



Malibu Civic Center Wastewater Treatment Facility

Second Quarter 2016
Groundwater + Surface Water
Monitoring Report



Rincon Consultants Inc.
July 2016

Submitted to:

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July 20, 2016
Project 15-01587

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Subject: Second Quarter 2016 Baseline Groundwater and Surface Water Monitoring Report, Malibu Civic Center Wastewater Treatment Facility - City of Malibu, California

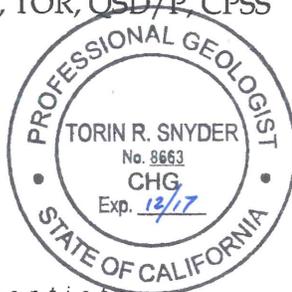
Dear Mr. George:

Rincon Consultants, Inc. has prepared the Second Quarter 2016 Baseline Groundwater and Surface Water Monitoring Report for the Malibu Civic Center Wastewater Treatment Facility located in Malibu, California. The objective of the study is to develop baseline groundwater and surface water quality conditions prior to the operation of the Wastewater Treatment Facility. Once the Wastewater Treatment Facility is operating, the baseline water quality conditions will be used to identify any potential impacts as a result of land disposal of treated wastewater via injection and landscape irrigation or percolation on the receiving water aquifers, Santa Monica Bay, Malibu Creek, and Malibu Lagoon.

Please contact us with any questions you may have regarding the results of the Second Quarter 2016 Baseline Groundwater and Surface Water Monitoring Report.

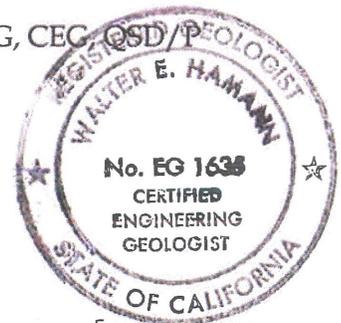
Sincerely,
RINCON CONSULTANTS, INC.

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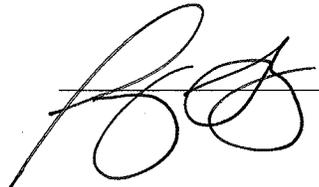


Planners

Engineers

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment."

Executed on the 27 day of JULY 2016 at MALIBU

 Signature
CRAIG GEORGE

ENVIRONMENTAL Title
SUSTAINABILITY DIRECTOR



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1.0 INTRODUCTION

This report presents the results of the Second Quarter 2016 Baseline Groundwater and Surface Water Monitoring event for the Malibu Civic Center Wastewater Treatment Facility located in the City of Malibu, California (Figure 1). The objective of the work program is to implement and manage a basin-wide groundwater and surface water monitoring and reporting program. The monitoring program has been designed to identify potential impacts as a result of land disposal of treated wastewater via injection and landscape irrigation or percolation on the receiving water quality of the local groundwater aquifers, Santa Monica Bay, Malibu Creek, and Malibu Lagoon.

This report was prepared by Rincon Consultants, Inc. (Rincon) and presents the geologic and hydrogeologic setting, groundwater elevations and gradient, surface water sampling methodologies, water quality data results, and our conclusions.

2.0 BACKGROUND

On-site wastewater disposal systems (OWDS) have allegedly contributed to the non-point source pollution of Malibu Creek and Lagoon located in the Civic Center Area of the City of Malibu. As a result of regulatory actions taken by the Los Angeles Regional Water Quality Control Board (LARWQCB) and the State Water Resources Control Board (SWRCB) to prohibit discharges from OWDS in the Civic Center area, the City of Malibu has designed and begun constructing a new wastewater treatment facility.

To establish baseline groundwater and surface water quality conditions prior to operation and discharge of treated wastewater, the LARWQCB requires basin-wide, baseline groundwater and surface water monitoring. The water quality monitoring program is driven by several factors:

- Timelines established through regulatory action
- Proposed programs to fulfill anticipated future regulatory requirements associated with the development of the Civic Center Wastewater Treatment Facility (CCWTF)
- The distribution of Title 22 Recycled Water in the Prohibition area
- Protection of the Malibu Valley Groundwater Basin, Malibu Creek, Malibu Lagoon, and the near shore environment of Santa Monica Bay.

At this time, the basin-wide monitoring program consists of five water quality monitoring tasks that occur in the Civic Center area of the City of Malibu. All five monitoring tasks have been designed to build upon one another to provide a comprehensive basin-wide groundwater and surface water monitoring program. Below is a general description of each task and a discussion of its key objective.

– *Task I – Baseline Groundwater and Surface Water Quality Monitoring of the Civic Center Area*

The baseline groundwater and surface water quality monitoring task involves monitoring groundwater in nine shallow and deep groundwater wells, and monitoring surface water quality at ten locations. The objective of the monitoring in this task is to develop baseline, ambient shallow and deep groundwater and surface water conditions prior to the implementation of the CCWTF, as required by the Monitoring and Reporting Program (MRP) No. CI 10042 issued by the LARWQCB (LARWQCB 2015).



– *Task II – Long-Term Monitoring of Groundwater and Surface Water Quality Monitoring of the Civic Center Area*

The long-term groundwater and surface water quality monitoring task involves monitoring groundwater in nine shallow and deep groundwater wells and monitoring surface water quality at ten locations. The objective of the long-term monitoring is to identify the impact that land disposal of recycled water, via injection and landscape irrigation or percolation, will have on the water quality of the receiving groundwater aquifers, Santa Monica Bay, Malibu Creek, and Malibu Lagoon. The nine groundwater monitoring wells and ten surface water sampling locations identified in Task II will be sampled on a quarterly basis once CCWTF operations commence. This sampling is required by the MRP No. CI 10042 issued by the LARWQCB (LARWQCB 2015).

– *Task III – Salt and Nutrient Management Plan Monitoring Program*

The Salt and Nutrient Management Plan (SNMP) monitoring program branches off from the baseline and long-term groundwater and surface water monitoring programs described above (Tasks I and II). Task III involves performing semi-annual groundwater monitoring at 16 groundwater monitoring wells (mix of shallow and deep) located in the Civic Center area of the City and in a small area in the unincorporated portion of Los Angeles County. The objective of the SNMP is to monitor the potential impacts that recycled water, introduced through irrigation and injection, will have on the Malibu Groundwater Basin. The SNMP will also provide data to assess the various phases of the CCWTF implementation during the time that the collection system and treatment plant connections increase, and as OWDS-related discharges cease (RMC Water 2015a).

– *Task IV – Memorandum of Understanding Compliance Monitoring*

Compliance with the Memorandum of Understanding (MOU) the City has with the LARWQCB corresponds with baseline and long term groundwater and surface water monitoring programs described in Tasks I through III above. Task IV involves performing semi-annual monitoring at 14 groundwater wells located in the City's Civic Center area. The objective of the MOU is to monitor for potential impacts to the Shallow Alluvium as a result of CCTWF implementation (LARWQCB 2014).

– *Task V – Civic Center Groundwater Elevation Monitoring Program*

The groundwater elevation monitoring program has been designed to appraise the groundwater elevations in the Malibu Groundwater Basin and in Winter Canyon. The objective of this task is to provide a better understanding of the groundwater elevation conditions of the Civic Center Area, including elevation trends related to precipitation, tidal, and lagoon influences (LARWQCB 2015).



3.0 GEOLOGIC AND HYDROGEOLOGIC SETTING

3.1 HYDROLOGY

The project lies in the Los Angeles hydrologic region, as defined by the LARWQCB. The Los Angeles hydrologic region encompasses all coastal drainages flowing to the Pacific Ocean between Rincon Point and the eastern Los Angeles County line. The study area covers two watersheds: the Malibu Creek and Winter Canyon Creek watersheds. The majority of the study area addressed in this report is located within the 109-square-mile Malibu Creek watershed, which is the second largest watershed draining to the Santa Monica Bay. The Malibu Creek watershed contains mostly undeveloped mountain areas, large-acreage residential properties, and many natural stream reaches (Los Angeles RWQCB 2011). Malibu Lagoon is located at the terminus of the Malibu Creek watershed. Malibu Lagoon is a brackish estuary of approximately 13 acres but is one of the only two remaining coastal marshes in Los Angeles County.

3.2 GEOLOGY

The study area is located within the Santa Monica Mountains in the northwestern corner of the Los Angeles basin. The study area lies at the juncture of the Peninsular Ranges geomorphic province, consisting of a northwest-oriented structural grain, and the Transverse Ranges geomorphic province, which features a predominantly east-west-oriented structural grain.

The 45-mile-long Santa Monica Mountains range is part of the southernmost portion of the western Transverse Ranges province. It forms an east-west range of low mountains along the southern California Coast from the Oxnard Plain to Los Angeles. The Santa Monica Mountain range is characterized by long, south draining canyons on its south flank and short, north draining canyons on its north flank. The Malibu Canyon and Winter Canyon are two significant canyons within the study area that drain to the south.

3.3 HYDROGEOLOGY

The Malibu Valley Groundwater Basin (DWR groundwater basin no. 4-22) is a small alluvial basin, approximately 613 acres in size. The groundwater basin is bounded by the Pacific Ocean on the south, and by the Santa Monica Mountains, composed of non-water-bearing Tertiary age rocks to the north, east, and west.

Water bearing geologic formations in the Malibu Valley Groundwater Basin are comprised of Holocene alluvium, consisting of clays, silts, sands, and gravels, overlying impermeable bedrock. The unconsolidated alluvium in the Civic Center area by Malibu Creek and other small drainages is estimated to range in thickness from a thin layer near the valley walls to around 175 feet in the central part of the main body of the alluvium. The alluvium can be subdivided into three categories or zones: 1) a shallow zone of permeable alluvial sediments, 2) underlain by a sequence of fine-grained estuarine deposits, and 3) and underlying coarse-grained stratum commonly referred to as the "Civic Center Gravels" (GeoSoils 1989, Leighton 1994, ECI 200, Ambrose and Orme 2000, Fugro West, Inc. 2005, Geosyntec Consultants 2007). Depth to groundwater in the alluvium is typically 5 to 13 feet below grade and is deeper in the upland canyon areas.



4.0 ACTIVITIES COMPLETED DURING THE SECOND QUARTER OF 2016

The following activities were completed during the Second Quarter of 2016:

- Rincon measured depth to water in the groundwater monitoring wells on April 25, 2016, May 16, 2016, and June 17, 2016.
- Rincon collected and analyzed surface water samples for WDR/MRP compliance (Task I).

5.0 GROUNDWATER ELEVATIONS AND GRADIENTS

Rincon measured the depth to water in 46 groundwater monitoring wells using an electronic water level indicator on April 25, 2016, May 16, 2016, and June 17, 2016 (Table 1 and Appendix A). Of the 46 groundwater monitoring wells, seven of the wells do not have elevation data for the top of well casing. Therefore, groundwater elevations could not be calculated in these seven groundwater wells.

