4-Chloro-3-methylphenol	ND	5.0	n n	n	11				
2-Chloronaphthalene	ND	5.0		н	**	н		"	
4-Chlorophenyl phenyl ether	ND	5.0		н		"		**	
Chrysene	ND	5.0	n	34	n	11	и	n	
Dibenz (a,h) anthracene	ND	5.0	n		n		**	100	
1,3-Dichlorobenzene	ND	5.0	"		•	"	"	"	
1,2-Dichlorobenzene	ND	5.0	н	"		"	"		
1,4-Dichlorobenzene	ND	5.0		"	п	н	**	**	
3,3'-Dichlorobenzidine	ND	5.0		.00	п		"	(M)	
2,4-Dichlorophenol	ND	1.0	,,	,,,	**		,		
Diethyl phthalate	ND	5.0	w		.0	"			
2,4-Dimethylphenol	ND	1.0	0 -	"		"			



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported: 09/21/21 15:56

#### Semivolatile Organics by EPA Method 625.1

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit U	nits Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3-09-09 (2109121-03) Water	Sampled: 09/09/21 09:15	Received: 09/09/21	14:56					
Dimethyl phthalate	ND	5.0 μ	g/L 1	B111608	09/15/21	09/16/21 12:25	EPA 625.1	
Di-n-butyl phthalate	ND	5.0	11 11			н	н	
2,4-Dinitrophenol	ND	1.0	n n	"	н	п	"	
2,4-Dinitrotoluene	ND	5.0	и и		n.	386	"	
2,6-Dinitrotoluene	ND	5.0	n n	ü	n	н	"	
Di-n-octyl phthalate	ND	5.0	n n	"	n	н	н	
1,2-Diphenylhydrazine	ND	5.0	н	ĬĬ	н	n	n	
Fluoranthene	ND	5.0	" "	"	"	l H	"	
Fluorene	ND	5.0	н	,,	"	"		
Hexachlorobenzene	ND	5.0	п	"	n	н	,	
Hexachlorobutadiene	ND	5.0	н и	,,	11	n	"	
Hexachlorocyclopentadiene	ND	5.0	n "	ж		n .	"	
Hexachloroethane	ND	5.0	" "			10	"	
Indeno (1,2,3-cd) pyrene	ND	5.0	н п	,,	"		10	
Isophorone	ND	5.0	н п		"			
2-Methyl-4,6-dinitrophenol	ND	5.0	n n	m	"	и		
Naphthalene	ND	5.0	" "	"			m .	
Nitrobenzene	ND	5.0		71	"			
2-Nitrophenol	ND	1.0		n n	"	"		
4-Nitrophenol	ND	1.0	n o	"	"	н	n	
N-Nitrosodimethylamine	ND	5.0	п о			.00	ti .	
Diphenylamine	ND	5.0	11	"	"	3.00		
N-Nitrosodi-n-propylamine	ND	5.0			"		u	
Pentachlorophenol	ND	1.0		"	u		11	
Phenanthrene	ND	5.0	n u	"	0	in .	W	
Phenol	ND	1.0	11 11	n	· ·			
Pyrene	ND	5.0	" "	n	"	"		
1,2,4-Trichlorobenzene	ND	5.0		9	u		ii .	
2,4,6-Trichlorophenol	ND	1.0	n n	**	u.	"	0	