5.1 SHALLOW ZONE

The groundwater elevations ranged from 4.04 feet above mean sea level (amsl) in groundwater monitoring well MCWP-MW10 to 19.51 feet amsl in groundwater monitoring well EC-RC-MW01 (Table 1). Groundwater elevations fluctuated during the Second Quarter of 2016 when comparing monthly groundwater elevations between April and June 2016. Groundwater elevation decreased a maximum of 2.17 feet amsl in groundwater monitoring well SMBRP-6 and increased a maximum 1.52 feet amsl in groundwater monitoring well SMBRP-2. Groundwater elevations decreased a minimum of 0.04 feet amsl in groundwater monitoring wells SMBRP-10C, SMBRP-7B, and SMBRP-9. The groundwater elevation did not change between April and May 2016 in groundwater well SMBRP-9. The predominant direction of groundwater flow ranged from southeast to south, towards the coastline. Elevation data and flow direction are depicted in Figures 3 through 5.

The shallow groundwater gradient was 0.0027 feet/foot, 0.0026 feet/foot, and 0.0020 feet/foot (calculated using groundwater monitoring wells SMBRP-9, SMBRP-12, and SMBRP-2) during the April, May, and June monitoring events, respectively.

5.2 DEEP ZONE

The groundwater elevations ranged from 4.74 feet amsl in groundwater monitoring well MCWP-MW07D to 10.45 feet amsl in groundwater monitoring well MCWP-MW09 (Table 1). Groundwater elevation decreased a maximum of 0.58 feet amsl in groundwater monitoring well MCWP-MW03 and increased a maximum 0.53 feet amsl in groundwater monitoring wells MCWP-MW09 and MCWP-MW02 when comparing monthly groundwater elevations between April and June 2016.



5.3 WINTER CANYON

The groundwater elevations ranged from 9.72 feet amsl in groundwater monitoring well SMBRP-11 to 50.67 feet amsl in groundwater monitoring well LAMW-5S (Table 1). Groundwater elevation decreased a maximum of 0.74 feet amsl in groundwater monitoring well SMBRP-11 and increased a maximum 0.23 feet amsl in groundwater monitoring well SMBRP-11 when comparing monthly groundwater elevations between April and June 2016.

6.0 WATER QUALITY SAMPLING AND ANALYSIS

6.1 SURFACE WATER SAMPLING METHODOLOGY

On June 16, 2016 a total of ten surface water samples were collected. Six surface water samples were collected from the Malibu Lagoon and Creek and four ocean water samples were collected from the near shore area along Malibu Road. Surface water samples from nearshore were collected from each location at a depth of approximately 3-6 inches (ankle deep). Surface water samples from Malibu Lagoon and Creek were collected from each location at a depth of approximately twelve inches below the surface of the water. All surface water samples were collected up-current of the sampling person's body to minimize the potential for contaminating the surface water sample with bacteria that may originate from field personnel. Surface water samples were collected in a field sampling container and then transferred into preserved and non-preserved containers supplied by Fruit Growers Laboratory, Inc. (FGL) located in Santa Paula, California. The containers were capped, labeled, placed in Ziploc bags, and stored on ice in a cooler pending delivery to FGL. The surface water samples were analyzed for total and fecal coliform, total dissolved solids (TDS), phosphorous, nitrate (as nitrogen), nitrite (as nitrogen), ammonia, organic nitrogen, and total Kjeldahl nitrogen (TKN). All surface water monitoring locations and corresponding laboratory analysis are shown in the Surface Water Analysis Matrix (Table 2).

6.2 SURFACE WATER ANALYTICAL LABORATORY ANALYSIS

The surface water samples collected during the Second Quarter 2016 sampling event were analyzed by FGL. The laboratory analytical results for the Second Quarter monitoring event included the constituents listed in Table 3. Laboratory reports are included as Appendix B of this report.

6.2.1 Total Coliform

During the Second Quarter 2016 monitoring event, total coliform concentrations in the near shore surface water ranged from less than 1.8 Most Probable Number per 100 milliliters (MPN/100 mL) at N-001, N-002, and N-003 to 6.8 MPN/100 mL at N-004. Total coliform concentrations in the surface water of Malibu Lagoon and Creek ranged from 17 MPN/100 mL at L-006 to 350 MPN/100 mL at L-001 with an average concentration of 92 MPN/100 mL.



6.2.2 Fecal Coliform

During the Second Quarter 2016 monitoring event fecal coliform concentrations in the near shore surface water were not detected above the reporting limit of 1.8 mg/L. Fecal coliform concentrations in the Malibu Lagoon and Creek surface water ranged from 2 MPN/100 mL at L-002 and L-004 and 7.8 MPN/100 mL at L-006 with an average concentration of 4.5 MPN/100 mL.

6.2.3 Nitrogen

6.2.3.1 Nitrate as Nitrogen.

Nitrate as nitrogen concentrations in all surface water samples collected at the near shore and Malibu Lagoon and Creek sampling locations were less than 0.1 milligrams per liter (mg/L), the analytical practical quantification limit (reporting limit).

Nitrate as nitrogen concentrations in all surface water samples collected at the near shore and Malibu Lagoon and Creek sampling locations were less than 0.1 milligrams per liter (mg/L), the analytical practical quantification limit (reporting limit).

6.2.3.2 Other Forms of Nitrogen

All nitrite as nitrogen concentrations in surface water samples collected at the near shore and Malibu Lagoon and Creek sampling locations were not detected above the reporting limit of 0.1 mg/L.

Ammonia (NH_3^+) is the primary form of nitrogen in OWDS effluent, and it is converted to nitrate during the leaching process through the vadose zone (Figure 6). All ammonia concentrations in surface water samples collected at the near shore and the Malibu Lagoon and Creek sampling locations during the Second Quarter 2016 monitoring event were not detected above the reporting limit of 0.2 mg/L.

TKN concentrations in surface water samples collected at the near shore sampling locations during the Second Quarter 2016 monitoring event were not detected above the reporting limit of 0.5 mg/L. TKN detected in surface water samples collected at the Malibu Lagoon and Creek sampling locations during the Second Quarter 2016 sampling event ranged from less than 0.5 mg/L at sampling location L-003 to 1.18 mg/L at sampling location L-006.

Organic nitrogen concentrations in surface water samples collected at the near shore sampling locations during the Second Quarter 2016 monitoring event were not detected above the reporting limit of 0.5 mg/L. Organic nitrogen detected in surface water samples collected at the Malibu Lagoon and Creek sampling locations during the Second Quarter 2016 sampling event ranged from less than 0.5 mg/L at sampling location L-003 to 1.18 mg/L at sampling location L-006.



7.0 SCHEDULED ACTIVITIES FOR THE THIRD QUARTER OF 2016

The following activities will be completed during the Third Quarter of 2016:

- Prepare and submit the Second Quarter 2016 Groundwater and Surface Water Monitoring Report to the LARWQCB.
- Rincon will collect and analyze surface water samples for MRP compliance (Task I).
- Rincon will collect and analyze groundwater samples for MRP compliance (Task I).
- Rincon will collect and analyze groundwater samples for SNMP compliance (Task III).
- Rincon will collect and analyze groundwater samples for MOU compliance (Task IV).
- Rincon will measure depth to water in the groundwater monitoring wells in July, August, and September (Task V).

8.0 SUMMARY OF MONITORING ACTIVITIES

Groundwater elevations fluctuated several feet between April, May, and June groundwater monitoring events. Shallow groundwater generally flows southeast to south, towards the coastline.

During the Second Quarter 2016 monitoring event, total coliform concentrations in the near shore surface water ranged from less than 1.8 MPN/100 mL at N-001, N-002, and N-003 to 6.8 MPN/100 mL at N-004. Total coliform concentrations in the surface water of Malibu Lagoon and Creek ranged from 17 MPN/100 mL at L-006 to 350 MPN/100 mL at L-001 with an average concentration of 92 MPN/100 mL.

During the Second Quarter 2016 monitoring event fecal coliform concentrations in the near shore surface water were not detected above the reporting limit of 1.8 mg/L. Fecal coliform concentrations in the Malibu Lagoon and Creek surface water ranged from 2 MPN/100 mL at L-002 and L-004 and 7.8 MPN/100 mL at L-006 with an average concentration of 4.5 MPN/100 mL.

Nitrate as nitrogen concentrations in all surface water samples collected at the near shore and Malibu Lagoon and Creek were less than 0.1 mg/L, analytical practical quantification limit.



10.0 LIMITATIONS

This report has been prepared for and is intended for the exclusive use of the City of Malibu. The contents of this report should not be relied upon by any other party without the written consent of Rincon Consultants, Inc.

Our conclusions regarding the site are based on observations of existing site conditions, our interpretation of site usage information, and the results of a limited subsurface sampling and chemical testing program. The concentrations of contaminants measured at any given location may not be representative of conditions at other locations intermediate to the locations sampled. Furthermore, conditions may change at any particular location as a function of time in response to natural conditions, chemical reactions, and other events. Conclusions regarding the condition of the site do not represent a warranty that all areas within the site are similar to those sampled.



11.0 REFERENCES

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- GeoSoils. 1989. Response to County of Los Angeles Geologic Review of 18.4 Acre Parcel NW of Cross Creek Road and Civic Center Way. April 17.
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- Los Angeles Regional Water Quality Control Board. 2015. Waste Discharge Requirements / Water Recycling Requirements for Malibu Civic Center Wastewater Treatment Facility - Phase I & II.
- RMC Water. 2015a. Draft Salt Nutrient and Management Plan Malibu Valley Groundwater Basin.
- RMC Water. 2015b. Draft Groundwater Management Plan Malibu Valley Groundwater Basin.