Crestline CA, 92325-3395

P.O. Box 3395

Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

09/21/21 15:56

#### Semivolatile Organics by EPA Method 625.1

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4-09-09 (2109121-04) Water	Sampled: 09/09/21 09:35	Received: 09/09	9/21 14:56						
Surrogate: 2-Fluorophenol		58.6 %	25-	121	B111608	09/15/21	09/16/21 12:25	EPA 625.1	
Surrogate: Phenol-d6		54.6 %	24-	113	"	"	"	"	
Surrogate: Nitrobenzene-d5		42.6 %	23-	120	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		83.5 %	30-	115	"	n	"	"	
Surrogate: 2,4,6-Tribromophenol		102 %	19-	122	"	n	<i>n</i> –	"	
Surrogate: Terphenyl-d14		83.3 %	18-	137	"	n	<i>"</i>	"	
Acenaphthene	ND	5.0			110		"	n	
Acenaphthylene	ND	5.0				0	.0	н	
Anthracene	ND	5.0	11	n	**	**	"		
Benzidine	ND	5.0	"	n	**	**	n	,,	
Benzo (a) anthracene	ND	5.0				"			
Benzo (b) fluoranthene	ND	5.0				и.	"	.00	
Benzo (k) fluoranthene	ND	5.0	"	"		**	"	•	
Benzo (a) pyrene	ND	5.0	,	н		**		0	
Benzo (g,h,i) perylene	ND	5.0	н	"		**	n		
Butyl benzyl phthalate	ND	5.0	90	**	0	0	u.	"	
Bis(2-chloroethyl)ether	ND	5.0	30.	0.	0.	11		"	
Bis(2-chloroethoxy)methane	ND	5.0	"	0		н	н	н	
Bis(2-ethylhexyl)phthalate	ND	5.0	0	0	**	н	и	н	
Bis(2-chloroisopropyl)ether	ND	5.0	**	**	н	н	ж	н	
4-Bromophenyl phenyl ether	ND	5.0	(11)	"	"				
2-Chlorophenol	ND	1.0	**	"		"		-11	
4-Chloro-3-methylphenol	ND	5.0	n	"	"	n	"	"	
2-Chloronaphthalene	ND	5.0	n	N.		n	ar a	0	
4-Chlorophenyl phenyl ether	ND	5.0	н	"	0	u	10	"	
Chrysene	ND	5.0	"			"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	0	9	н	"	11	
1,3-Dichlorobenzene	ND	5.0	n	0	"	n	,	и	
1,2-Dichlorobenzene	ND	5.0		11	"	н	:n:	и	
1,4-Dichlorobenzene	ND	5.0	3.00	"	"	н	n	н	
3,3'-Dichlorobenzidine	ND	5.0	**			н		"	
2,4-Dichlorophenol	ND	1.0	0	,,	н	н	•	"	
Diethyl phthalate	ND	5.0	110	н	it	**	.00	11	
2,4-Dimethylphenol	ND	1.0	***	,,	.0	н		11	
Dimethyl phthalate	ND	5.0	**		v	11	,,	,,	
Di-n-butyl phthalate	ND	5.0	н	н	v	"		н	
2,4-Dinitrophenol	ND	1.0	н		"	"	n	н	
2,4-Dinitrotoluene	ND	5.0	н		n	н	н	*	
2,6-Dinitrotoluene	ND	5.0			,				
Di-n-octyl phthalate	ND	5.0	"	0	,	,	,,		
1,2-Diphenylhydrazine	ND	5.0						"	
.,p	ND	2.0							



Crestline CA, 92325-3395

P.O. Box 3395

Project: Las Flores Ranch

Project Number: Annual Monitoring Wells 1,2,3,4

Project Manager: Ron Scriven

Reported:

09/21/21 15:56

#### Semivolatile Organics by EPA Method 625.1

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4-09-09 (2109121-04) Water	Sampled: 09/09/21 09:35	Received: 09/0	9/21 14:56						
Fluoranthene	ND	5.0	μg/L	l	B111608	09/15/21	09/16/21 12:25	EPA 625.1	
Fluorene	ND	5.0	и	n n	и	"	11		
Hexachlorobenzene	ND	5.0	н	н	"	"	11	"	
Hexachlorobutadiene	ND	5.0	н	м	п	in:	,,	н	
Hexachlorocyclopentadiene	ND	5.0	"	11	"	"	**	n	
Hexachloroethane	ND	5.0	n	u u	n	н	н		
Indeno (1,2,3-cd) pyrene	ND	5.0		"	11	n n	n		
Isophorone	ND	5.0		u ·	n	11	н	"	
2-Methyl-4,6-dinitrophenol	ND	5.0		n	"	.10			
Naphthalene	ND	5.0		**	11	11	н	n n	
Nitrobenzene	ND	5.0		**	n	"	"	"	
2-Nitrophenol	ND	1.0	11	"	"	"	"		
4-Nitrophenol	ND	1.0	100	"	"		.00	11	
N-Nitrosodimethylamine	ND	5.0	"	"		"	v	,	
Diphenylamine	ND	5.0		н	н		n	9	
N-Nitrosodi-n-propylamine	ND	5.0		"			"		*
Pentachlorophenol	ND	1.0		и		м	н		
Phenanthrene	ND	5.0		"				**	
Phenol	ND	1.0		n	Ü	п	н		
Pyrene	ND	5.0		,,		н.			
1,2,4-Trichlorobenzene	ND	5.0	ж	"	**		н	W	
2,4,6-Trichlorophenol	ND	1.0	н				**	"	



P.O. Box 3395

Project: Las Flores Ranch Project Number: Monitoring Wells

Reported: 12/20/21 13:14

Crestline CA, 92325-3395

Project Manager: Ron Scriven

#### Trihalomethanes by EPA Method 524.2

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 12-09 (2112137-01) Water	Sampled: 12/09/21 09:50	Received: 12/09	Received: 12/09/21 12:35						
Surrogate: Dibromofluoromethane		115 %	86	5-118	B1L1005	12/10/21	12/13/21 09:12	EPA 524.2	
Surrogate: Toluene-d8		104 %	88-110		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	86	i-115	"	"	н	"	
Bromodichloromethane	ND	0.500		.0	.0	н	n.		
Bromoform	ND	0.500	**		n		n	"	
Chloroform	ND	0.500		0	,		"	"	
Dibromochloromethane	ND	0.500	.0	0	н	н	n	"	
Total Trihalomethanes	ND	0.500	o.	30.3	311.0	н	= 50.	n =	
MW-2 12-09 (2112137-02) Water	Sampled: 12/09/21 11:02	Received: 12/09	/21 12:35	5		_ 1 11			
Surrogate: Dibromofluoromethane		115 %	86	5-118	B1L1005	12/10/21	12/13/21 09:12	EPA 524.2	
Surrogate: Toluene-d8		104 %	88	3-110	n	n	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	86	i-115	"	"	n	"	
Bromodichloromethane	ND	0.500	0	u		"		"	
Bromoform	ND	0.500	0	U.	30.5	"	· u		
Chloroform	ND	0.500	200	.003	30	ж		"	
Dibromochloromethane	ND	0.500				"		n	
Total Trihalomethanes	ND	0.500	0	11	н	п	н	n	
MW-3 12-09 (2112137-03) Water	Sampled: 12/09/21 10:30	Received: 12/09	/21 12:35	5					
Surrogate: Dibromofluoromethane		117 %	86	i-118	B1L1005	12/10/21	12/13/21 09:12	EPA 524.2	
Surrogate: Toluene-d8		105 %	88	3-110	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	86	5-115	"	"	"	"	
Bromodichloromethane	ND	0.500			0.1	.0.	н	n	
Bromoform	ND	0.500	v			11			
Chloroform	ND	0.500		n			н		
Dibromochloromethane	ND	0.500	0	n	u	"			
Total Trihalomethanes	ND	0.500	in.	"	an .	n.	**	н	



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Crestline CA, 92325-3395

Project: Las Flores Ranch Project Number: Monitoring Wells

Project Manager: Ron Scriven

Reported: 12/20/21 13:14

#### Trihalomethanes by EPA Method 524.2

#### Sierra Analytical Labs, Inc.

Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Sampled: 12/09/21 10:45	Received: 12/09	Received: 12/09/21 12:35						
	114 %	86-	118	B1L1005	12/10/21	12/13/21 09:12	EPA 524.2	
	103 %	88-110		"	,,	"	"	
	108 %	86-115		"	"	n	"	
ND	0.500	11	н	0.	н	'n	**	
ND	0.500	10	н	tt.		ж	"	
ND	0.500	"	"	0	"		"	
ND	0.500	0	"	0	"	*	"	
ND	0.500	0	n	ti .	н	н	"	
	ND ND ND ND ND ND	Result   Limit	Result         Limit         Units           Sampled: 12/09/21 10:45         Received: 12/09/21 12:35           114 %         86-103 %         88-108 %           ND         0.500         "           ND         0.500         "	Result         Limit         Units         Dilution           Sampled: 12/09/21 10:45         Received: 12/09/21 12:35           I14 %         86-118           103 %         88-110           108 %         86-115           ND         0.500         "           ND         0.500         "           ND         0.500         "           ND         0.500         "           ND         0.500         "	Result         Limit         Units         Dilution         Batch           Sampled: 12/09/21 10:45           114 % 86-118 81L1005           103 % 88-110 "           108 % 86-115 "           ND 0.500 " " "	Result   Limit   Units   Dilution   Batch   Prepared	Result   Limit   Units   Dilution   Batch   Prepared   Analyzed	Result         Limit         Units         Dilution         Batch         Prepared         Analyzed         Method           Sampled: 12/09/21 10:45           114 %         86-118         B1L1005         12/10/21         12/13/21 09:12         EPA 524.2           103 %         88-110         "         "         "         "         "         "           ND         0.500         "         "         "         "         "         "         "           ND         0.500         "