Table 1
Groundwater Elevations

Shallow Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
C-1	8/24/2015	11.47	N/A	-
	9/21/2015		N/A	-
	10/20/2015		N/A	-
	11/16/2015		5.07	6.40
	12/14/2015		4.12	7.35
	1/14/2016		6.65	4.82
	2/16/2016		6.65	4.82
	3/14/2016		6.80	4.67
	4/25/2016		5.72	5.75
	5/16/2016		4.59	6.88
	6/17/2016		4.72	6.75
C-2	8/24/2015	11.19	5.11	6.08
	9/21/2015		4.92	6.27
	10/20/2015		5.18	6.01
	11/16/2015		4.96	6.23
	12/14/2015		3.93	7.26
	1/14/2016		6.44	4.75
	2/16/2016		6.34	4.85
	3/14/2016		6.50	4.69
	4/25/2016		5.54	5.65
	5/16/2016		4.49	6.70
	6/17/2016		4.62	6.57
CCPE	8/24/2015	12.935	5.76	7.18
	9/21/2015		5.61	7.33
	10/20/2015		5.87	7.07
	11/16/2015		5.79	7.15
	12/14/2015		4.52	8.42
	1/14/2016		7.95	4.99
	2/16/2016		8.27	4.67
	3/14/2016		8.35	4.59
	4/25/2016		7.13	5.81
	5/16/2016		5.72	7.22
	6/17/2016		6.54	6.40

Table 1
Groundwater Elevations

Shallow Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
CCPNE	8/24/2015	13.675	6.44	7.24
	9/21/2015		6.27	7.41
	10/20/2015		6.54	7.14
	11/16/2015		6.74	6.94
	12/14/2015		5.28	8.40
	1/14/2016		8.51	5.17
	2/16/2016		8.65	5.03
	3/14/2016		8.65	5.03
	4/25/2016		7.79	5.89
	5/16/2016		6.39	7.29
	6/17/2016		5.83	7.85
CCPSW	8/24/2015	13.67	6.29	7.38
	9/21/2015		6.09	7.58
	10/20/2015		6.35	7.32
	11/16/2015		6.24	7.43
	12/14/2015		5.27	8.40
	1/14/2016		8.22	5.45
	2/16/2016		8.11	5.56
	3/14/2016		8.05	5.62
	4/25/2016		7.50	6.17
	5/16/2016		6.18	7.49
	6/17/2016		6.26	7.41
CCW-4	8/24/2015	15.765	6.50	9.27
	9/21/2015		6.71	9.06
	10/20/2015		6.90	8.87
	11/16/2015		7.02	8.75
	12/14/2015		7.05	8.72
	1/14/2016		6.19	9.58
	2/16/2016		6.17	9.60
	3/14/2016		5.72	10.05
	4/25/2016		5.28	10.49
	5/16/2016		6.45	9.32
	6/17/2016		6.7	9.07

Table 1
Groundwater Elevations

Shallow Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
GH6-M1	8/24/2015	-	28.92	-
	9/21/2015		29.11	-
	10/20/2015		29.24	-
	11/16/2015		29.32	-
	12/14/2015		29.43	-
	1/14/2016		29.43	-
	2/16/2016		29.56	-
	3/14/2016		29.44	-
	4/25/2016		29.46	-
	5/16/2016		29.35	-
	6/17/2016		29.2	-
GH8-M3	8/24/2015	-	28.37	-
	9/21/2015		28.54	-
	10/20/2015		28.69	-
	11/16/2015		28.75	-
	12/14/2015		28.78	-
	1/14/2016		28.92	-
	2/16/2016		28.96	-
	3/14/2016		28.79	-
	4/25/2016		28.78	-
	5/16/2016		28.63	-
	6/17/2016		28.67	-
GH9-M4	8/24/2015	-	30.31	-
	9/21/2015		30.54	-
	10/20/2015		30.66	-
	11/16/2015		30.75	-
	12/14/2015		30.86	-
	1/14/2016		34.54	-
	2/16/2016		31.12	-
	3/14/2016		31.07	-
	4/25/2016		34.32	-
	5/16/2016		32.80	-
	6/17/2016		30.56	-

Table 1
Groundwater Elevations

Shallow Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
M6-1	8/24/2015	-	6.61	-
	9/21/2015		6.43	-
	10/20/2015		6.72	-
	11/16/2015		6.68	-
	12/14/2015		6.35	-
	1/14/2016		6.63	-
	2/16/2016		7.03	-
	3/14/2016		6.45	-
	4/25/2016		7.15	-
	5/16/2016		6.85	-
	6/17/2016		7.04	-
M6-2	8/24/2015	-	5.76	-
	9/21/2015		5.75	-
	10/20/2015		6.08	-
	11/16/2015		6.17	-
	12/14/2015		6.12	-
	1/14/2016		4.69	-
	2/16/2016		5.46	-
	3/14/2016		4.27	-
	4/25/2016		5.51	-
	5/16/2016		5.74	-
	6/17/2016		5.94	-
M7-1	8/24/2015	-	8.09	-
	9/21/2015		8.12	-
	10/20/2015		8.40	-
	11/16/2015		8.48	-
	12/14/2015		8.30	-
	1/14/2016		8.04	-
	2/16/2016		8.36	-
	3/14/2016		7.83	-
	4/25/2016		8.46	-
	5/16/2016		8.17	-
	6/17/2016		8.22	-

Table 1
Groundwater Elevations

Shallow Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
M7-2	8/24/2015	-	7.78	-
	9/21/2015		7.91	-
	10/20/2015		8.15	-
	11/16/2015		8.27	-
	12/14/2015		8.28	-
	1/14/2016		7.34	-
	2/16/2016		7.74	-
	3/14/2016		7.03	-
	4/25/2016		7.84	-
	5/16/2016		7.70	-
	6/17/2016		7.77	-
MBCMW-7	8/24/2015	16.635	11.26	5.38
	9/21/2015		10.94	5.70
	10/20/2015		11.09	5.55
	11/16/2015		11.11	5.53
	12/14/2015		10.27	6.37
	1/14/2016		11.39	5.25
	2/16/2016		11.75	4.89
	3/14/2016		11.55	5.09
	4/25/2016		11.44	5.20
	5/16/2016		11.22	5.42
	6/17/2016		11.71	4.93
MBCMW-8	8/24/2015	16.53	9.11	7.42
	9/21/2015		9.13	7.40
	10/20/2015		9.44	7.09
	11/16/2015		9.58	6.95
	12/14/2015		9.59	6.94
	1/14/2016		8.05	8.48
	2/16/2016		8.66	7.87
	3/14/2016		7.36	9.17
	4/25/2016		8.54	7.99
	5/16/2016		8.89	7.64
	6/17/2016		9.16	7.37

Table 1
Groundwater Elevations

Shallow Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
MBCMW-9	8/24/2015	17.71	8.70	9.01
	9/21/2015		8.83	8.88
	10/20/2015		9.00	8.71
	11/16/2015		9.09	8.62
	12/14/2015		9.09	8.62
	1/14/2016		8.30	9.41
	2/16/2016		8.06	9.65
	3/14/2016		7.83	9.88
	4/25/2016		8.21	9.50
	5/16/2016		8.40	9.31
	6/17/2016		8.64	9.07
MBCMW-10	8/24/2015	17.74	8.63	9.11
	9/21/2015		8.20	9.54
	10/20/2015		8.40	9.34
	11/16/2015		8.35	9.39
	12/14/2015		7.34	10.40
	1/14/2016		8.82	8.92
	2/16/2016		9.34	8.40
	3/14/2016		8.97	8.77
	4/25/2016		9.22	8.52
	5/16/2016		8.75	8.99
	6/17/2016		8.58	9.16
MCWP-MW04S	8/24/2015	15.29	7.55	7.74
	9/21/2015		7.67	7.62
	10/20/2015		7.85	7.44
	11/16/2015		7.99	7.30
	12/14/2015		8.06	7.23
	1/14/2016		6.48	8.81
	2/16/2016		7.08	8.21
	3/14/2016		5.92	9.37
	4/25/2016		7.10	8.19
	5/16/2016		7.36	7.93
	6/17/2016		7.64	7.65

Table 1
Groundwater Elevations

Shallow Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
MCWP-MW07S	8/24/2015	13.72	6.76	6.96
	9/21/2015		7.13	6.59
	10/20/2015		6.44	7.28
	11/16/2015		6.74	6.98
	12/14/2015		6.56	7.16
	1/14/2016		6.19	7.53
	2/16/2016		6.75	6.97
	3/14/2016		5.85	7.87
	4/25/2016		6.49	7.23
	5/16/2016		6.73	6.99
	6/17/2016		N/A	-
MCWP-MW08	8/24/2015	12.21	7.64	4.57
	9/21/2015		7.42	4.79
	10/20/2015		7.61	4.60
	11/16/2015		7.40	4.81
	12/14/2015		6.62	5.59
	1/14/2016		8.46	3.75
	2/16/2016		8.27	3.94
	3/14/2016		7.96	4.25
	4/25/2016		7.83	4.38
	5/16/2016		6.87	5.34
	6/17/2016		6.97	5.24
MCWP-MW10	8/24/2015	11.11	5.70	5.41
	9/21/2015		5.55	5.56
	10/20/2015		5.81	5.30
	11/16/2015		5.74	5.37
	12/14/2015		4.59	6.52
	1/14/2016		8.09	3.02
	2/16/2016		7.98	3.13
	3/14/2016		8.04	3.07
	4/25/2016		7.07	4.04
	5/16/2016		5.63	5.48
	6/17/2016		5.73	5.38

Table 1
Groundwater Elevations

Shallow Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
P-4	8/24/2015	12.155	4.58	7.58
	9/21/2015		4.47	7.69
	10/20/2015		4.71	7.45
	11/16/2015		4.65	7.51
	12/14/2015		3.52	8.64
	1/14/2016		6.93	5.23
	2/16/2016		6.88	5.28
	3/14/2016		6.92	5.24
	4/25/2016		6.00	6.16
	5/16/2016		4.57	7.59
	6/17/2016		4.68	7.48
P-9	8/24/2015	12.165	5.07	7.10
	9/21/2015		4.90	7.27
	10/20/2015		5.18	6.99
	11/16/2015		5.08	7.09
	12/14/2015		3.92	8.25
	1/14/2016		7.49	4.68
	2/16/2016		7.53	4.64
	3/14/2016		7.66	4.51
	4/25/2016		6.49	5.68
	5/16/2016		5.02	7.15
	6/17/2016		5.09	7.08
SMBRP-2	8/24/2015	13.131	6.04	7.09
	9/21/2015		5.91	7.22
	10/20/2015		6.16	6.97
	11/16/2015		6.09	7.04
	12/14/2015		4.84	8.29
	1/14/2016		8.80	4.33
	2/16/2016		8.54	4.59
	3/14/2016		8.58	4.55
	4/25/2016		7.59	5.54
	5/16/2016		6.07	7.06
	6/17/2016		6.14	6.99

Table 1
Groundwater Elevations

Shallow Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
SMBRP-6	8/24/2015	26.875	16.49	10.39
	9/21/2015		15.95	10.93
	10/20/2015		16.66	10.22
	11/16/2015		16.47	10.41
	12/14/2015		14.78	12.10
	1/14/2016		14.68	12.20
	2/16/2016		15.22	11.66
	3/14/2016		14.43	12.45
	4/25/2016		16.60	10.28
	5/16/2016		16.81	10.07
	6/17/2016		17.87	9.01
SMBRP-7B	8/24/2015	18.985	10.69	8.30
	9/21/2015		10.62	8.37
	10/20/2015		10.77	8.22
	11/16/2015		10.78	8.21
	12/14/2015		10.60	8.39
	1/14/2016		10.83	8.16
	2/16/2016		11.08	7.91
	3/14/2016		10.84	8.15
	4/25/2016		11.23	7.76
	5/16/2016		11.04	7.95
	6/17/2016		11.08	7.905
EC-RC-MW01	8/24/2015	48.69	28.74	19.95
	9/21/2015		29.02	19.67
	10/20/2015		28.76	19.93
	11/16/2015		29.38	19.31
	12/14/2015		29.32	19.37
	1/14/2016		28.93	19.76
	2/16/2016		29.18	19.51
	3/14/2016		28.76	19.93
	4/25/2016		29.40	19.29
	5/16/2016		29.18	19.51
	6/17/2016		29.38	19.31

Table 1
Groundwater Elevations

Shallow Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
SMBRP-9	8/24/2015	50.32	38.24	12.08
	9/21/2015		38.46	11.86
	10/20/2015		38.62	11.70
	11/16/2015		N/A	-
	12/14/2015		38.86	11.46
	1/14/2016		38.95	11.37
	2/16/2016		39.03	11.29
	3/14/2016		38.97	11.35
	4/25/2016		38.82	11.50
	5/16/2016		38.82	11.50
	6/17/2016		38.86	11.46
SMBRP-10C	8/24/2015	16.25	7.37	8.88
	9/21/2015		7.64	8.61
	10/20/2015		7.96	8.29
	11/16/2015		8.16	8.09
	12/14/2015		8.06	8.19
	1/14/2016		6.11	10.14
	2/16/2016		6.57	9.68
	3/14/2016		4.80	11.45
	4/25/2016		6.59	9.66
	5/16/2016		6.86	9.39
	6/17/2016		6.9	9.35
SMBRP-12	8/24/2015	12.615	7.52	5.10
	9/21/2015		6.91	5.71
	10/20/2015		6.72	5.90
	11/16/2015		6.75	5.87
	12/14/2015		6.42	6.20
	1/14/2016		6.95	5.67
	2/16/2016		6.85	5.77
	3/14/2016		6.09	6.53
	4/25/2016		6.76	5.86
	5/16/2016		6.40	6.22
	6/17/2016		5.39	7.225

Table 1
Groundwater Elevations

Shallow Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
SMBRP-13	8/24/2015	13.58	8.32	5.26
	9/21/2015		7.98	5.60
	10/20/2015		8.20	5.38
	11/16/2015		7.87	5.71
	12/14/2015		6.85	6.73
	1/14/2016		8.24	5.34
	2/16/2016		8.00	5.58
	3/14/2016		7.61	5.97
	4/25/2016		7.66	5.92
	5/16/2016		6.92	6.66
	6/17/2016		7.52	6.06
SMBRP-15B	8/24/2015	16.765	dry	-
	9/21/2015		dry	-
	10/20/2015		dry	-
	11/16/2015		dry	-
	12/14/2015		dry	-
	1/14/2016		dry	-
	2/16/2016		dry	-
	3/14/2016		dry	-
	4/25/2016		dry	-
	5/16/2016		dry	-
	6/17/2016		dry	-
SMBRP-16	8/24/2015	14.5	4.95	9.55
	9/21/2015		4.96	9.54
	10/20/2015		5.34	9.16
	11/16/2015		5.55	8.95
	12/14/2015		5.59	8.91
	1/14/2016		3.79	10.71
	2/16/2016		4.60	9.90
	3/14/2016		5.27	9.23
	4/25/2016		4.65	9.85
	5/16/2016		4.92	9.58
	6/17/2016		5.15	9.35

Notes:

N/A: well not accessible

'-': no data available

TOC: top of well casing

ft bTOC: feet below top of well casing

ft amsl: feet above mean sea level

Table 1
Groundwater Elevations

Deep Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
MCWP-MW01	8/24/2015	17.9	10.22	7.68
	9/21/2015		9.71	8.19
	10/20/2015		10.00	7.90
	11/16/2015		9.91	7.99
	12/14/2015		9.23	8.67
	1/14/2016		10.45	7.45
	2/16/2016		11.02	6.88
	3/14/2016		10.53	7.37
	4/25/2016		10.89	7.01
	5/16/2016		10.70	7.20
	6/17/2016		10.75	7.15
MCWP-MW02	8/24/2015	18.06	10.39	7.67
	9/21/2015		9.92	8.14
	10/20/2015		10.25	7.81
	11/16/2015		10.16	7.90
	12/14/2015		9.14	8.92
	1/14/2016		10.68	7.38
	2/16/2016		11.13	6.93
	3/14/2016		10.72	7.34
	4/25/2016		11.08	6.98
	5/16/2016		10.55	7.51
	6/17/2016		10.82	7.24
MCWP-MW03	8/24/2015	15.31	7.65	7.66
	9/21/2015		7.52	7.79
	10/20/2015		7.78	7.53
	11/16/2015		7.34	7.97
	12/14/2015		6.75	8.56
	1/14/2016		8.38	6.93
	2/16/2016		8.43	6.88
	3/14/2016		8.05	7.26
	4/25/2016		8.63	6.68
	5/16/2016		8.35	6.96
	6/17/2016		8.5	6.81

Table 1
Groundwater Elevations

Deep Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
MCWP-MW04D	8/24/2015	15.43	9.35	6.08
	9/21/2015		8.84	6.59
	10/20/2015		9.16	6.27
	11/16/2015		9.13	6.30
	12/14/2015		8.39	7.04
	1/14/2016		9.59	5.84
	2/16/2016		10.24	5.19
	3/14/2016		9.69	5.74
	4/25/2016		10.07	5.36
	5/16/2016		9.83	5.60
	6/17/2016		9.97	5.46
MCWP-MW05	8/24/2015	13.92	7.62	6.30
	9/21/2015		7.30	6.62
	10/20/2015		7.47	6.45
	11/16/2015		7.42	6.50
	12/14/2015		6.39	7.53
	1/14/2016		7.82	6.10
	2/16/2016		8.37	5.55
	3/14/2016		7.96	5.96
	4/25/2016		8.27	5.65
	5/16/2016		7.78	6.14
	6/17/2016		8.05	5.87
MCWP-MW06	8/24/2015	16.05	9.87	6.18
	9/21/2015		9.40	6.65
	10/20/2015		9.71	6.34
	11/16/2015		9.61	6.44
	12/14/2015		8.64	7.41
	1/14/2016		10.12	5.93
	2/16/2016		10.58	5.47
	3/14/2016		10.14	5.91
	4/25/2016		10.49	5.56
	5/16/2016		10.06	5.99
	6/17/2016		10.27	5.78

Table 1
Groundwater Elevations

Deep Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
MCWP-MW07D	8/24/2015	13.21	7.51	5.70
	9/21/2015		7.44	5.77
	10/20/2015		7.67	5.54
	11/16/2015		7.27	5.94
	12/14/2015		6.59	6.62
	1/14/2016		8.32	4.89
	2/16/2016		8.32	4.89
	3/14/2016		7.92	5.29
	4/25/2016		8.47	4.74
	5/16/2016		8.26	4.95
	6/17/2016		8.45	4.76
MCWP-MW09	8/24/2015	16.3	5.69	10.61
	9/21/2015		5.42	10.88
	10/20/2015		5.68	10.62
	11/16/2015		5.50	10.80
	12/14/2015		4.75	11.55
	1/14/2016		6.37	9.93
	2/16/2016		6.42	9.88
	3/14/2016		6.04	10.26
	4/25/2016		6.38	9.92
	5/16/2016		5.85	10.45
	6/17/2016		5.96	10.34

Notes:

N/A: well not accessible

'-': no data available

TOC: top of well casing

ft bTOC: feet below top of well casing

ft amsl: feet above mean sea level

Table 1
Groundwater Elevations

Winter Canyon Groundwater Monitoring Wells				
Well ID	Date	TOC Elevation (ft amsl)	Depth to Water (ft bTOC)	Groundwater Elevation
LAMW-5S	8/24/2015	104.55	53.71	50.84
	9/21/2015		53.30	51.25
	10/20/2015		53.74	50.81
	11/16/2015		53.90	50.65
	12/14/2015		53.54	51.01
	1/14/2016		54.02	50.53
	2/16/2016		53.69	50.86
	3/14/2016		53.92	50.63
	4/25/2016		53.88	50.67
	5/16/2016		53.98	50.57
	6/17/2016		53.97	50.58
SMBRP-11	8/24/2015	18.35	8.88	9.47
	9/21/2015		8.70	9.65
	10/20/2015		8.36	9.99
	11/16/2015		8.64	9.71
	12/14/2015		8.35	10.00
	1/14/2016		8.00	10.35
	2/16/2016		8.30	10.05
	3/14/2016		7.89	10.46
	4/25/2016		8.63	9.72
	5/16/2016		8.62	9.73
	6/17/2016		8.39	9.96

Notes:

N/A: well not accessible

'-': no data available

TOC: top of well casing

ft bTOC: feet below top of well casing

ft amsl: feet above mean sea level

Table 2
Baseline Surface Water Analysis Matrix
Second Quarter 2016

Surface Water	Location									
	N-001	N-002	N-003	N-004	L-001	L-002	L-003	L-004	L-005	L-006
<i>Laboratory Analysis</i>										
Total and Fecal Coliform	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nitrate as Nitrogen	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nitrite as Nitrogen	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ammonia Nitrogen	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Organic Nitrogen	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Kjeldahl Nitrogen	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Total Phosphorous	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Notes:

- ✓ : Laboratory analysis completed
- : Sampling & analysis not required

Table 3
Surface Water Quality Analytical Results

Location	Monitoring Depth	Well ID	Sample Date	Coliform Bacteria Analysis (MPN/100mL)		Inorganic Analysis (mg/L)					
				Total	Fecal	Nitrate Nitrogen	Nitrite Nitrogen	Nitrogen, Organic	Ammonia Nitrogen	Kjeldahl Nitrogen	Phosphorous, Total
Near Shore	Ankle Depth	N-001	9/25/2015	70	46	<0.1	<0.1	<0.5	<0.2	<0.5	1.760
			12/1/2015	<1.8	<1.8	<0.1	<0.1	<0.5	<0.2	<0.5	0.775
			3/18/2016	<1.8	<1.8	0.1	<0.1	0.937	<0.2	0.937	0.400
			6/16/2016	<1.8	<1.8	<0.1	<0.1	<0.5	<0.2	<0.5	0.658
		N-002	9/25/2015	13	13	<0.1	<0.1	<0.5	<0.2	<0.5	1.480
			12/1/2015	<1.8	<1.8	<0.1	<0.1	<0.5	<0.2	<0.5	1.380
			3/18/2016	<1.8	<1.8	0.1	<0.1	<0.5	<0.2	<0.5	1.42
			6/16/2016	<1.8	<1.8	<0.1	<0.1	<0.5	<0.2	<0.5	1.03
		N-003	9/25/2015	11	4	<0.1	<0.1	<0.5	<0.2	<0.5	0.347
			12/1/2015	14	14	<0.1	<0.1	<0.5	<0.2	<0.5	1.460
			3/18/2016	13	<1.8	0.1	<0.1	0.865	<0.2	0.865	<0.1
			6/16/2016	<1.8	<1.8	<0.1	<0.1	<0.5	<0.2	<0.5	<0.1
		N-004	9/25/2015	14	9.3	<0.1	<0.1	<0.5	<0.2	<0.5	0.288
			12/1/2015	2	<1.8	<0.1	<0.1	<0.5	<0.2	<0.5	1.010
			3/18/2016	2	<1.8	0.1	<0.1	<0.5	<0.2	<0.5	0.648
			6/16/2016	6.8	<1.8	<0.1	<0.1	<0.5	<0.2	<0.5	1.250