P.O. Box 3395

Crestline CA, 92325-3395

Project: Las Flores Ranch

Project Number: Monitoring Wells Project Manager: Ron Scriven

Reported: 12/20/21 13:14

#### Haloacetic Acids (GC/ECD) by EPA Method 552.2

#### Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 12-09 (2112137-01) Water	Sampled: 12/09/21 09:50	Received: 12/09	/21 12:35						
Surrogate: 2,3-Dibromopropionic Acid		101 %	60-	150	B1L1304	12/13/21	12/14/21 09:44	EPA 552.2	
Monochloroacetic Acid	ND	2.00		"	"	"	н		
Dichloroacetic Acid	ND	1.00	316	н	н	н	н		
Trichloroacetic Acid	ND	1.00	19	н		31	Н.	н	
Monobromoacetic Acid	ND	1.00	0	n	и	н		н	
Dibromoacetic Acid	ND	1.00		"	"	"	**	н	
Total Haloacetic Acids	ND	1.00	308	"			н	"	
MW-2 12-09 (2112137-02) Water	Sampled: 12/09/21 11:02	Received: 12/09	/21 12:35						
Surrogate: 2,3-Dibromopropionic A	cid	119 %	60-	150	B1L1304	12/13/21	12/14/21 09:44	EPA 552.2	
Monochloroacetic Acid	ND	2.00	и		n	п		n	
Dichloroacetic Acid	ND	1.00	.11	***	,,,	н	н	19	
Trichloroacetic Acid	ND	1.00	и	n	n	н	n	"	
Monobromoacetic Acid	ND	1.00	n	"	n	"	n	n	
Dibromoacetic Acid	ND	1.00	л	"	"		n	"	
Total Haloacetic Acids	ND	1.00	т.	"	н	ж	н	"	
MW-3 12-09 (2112137-03) Water	Sampled: 12/09/21 10:30	Received: 12/09	/21 12:35						
Surrogate: 2,3-Dibromopropionic A	cid	108 %	60-	150	B1L1304	12/13/21	12/14/21 09:44	EPA 552.2	
Monochloroacetic Acid	ND	2.00	20.		н	16	п	n	
Dichloroacetic Acid	ND	1.00	н	ű	n	n	н	н	
Trichloroacetic Acid	ND	1.00			и		,,	n	
Monobromoacetic Acid	ND	1.00	n	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	"			"	
Dibromoacetic Acid	ND	1.00	н		и	316	in .	11	
Total Haloacetic Acids	ND	1.00	**		,,			**	



P.O. Box 3395 Crestline CA, 92325-3395 Project: Las Flores Ranch Project Number: Monitoring Wells

Reported:

12/20/21 13:14

## Project Manager: Ron Scriven Haloacetic Acids (GC/ECD) by EPA Method 552.2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 12-09 (2112137-04) Water	Sampled: 12/09/21 10:45	Received: 12/09	Received: 12/09/21 12:35						
Surrogate: 2,3-Dibromopropionic Acid		140 %	60-150		B1L1304	12/13/21	12/14/21 09:44	EPA 552.2	
Monochloroacetic Acid	ND	2.00	0	н	.0	"		"	
Dichloroacetic Acid	ND	1.00	.0	"	u u	н	"	"	
Trichloroacetic Acid	ND	1.00		"	"	н	н		
Monobromoacetic Acid	ND	1.00		11	n	311	0.5	· · ·	
Dibromoacetic Acid	ND	1.00	(w)	0	II.	11	н	"	
Total Haloacetic Acids	ND	1.00	(0)		"	"	n	"	