Table 3
Surface Water Quality Analytical Results

Location	Monitoring Depth	Well ID	Sample Date	Coliform Bacteria Analysis (MPN/100mL)		Inorganic Analysis (mg/L)					
				Total	Fecal	Nitrate Nitrogen	Nitrite Nitrogen	Nitrogen, Organic	Ammonia Nitrogen	Kjeldahl Nitrogen	Phosphorous, Total
Malibu Lagoon and Creek	1 foot BSW	L-001	9/25/2015	920	49	<0.1	<0.1	2.26	<0.2	2.26	0.558
			12/1/2015	350	33	<0.1	<0.1	0.837	<0.2	0.837	0.218
			3/18/2016	350	23	0.3	<0.1	1.99	<0.2	1.99	0.635
			6/16/2016	350	4.5	<0.1	<0.1	0.696	<0.2	0.696	0.178
		L-002	9/25/2015	920	49	<0.1	<0.1	1.83	<0.2	1.83	0.404
			12/1/2015	540	33	<0.1	<0.1	0.591	<0.2	0.591	0.226
			3/18/2016	280	49	0.6	<0.1	0.852	<0.2	0.852	0.379
			6/16/2016	33	2	<0.1	<0.1	0.964	<0.2	0.964	<0.1
		L-003	9/25/2015	540	70	<0.1	<0.1	2.35	<0.2	2.35	0.379
			12/1/2015	240	17	<0.1	<0.1	<0.5	<0.2	<0.5	0.213
			3/18/2016	240	23	0.6	<0.1	1.03	<0.2	1.03	0.397
			6/16/2016	79	4	<0.1	<0.1	<0.5	<0.2	<0.5	0.139
		L-004	9/25/2015	170	23	<0.1	<0.1	2.67	<0.2	2.67	0.266
			12/1/2015	170	130	<0.1	<0.1	0.583	<0.2	0.583	0.200
			3/18/2016	350	170	0.5	<0.1	0.798	<0.2	0.798	0.350
			6/16/2016	49	2	<0.1	<0.1	0.667	<0.2	0.667	0.114
		L-005	9/25/2015	350	49	<0.1	<0.1	3.8	<0.2	3.8	0.372
			12/1/2015	350	49	<0.1	<0.1	<0.5	<0.2	<0.5	0.123
			3/18/2016	540	350	1.6	<0.1	1.37	<0.2	1.37	0.661
			6/16/2016	26	6.8	<0.1	<0.1	1.16	<0.2	1.16	0.133
		L-006	9/25/2015	170	170	<0.1	<0.1	3.59	<0.2	3.67	0.320
			12/1/2015	350	49	<0.1	<0.1	<0.5	<0.2	<0.5	0.168
			3/18/2016	920	130	0.4	<0.1	1.46	<0.2	1.46	0.366
			6/16/2016	17	7.8	<0.1	<0.1	1.18	<0.2	1.18	0.172

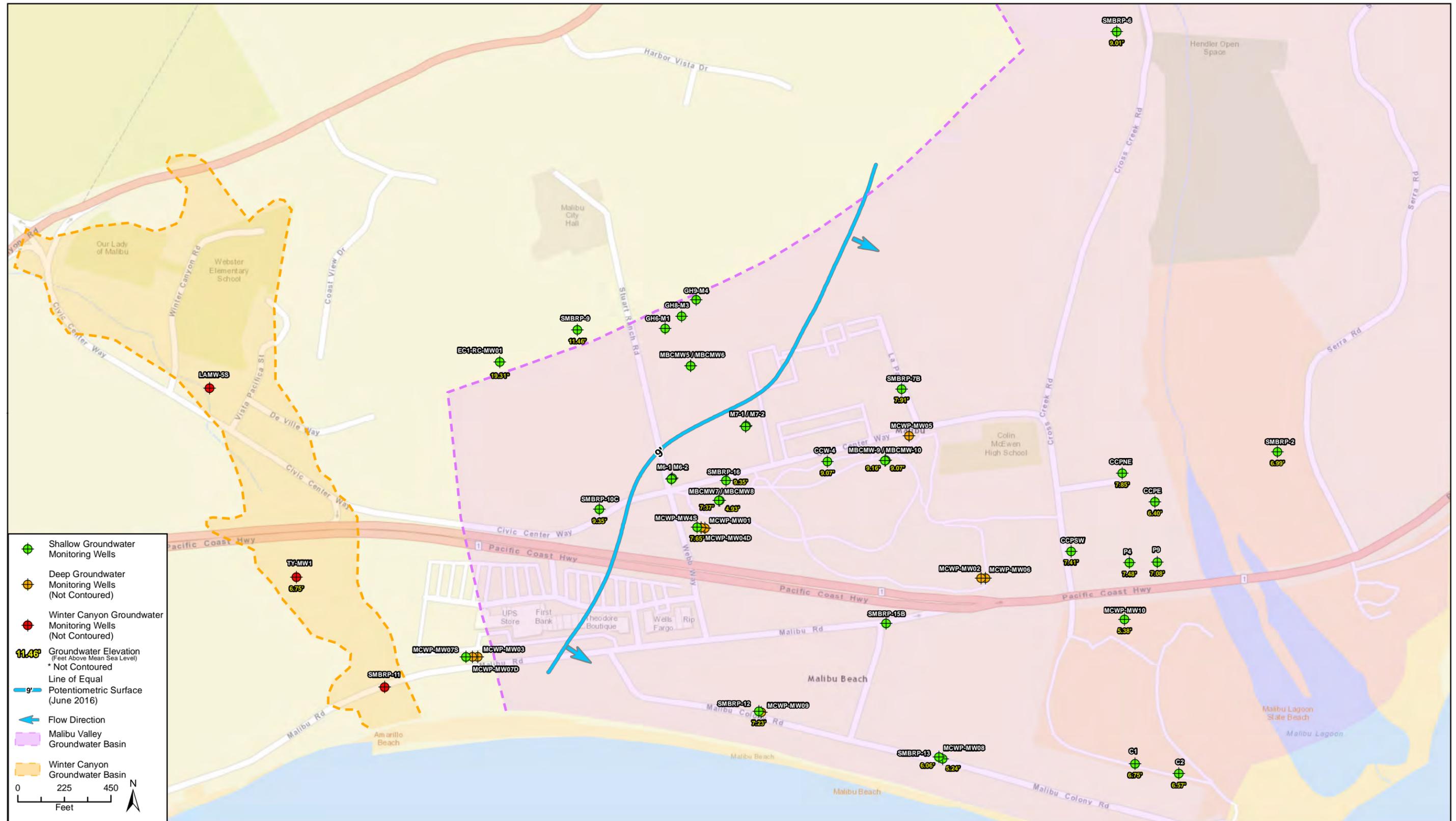
Notes:

mg/L: milligrams per liter

MPN/100mL: Most Probable Number per 100 milliliters

BSW: below surface water

<: not detected above the Practical Quantitation Limit (PQL)



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Shallow Groundwater Elevations
 June 2016

Appendix A

Groundwater and Surface Water Field Sheets

Peter Shellenbarger
 4/25/16 - DMW
 Start 12:00pm
 Done 1530 pm - 3:30pm

Table 1
 Groundwater Monitoring Well Construction

Well ID	Total Well Depth (ft bTOC)	Well Diameter (in)	TOC Elevation (ft amsl)	Depth to Water 4/25/2016	Time	Depth to Water 8/24/2015 (ft bTOC)
1 C-1	14.5	n/a	11.47	5.72	1356	n/a
2 C-2	14.5	2	11.19	5.54	1354	5.11
3 CCPE	20	2	12.935	7.13	1333	5.76
4 CCPNE		2	13.675	7.79	1337	6.44
5 CCPSW		2	13.67	7.50	1340	6.29
6 CCW-4		1	15.765	5.28	1245	6.5
7 GH6-M1	35	2		29.44	1250	28.92
8 GH8-M3	40	2		28.78	1442	28.37
9 GH9-M4	45	2		34.32	1437	30.31
10 Lagoon		n/a		n/a	n/a	n/a
11 LAMW-55	20	4	104.55	53.88	1203	53.71
12 M6-1	45	2		5.51	1252	6.61
13 M6-2	20	2		7.15	1254	5.76
14 M7-1 (D)	40	2		8.46	1432	8.09
15 M7-2 (S)	25	2		7.84	1430	7.78
16 MBCMW-5	19.4	n/a	29.03	n/a	n/a	n/a
17 MBCMW-6	64.26	n/a	29.02	n/a	n/a	n/a
18 MBCMW-7	52.5	2	16.635	11.44	1230	11.26
19 MBCMW-8	10	2	16.53	8.54	1235	9.11
20 MBCMW-9	10	2	17.71	8.21	1300	8.7
21 MBCMW-10	53	2	17.74	9.22	1304	8.63
22 MCWP-MW01	148	6		10.89	1419	10.22
23 MCWP-MW02	145	6	18.06	11.08	1410	10.39
24 MCWP-MW03	134	6		8.63	1501	7.65
25 MCWP-MW04D	148	4		10.07	1417	9.35
26 MCWP-MW04S	20	4		7.10	1414	7.55
27 MCWP-MW05	158	4		8.27	1251	7.62

28	MCWP-MW06	153	2						9.87
29	MCWP-MW07D	134	2						7.51
30	MCWP-MW07S	20	2						6.76
31	MCWP-MW08	77	2						7.64
32	MCWP-MW09	95	2						7.52
33	MCWP-MW10	60	2						5.7
34	P-4	12.5	4						4.58
35	P-9	14.3	4						5.07
36	SMBRP-2	25	2						6.04
37	SMBRP-6	25	2						16.49
38	SMBRP-7b	45	2						10.69
39	SMBRP-8 (EG-RC)	60	4						28.74
40	SMBRP-9	45	2						38.24
41	SMBRP-10C	25	2						7.37
42	SMBRP-11	20	2						8.88
43	SMBRP-12	25	2						5.69
44	SMBRP-13	20	2						8.32
45	SMBRP-15b	25	1						
46	SMBRP-16	25	2						

10.49
 8.47
 6.49
 7.83
 6.38
 7.07
 6.0
 6.49
 7.59
 16.60
 11.23
 29.40
 38.82
 6.59
 8.63
 6.76
 7.66
 DM
 DM
 4.65
 1407
 1503
 1505
 1517
 1525
 1347
 1329
 1327
 1321
 1311
 1255
 1200
 1217
 1211
 1508
 1503
 1513
 DM
 DM
 1235
 dry, recorded depth 8.77
 4.95



Legend

- Monthly Transducer Well
- Monthly Well
- Other Well

Report File: 11-15-18 - Civic Center Area Groundwater Monitoring - CHE-SARMS 03-115318-01-2018-AS-1-18
 (Click to download)

0 500 Feet

earthlorenics, inc.

MONTHLY GROUNDWATER WELLS
 Civic Center Area
 Malibu, CA

E1-2018
 2012-150

1

The Walks Bay
 Company = "Sustan"
 For very

Arrive onsite @ 10:50 am
 Done @ 1540

5-16-16
 Monthly DTU
 Peter Shellenbarger

Table 1

Groundwater Monitoring Well Construction

Well ID	Total Well Depth (ft bTOC)	Well Diameter (in)	TOC Elevation (ft amsl)	Depth to Water 5/16/2015	Time	Depth to Water 8/24/2015 (ft bTOC)
1 C-1	14.5	n/a	11.47	4.59	1305	n/a
2 C-2	14.5	2	11.19	4.49	1302	5.11
3 CCPE	20	2	12.935	5.72	1212	5.76
4 CCPNE		2	13.675	6.39	1215	6.44
5 CCPSW		2	13.67	6.18	1250	6.29
6 CCW-4		1	15.765	6.45	1130	6.5
7 GH6-M1	35	2		8.29, 3.35	1407	28.92
8 GH8-M3	40	2		2.8, 6.3	1403	28.37
9 GH9-M4	45	2		3.2, 8.80	1358	30.31
10 Lagoon		n/a				n/a
11 LAMW-55	20	4	104.55	53.98	1055	53.71
12 M6-1	45	2		6.85	1417	6.61
13 M6-2	20	2		5.74	1414	5.76
14 M7-1	40	2		8.17	1351	8.09
15 M7-2	25	2		7.70	1354	7.78
16 MBCMW-5	19.4	n/a	29.03			n/a
17 MBCMW-6	64.26	n/a	29.02			n/a
18 MBCMW-7	52.5	2	16.635	11.72	1124	11.26
19 MBCMW-8	10	2	16.53	8.85	1121	9.11
20 MBCMW-9	10	2	17.71	8.40	1137	8.7
21 MBCMW-10	53	2	17.74	8.75	1139	8.63
22 MCWP-MW01	148	6		10.70	1333	10.22
23 MCWP-MW02	145	6	18.06	10.55	1322	10.39
24 MCWP-MW03	134	6		8.35	1449	7.65
25 MCWP-MW04D	148	4		9.85	1331	9.35
26 MCWP-MW04S	20	4		7.36	1328	7.55
27 MCWP-MW05	158	4		7.78	1134	7.62

28	MCWP-MW06	153	2					9.87
29	MCWP-MW07D	134	2		16.00	1320		7.51
30	MCWP-MW07S	20	2		8.26	1447		6.76
31	MCWP-MW08	77	2		6.73	1440		7.64
32	MCWP-MW09	95	2		6.87	1503		7.52
33	MCWP-MW10	60	2		5.85	1318		5.7
34	P-4	12.5	4		5.63	1257		5.7
35	P-9	14.3	4		4.57	1205		4.58
36	SMBRP-2	25	2		5.02	1208		5.07
37	SMBRP-6	25	2		6.07	1200		6.04
38	SMBRP-7b	45	2		16.81	1151		16.49
39	SMBRP-8 (EG-R)	60	4		11.04	1144		10.69
40	SMBRP-9	45	2		29.18	1107		28.74
41	SMBRP-10C	25	2		6.86	1112		7.37
42	SMBRP-11	20	2		8.62	1453		8.88
43	SMBRP-12	25	2		6.40	1515		5.69
44	SMBRP-13	20	2		10.92	1508		8.32
45	SMBRP-15b	25	1		16.765	154	1.88	8.77
46	SMBRP-16	25	2		4.92	1117	1.88	4.95

38.82 1545

-Note: Malibu Lagoon Water level higher compared to last 2 previous DTW events.



Legend

- Monthly Transducer Well
- Monthly
- Other Well

Groundwater Monitoring Wells are shown. Do not interpret this map as a representation of the actual groundwater conditions. The data shown on this map is for informational purposes only. All rights reserved. © 2013 EarthTrenics, Inc.



**MONTHLY
GROUNDWATER WELLS**
Civic Center Area
Malibu, CA




Date: 2013.15C Version: 1.000	Page: 1
----------------------------------	---------

Lagoon State: Full, closed basin
water level high

6-17-16
Peter Shelkeberger
DTRU - Malibu Civic Center

Table 1
Groundwater Monitoring Well Construction

Well ID	Total Well Depth (ft bTOC)	Well Diameter (in)	TOC Elevation (ft amsl)	Depth to Water 5/16/2015	Time	Depth to Water 8/24/2015 (ft bTOC)
1 C-1	14.5	n/a	11.47	4.72	1207	n/a
2 C-2	14.5	2	11.19	4.02	1203	5.11
3 CCPE	20	2	12.935	6.54	1237	5.76
4 CCPNE		2	13.675	5.83	1234	6.44
5 CCPSW		2	13.67	6.26	1240	6.29
6 CCW-4		1	15.765	6.70	0752	6.5
7 GH6-M1	35	2		29.20	1355	28.92
8 GH8-M3	40	2		28.67	1352	28.37
9 GH9-M4	45	2		20.56	1350	30.31
10 Lagoon		n/a		n/a	n/a	n/a
11 LAMW-55	20	4	104.55	53.97	1310	53.71
12 M6-1	45	2		7.04	1359	6.61
13 M6-2	20	2		5.94	1358	5.76
14 M7-1	40	2		8.22	1341	8.09
15 M7-2	25	2		7.77	1339	7.78
16 MBCMW-5	19.4	n/a	29.03	n/a	n/a	n/a
17 MBCMW-6	64.26	n/a	29.02	n/a	n/a	n/a
18 MBCMW-7	52.5	2	16.635	11.71	749	11.26
19 MBCMW-8	10	2	16.53	9.10	747	9.11
20 MBCMW-9	10	2	17.71	8.04	0758	8.7
21 MBCMW-10	53	2	17.74	8.58	0755	8.63
22 MCWP-MW01	148	6		10.75	1301	10.22
23 MCWP-MW02	145	6	18.06	10.82	1253	10.39
24 MCWP-MW03	134	6		8.50	1322	7.65
25 MCWP-MW04D	148	4		9.97	1259	9.35
26 MCWP-MW04S	20	4		7.64	1257	7.55
27 MCWP-MW05	158	4		8.05	0800	7.62

28	MCWP-MW06	153	2					9.87
29	MCWP-MW07D	134	2					7.51
30	MCWP-MW07S	20	2					6.76
31	MCWP-MW08	77	2					7.64
32	MCWP-MW09	95	2					7.52
33	MCWP-MW10	60	2					5.7
34	P-4	12.5	4					4.58
35	P-9	14.3	4					5.07
36	SMBRP-2	25	2					6.04
37	SMBRP-6	25	2					16.49
38	SMBRP-7b	45	2					10.69
39	SMBRP-8 (EG-R)	60	4					28.74
40	SMBRP-9	45	2					38.24
41	SMBRP-10C	25	2					7.37
42	SMBRP-11	20	2					8.88
43	SMBRP-12	25	2					5.69
44	SMBRP-13	20	2					8.32
45	SMBRP-15b	25	1					dry, recorded depth 8.77
46	SMBRP-16	25	2					4.95

10.27
 8.45
 NOT RECESSIBLE -
 6.97
 5.94
 5.73
 4.68
 5.09
 6.14
 17.87
 11.08
 29.38
 38.80
 16.90
 8.39
 5.34
 7.52
 Dry
 5.15
 12.48
 13.25
 14.23
 14.27
 11.55
 12.25
 12.29
 11.43
 11.27
 08.04
 07.39
 07.35
 13.06
 13.33
 14.26
 14.21
 07.43
 Check
 3 x
 homogeneous
 Dry



Legend

- Monthly Titan Sucker Well
- Monthly Well
- Other Well

Groundwater Monitoring System - Design, Permitting, Construction, O&M, and Reporting - CIESA/Info US/USDP/USGS/LEA/USGS
 GIS Data Courtesy:

MONTHLY GROUNDWATER WELLS Civic Center Area Malibu, CA	
0 500 Feet	
Project No: 2013-132 Date: 05/14/14	Page: 1

Project #

June 16, 2014

Malibu Civic Center WWT
Surface Water Sampling

• Arrive in Malibu @ 1030am

• Five Samples taken

L-001 @ 1100 (written on)

N-001 @ (written on)
~~1300~~ 1300 N

L-002 @ 1440

N-002 @ ~~1220~~ 1320

L-003 @ 1120 (written on)

N-003 @ 1140 (written on)

L-004 @ 1220

N-004 @ 1345

L-006 @ 1240

• Weather - clear, 75°F, light wind, large surf

• low tide approx. 1:00pm

• Lagoons - High water - closed berm

• Completed Sampling in Malibu @ 1500

• Laboratory received Samples @ 1630

Client: **Rincon Consultants, Inc.** Address: Attn: Torin Snyder
180 N. Ashwood Ave.
Vennura, CA 93003
Phone: (760)918-9444x209 Fax: (760)918-9444x209
Contact Person: Torin Snyder
Project Name: **Malibu WWTP - SW Monitoring**
Purchase Order Number:
Quote Number: **SP 20150526-01**

Sampler(s) *Rows 5.*
Sampling Fee: _____ Pickup Fee: _____
Compositor Setup Date: ___/___/___ Time: ___/___/___
Lab Number: **SP 2-25173**

Sample Num	Location Description	Date Sampled	Time Sampled	Method of Sampling:	Type of Sample	Potable(P) Non-Potable(NP) Ag Water(AgW)	Bacteriotype: Other(O) System(SYS) Source(SR) Waste(W)	Bacteri Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL)	Coliform-L/TB-Series 15 Tube 120ml(PBa)-Na2S2O3	Wet Chemistry-NO3-N,NO2-N,N-Organic,Total P,NH3-N 16oz(P), 16oz(P)-H2SO4
1	N-001	6/11/16	12:00	Composite(C) Grab(G)	**SEE REVERSE SIDE**				1	1.1
2	N-002	6/11/16	12:20	Composite(C) Grab(G)	**SEE REVERSE SIDE**				1	1.1
3	N-003	6/11/16	12:40	Composite(C) Grab(G)	**SEE REVERSE SIDE**				1	1.1
4	N-004	6/11/16	12:45	Composite(C) Grab(G)	**SEE REVERSE SIDE**				1	1.1
5	L-001	6/11/16	1:00	Composite(C) Grab(G)	**SEE REVERSE SIDE**				1	1.1
6	L-002	6/11/16	1:10	Composite(C) Grab(G)	**SEE REVERSE SIDE**				1	1.1
7	L-003	6/11/16	1:20	Composite(C) Grab(G)	**SEE REVERSE SIDE**				1	1.1
8	L-004	6/11/16	1:20	Composite(C) Grab(G)	**SEE REVERSE SIDE**				1	1.1
9	L-005	6/11/16	1:50	Composite(C) Grab(G)	**SEE REVERSE SIDE**				1	1.1
10	L-006	6/11/16	1:40	Composite(C) Grab(G)	**SEE REVERSE SIDE**				1	1.1

Remarks: Relinquished
Received By: *[Signature]* Date: *6/11/16* Time: *11:40*
Relinquished
Received By: _____ Date: _____ Time: _____
Relinquished
Received By: _____ Date: _____ Time: _____
Relinquished
Received By: _____ Date: _____ Time: _____
Relinquished
Received By: _____ Date: _____ Time: _____

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
Phone: (805) 392-2000
Env Fax: (805) 525-4172 / Ag Fax: (805) 392-2063

Office & Laboratory
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Stockton, CA 95215
Phone: (209) 942-0182
Fax: (209) 942-0423

Office & Laboratory
563 E. Lindo
Chico, CA 95926
Phone: (530) 343-5818
Fax: (530) 343-3807

Office & Laboratory
3442 Empresa Drive, Suite D
San Luis Obispo, CA 93401
Phone: (805) 783-2940
Fax: (805) 783-2912

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
Phone: (559) 734-9473
Fax: (559) 734-8435

Appendix B

Analytical Laboratory Reports

June 24, 2016

Rincon Consultants, Inc.
 Attn: Torin Snyder
 180 N. Ashwood Ave.
 Ventura, CA 93003

SP 1606932:1-10 COLIFORM BACTERIA ANALYSIS
 Customer ID : 2-25173

System Number :
 Project Name : Malibu WWTP - Surface Water Monitoring

Sample Handling Information

ID	Sample Number	Sample Description	Sample Type/Reason	Sampled By	Employed By	Sampled	Started	Finished
1	SP 1606932-001	N-001	Source-Other	Peter S.	Not Available	06/16/2016 13:00	06/16/2016 16:59 LM	06/20/2016 LM
2	SP 1606932-002	N-002	Source-Other	Peter S.	Not Available	06/16/2016 13:20	06/16/2016 17:01 LM	06/20/2016 LM
3	SP 1606932-003	N-003	Source-Other	Peter S.	Not Available	06/16/2016 11:40	06/16/2016 17:03 LM	06/20/2016 LM
4	SP 1606932-004	N-004	Source-Other	Peter S.	Not Available	06/16/2016 13:45	06/16/2016 17:05 LM	06/20/2016 LM
5	SP 1606932-005	L-001	Source-Other	Peter S.	Not Available	06/16/2016 11:00	06/16/2016 17:07 LM	06/19/2016 LM
6	SP 1606932-006	L-002	Source-Other	Peter S.	Not Available	06/16/2016 14:40	06/16/2016 17:09 LM	06/20/2016 LM
7	SP 1606932-007	L-003	Source-Other	Peter S.	Not Available	06/16/2016 11:20	06/16/2016 17:11 LM	06/19/2016 LM
8	SP 1606932-008	L-004	Source-Other	Peter S.	Not Available	06/16/2016 12:20	06/16/2016 17:13 LM	06/19/2016 LM
9	SP 1606932-009	L-005	Source-Other	Peter S.	Not Available	06/16/2016 11:50	06/16/2016 17:15 LM	06/20/2016 LM
10	SP 1606932-010	L-006	Source-Other	Peter S.	Not Available	06/16/2016 12:40	06/16/2016 17:17 LM	06/19/2016 LM

Analytical Results

ID	Sample Description	Chlorine Total/Free	Temp °C	Method	Units	Total	Fecal	E. Coli	Person Notified ‡	Date ‡ Notified	Time ‡ Notified	Foot Note
1	N-001	---	---	SM 9221B	MPN/100ml	<1.8 ABSENT	<1.8 ABSENT	---	N/R			
2	N-002	---	---	SM 9221B	MPN/100ml	<1.8 ABSENT	<1.8 ABSENT	---	N/R			
3	N-003	---	---	SM 9221B	MPN/100ml	<1.8 ABSENT	<1.8 ABSENT	---	N/R			
4	N-004	---	---	SM 9221B	MPN/100ml	6.8 PRESENT	<1.8 ABSENT	---	N/R			
5	L-001	---	---	SM 9221B	MPN/100ml	350 PRESENT	4.5 PRESENT	---	N/R			
6	L-002	---	---	SM 9221B	MPN/100ml	33 PRESENT	2 PRESENT	---	N/R			
7	L-003	---	---	SM 9221B	MPN/100ml	79 PRESENT	4 PRESENT	---	N/R			
8	L-004	---	---	SM 9221B	MPN/100ml	49 PRESENT	2 PRESENT	---	N/R			
9	L-005	---	---	SM 9221B	MPN/100ml	26 PRESENT	6.8 PRESENT	---	N/R			
10	L-006	---	---	SM 9221B	MPN/100ml	17 PRESENT	7.8 PRESENT	---	N/R			

N/R Not Required. MPN Most Probable Number A/P Absence/Presence

‡ Client Notification details.

June 24, 2016

SP 1606932:1-10 **COLIFORM BACTERIA ANALYSIS**

Customer ID : 2-25173

Rincon Consultants, Inc.

The sample(s) listed below failed drinking water standards for Total and/or Fecal Coliform as listed:

N-004 Total Coliform - Failure.

L-001 Total Coliform - Failure, Fecal Coliform - Failure.

L-002 Total Coliform - Failure, Fecal Coliform - Failure.

L-003 Total Coliform - Failure, Fecal Coliform - Failure.

L-004 Total Coliform - Failure, Fecal Coliform - Failure.

L-005 Total Coliform - Failure, Fecal Coliform - Failure.

L-006 Total Coliform - Failure, Fecal Coliform - Failure.

Analyses were performed using Standard Methods 21st edition. If you have any questions regarding your results, please call.

RRH:GMA

Reviewed and
Approved By

Raquel R. Harvey



Digitally signed by Raquel R. Harvey
Title: Tech Director Microbiology
Date: 2008-12-15

June 29, 2016

Rincon Consultants, Inc.
 Attn: Torin Snyder
 180 N. Ashwood Ave.
 Ventura, CA 93003

Lab ID : SP 1606932
 Customer : 2-25173

Laboratory Report

Introduction: This report package contains total of 14 pages divided into 3 sections:

Case Narrative (2 pages) : An overview of the work performed at FGL.
 Sample Results (10 pages) : Results for each sample submitted.
 Quality Control (2 pages) : Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab ID #	Matrix
N-001	06/16/2016	06/16/2016	SP 1606932-001	SW
N-002	06/16/2016	06/16/2016	SP 1606932-002	SW
N-003	06/16/2016	06/16/2016	SP 1606932-003	SW
N-004	06/16/2016	06/16/2016	SP 1606932-004	SW
L-001	06/16/2016	06/16/2016	SP 1606932-005	SW
L-002	06/16/2016	06/16/2016	SP 1606932-006	SW
L-003	06/16/2016	06/16/2016	SP 1606932-007	SW
L-004	06/16/2016	06/16/2016	SP 1606932-008	SW
L-005	06/16/2016	06/16/2016	SP 1606932-009	SW
L-006	06/16/2016	06/16/2016	SP 1606932-010	SW

Sampling and Receipt Information: All samples were received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. All samples arrived on ice. All samples were prepared and analyzed within the method specified hold time. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to the following tables:

Inorganic - Wet Chemistry QC

351.2	06/22/2016:207297 All preparation quality controls are within established criteria
	06/23/2016:207355 All preparation quality controls are within established criteria
4500NH3G	06/21/2016:208835 All analysis quality controls are within established criteria
	06/21/2016:207239 All preparation quality controls are within established criteria

June 29, 2016
Rincon Consultants, Inc.

Lab ID : SP 1606932
Customer : 2-25173

Inorganic - Wet Chemistry QC

4500NO2F	06/18/2016:207167 All preparation quality controls are within established criteria
4500NO3F	06/18/2016:208771 All analysis quality controls are within established criteria
	06/18/2016:208772 All analysis quality controls are within established criteria
	06/18/2016:207166 All preparation quality controls are within established criteria
4500-P B	06/17/2016:207159 All preparation quality controls are within established criteria
4500PE	06/17/2016:208650 All analysis quality controls are within established criteria
EPA351.2	06/23/2016:208970 All analysis quality controls are within established criteria
	06/24/2016:208975 All analysis quality controls are within established criteria

Certification:: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature.

KD:DMB

Approved By **Kelly A. Dunnahoo, B.S.**



Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2016-06-29



June 29, 2016

Lab ID : SP 1606932-001

Customer ID : 2-25173

Rincon Consultants, Inc.

Attn: Torin Snyder
180 N. Ashwood Ave.
Ventura, CA 93003

Sampled On : June 16, 2016-13:00

Sampled By : Peter S.

Received On : June 16, 2016-16:40

Matrix : Surface Water

Description : N-001

Project : Malibu WWTP - Surface Water Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation			Sample Analysis			
							Method	ID	Time	Method	ID	Time	
Wet Chemistry ^{P:1}													
Nitrate Nitrogen	0.0400	0.1	0.032	mg/L	1	J	4500NO3F	207166	06/18/16	05:00	4500NO3F	208772-FI207	06/18/16-07:47AMB
Nitrite Nitrogen	0.0140	0.1	0.011	mg/L	1	J	4500NO2F	207167	06/18/16	05:00	4500NO3F	208771-FI207	06/18/16-07:45AMB
Nitrogen, Organic	ND	0.5	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:32AMB
Ammonia Nitrogen	ND	0.2	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:32AMB
Kjeldahl Nitrogen	ND	0.5	0.32	mg/L	1	U	351.2	207297	06/22/16	07:26	EPA351.2	208970-FI206	06/23/16-07:00AMB
Phosphorus, Total	0.658	0.1	0.031	mg/L	1		4500-P B	207159	06/17/16	14:01	4500PE	208650-UV205	06/17/16-16:45SJM

DQF Flags Definition:

- U Constituent results were non-detect.
- J To indicate that result is estimated in cases where result less than PQL; or estimated due to RPD failure.

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: H2SO4 pH < 2



June 29, 2016

Rincon Consultants, Inc.

Attn: Torin Snyder
180 N. Ashwood Ave.
Ventura, CA 93003

Description : N-002
Project : Malibu WWTP - Surface Water Monitoring

Lab ID : SP 1606932-002

Customer ID : 2-25173

Sampled On : June 16, 2016-13:20

Sampled By : Peter S.

Received On : June 16, 2016-16:40

Matrix : Surface Water

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation			Sample Analysis			
							Method	ID	Time	Method	ID	Time	
Wet Chemistry ^{P:1}													
Nitrate Nitrogen	ND	0.1	0.032	mg/L	1	U	4500NO3F	207166	06/18/16	05:00	4500NO3F	208772-FI207	06/18/16-07:23AMB
Nitrite Nitrogen	0.0130	0.1	0.011	mg/L	1	J	4500NO2F	207167	06/18/16	05:00	4500NO3F	208771-FI207	06/18/16-07:21AMB
Nitrogen, Organic	ND	0.5	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:34AMB
Ammonia Nitrogen	ND	0.2	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:34AMB
Kjeldahl Nitrogen	ND	0.5	0.32	mg/L	1	U	351.2	207355	06/23/16	07:26	EPA351.2	208975-FI206	06/24/16-06:22AMB
Phosphorus, Total	1.03	0.1	0.031	mg/L	1		4500-P B	207159	06/17/16	14:01	4500PE	208650-UV205	06/17/16-16:46SJM
DQF Flags Definition:													
U Constituent results were non-detect.													
J To indicate that result is estimated in cases where result less than PQL; or estimated due to RPD failure.													

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: H2SO4 pH < 2

June 29, 2016

Lab ID : SP 1606932-003

Customer ID : 2-25173

Rincon Consultants, Inc.

Attn: Torin Snyder
 180 N. Ashwood Ave.
 Ventura, CA 93003

Sampled On : June 16, 2016-11:40

Sampled By : Peter S.

Received On : June 16, 2016-16:40

Matrix : Surface Water

Description : N-003

Project : Malibu WWTP - Surface Water Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation			Sample Analysis			
							Method	ID	Time	Method	ID	Time	
Wet Chemistry ^{P,1}													
Nitrate Nitrogen	0.0400	0.1	0.032	mg/L	1	J	4500NO3F	207166	06/18/16	05:00	4500NO3F	208772-FI207	06/18/16-07:45AMB
Nitrite Nitrogen	0.0140	0.1	0.011	mg/L	1	J	4500NO2F	207167	06/18/16	05:00	4500NO3F	208771-FI207	06/18/16-07:44AMB
Nitrogen, Organic	ND	0.5	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:37AMB
Ammonia Nitrogen	ND	0.2	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:37AMB
Kjeldahl Nitrogen	ND	0.5	0.32	mg/L	1	U	351.2	207355	06/23/16	07:26	EPA351.2	208975-FI206	06/24/16-06:23AMB
Phosphorus, Total	0.0696	0.1	0.031	mg/L	1	J	4500-P B	207159	06/17/16	14:01	4500PE	208650-UV205	06/17/16-16:47SJM
DQF Flags Definition:													
U Constituent results were non-detect.													
J To indicate that result is estimated in cases where result less than PQL; or estimated due to RPD failure.													

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: H2SO4 pH < 2



June 29, 2016

Rincon Consultants, Inc.

Attn: Torin Snyder
180 N. Ashwood Ave.
Ventura, CA 93003

Description : N-004
Project : Malibu WWTP - Surface Water Monitoring

Lab ID : SP 1606932-004

Customer ID : 2-25173

Sampled On : June 16, 2016-13:45

Sampled By : Peter S.

Received On : June 16, 2016-16:40

Matrix : Surface Water

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation			Sample Analysis			
							Method	ID	Time	Method	ID	Time	
Wet Chemistry ^{P,1}													
Nitrate Nitrogen	0.0400	0.1	0.032	mg/L	1	J	4500NO3F	207166	06/18/16	05:00	4500NO3F	208772-FI207	06/18/16-07:51AMB
Nitrite Nitrogen	0.0140	0.1	0.011	mg/L	1	J	4500NO2F	207167	06/18/16	05:00	4500NO3F	208771-FI207	06/18/16-07:49AMB
Nitrogen, Organic	ND	0.5	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:39AMB
Ammonia Nitrogen	ND	0.2	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:39AMB
Kjeldahl Nitrogen	ND	0.5	0.32	mg/L	1	U	351.2	207355	06/23/16	07:26	EPA351.2	208975-FI206	06/24/16-06:24AMB
Phosphorus, Total	1.25	0.1	0.031	mg/L	1		4500-P B	207159	06/17/16	14:01	4500PE	208650-UV205	06/17/16-16:48SJM
DQF Flags Definition:													
U Constituent results were non-detect.													
J To indicate that result is estimated in cases where result less than PQL; or estimated due to RPD failure.													

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: H2SO4 pH < 2

June 29, 2016

Lab ID : SP 1606932-005

Customer ID : 2-25173

Rincon Consultants, Inc.

Attn: Torin Snyder
 180 N. Ashwood Ave.
 Ventura, CA 93003

Sampled On : June 16, 2016-11:00

Sampled By : Peter S.

Received On : June 16, 2016-16:40

Matrix : Surface Water

Description : L-001

Project : Malibu WWTP - Surface Water Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation			Sample Analysis			
							Method	ID	Time	Method	ID	Time	
Wet Chemistry ^{P:1}													
Nitrate Nitrogen	ND	0.1	0.032	mg/L	1	J	4500NO3F	207166	06/18/16	05:00	4500NO3F	208772-FI207	06/18/16-07:32AMB
Nitrite Nitrogen	0.0140	0.1	0.011	mg/L	1	J	4500NO2F	207167	06/18/16	05:00	4500NO3F	208771-FI207	06/18/16-07:30AMB
Nitrogen, Organic	0.696	0.5	0.072	mg/L	1	J	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:41AMB
Ammonia Nitrogen	ND	0.2	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:41AMB
Kjeldahl Nitrogen	0.696	0.5	0.32	mg/L	1	J	351.2	207297	06/22/16	07:26	EPA351.2	208970-FI206	06/23/16-07:01AMB
Phosphorus, Total	0.178	0.1	0.031	mg/L	1		4500-P B	207159	06/17/16	14:01	4500PE	208650-UV205	06/17/16-16:49SJN
DQF Flags Definition:													
U Constituent results were non-detect.													
J To indicate that result is estimated in cases where result less than PQL; or estimated due to RPD failure.													

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: H2SO4 pH < 2

June 29, 2016

Lab ID : SP 1606932-006

Customer ID : 2-25173

Rincon Consultants, Inc.

Attn: Torin Snyder
 180 N. Ashwood Ave.
 Ventura, CA 93003

Sampled On : June 16, 2016-14:40

Sampled By : Peter S.

Received On : June 16, 2016-16:40

Matrix : Surface Water

Description : L-002

Project : Malibu WWTP - Surface Water Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation			Sample Analysis			
							Method	ID	Time	Method	ID	Time	
Wet Chemistry ^{P,1}													
Nitrate Nitrogen	0.0400	0.1	0.032	mg/L	1	J	4500NO3F	207166	06/18/16	05:00	4500NO3F	208772-FI207	06/18/16-07:30AMB
Nitrite Nitrogen	0.0140	0.1	0.011	mg/L	1	J	4500NO2F	207167	06/18/16	05:00	4500NO3F	208771-FI207	06/18/16-07:28AMB
Nitrogen, Organic	0.964	0.5	0.072	mg/L	1	J	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:43AMB
Ammonia Nitrogen	ND	0.2	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:43AMB
Kjeldahl Nitrogen	0.964	0.5	0.32	mg/L	1	J	351.2	207355	06/23/16	07:26	EPA351.2	208975-FI206	06/24/16-06:25AMB
Phosphorus, Total	0.0946	0.1	0.031	mg/L	1	J	4500-P B	207159	06/17/16	14:01	4500PE	208650-UV205	06/17/16-16:50SJM
DQF Flags Definition:													
U Constituent results were non-detect.													
J To indicate that result is estimated in cases where result less than PQL; or estimated due to RPD failure.													

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: H2SO4 pH < 2

June 29, 2016

Lab ID : SP 1606932-007

Customer ID : 2-25173

Rincon Consultants, Inc.

Attn: Torin Snyder
 180 N. Ashwood Ave.
 Ventura, CA 93003

Sampled On : June 16, 2016-11:20

Sampled By : Peter S.

Received On : June 16, 2016-16:40

Matrix : Surface Water

Description : L-003

Project : Malibu WWTP - Surface Water Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation			Sample Analysis			
							Method	ID	Time	Method	ID	Time	
Wet Chemistry ^{P:1}													
Nitrate Nitrogen	0.0500	0.1	0.032	mg/L	1	J	4500NO3F	207166	06/18/16	05:00	4500NO3F	208772-FI207	06/18/16-07:58AMB
Nitrite Nitrogen	0.0140	0.1	0.011	mg/L	1	J	4500NO2F	207167	06/18/16	05:00	4500NO3F	208771-FI207	06/18/16-07:56AMB
Nitrogen, Organic	0.409	0.5	0.072	mg/L	1	UJ	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:51AMB
Ammonia Nitrogen	ND	0.2	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:51AMB
Kjeldahl Nitrogen	0.409	0.5	0.32	mg/L	1	J	351.2	207297	06/22/16	07:26	EPA351.2	208970-FI206	06/23/16-07:05AMB
Phosphorus, Total	0.139	0.1	0.031	mg/L	1		4500-P B	207159	06/17/16	14:01	4500PE	208650-UV205	06/17/16-16:51SJN
DQF Flags Definition:													
U Constituent results were non-detect.													
J To indicate that result is estimated in cases where result less than PQL; or estimated due to RPD failure.													

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: H2SO4 pH < 2

June 29, 2016

Rincon Consultants, Inc.

Attn: Torin Snyder
 180 N. Ashwood Ave.
 Ventura, CA 93003

Description : L-004
 Project : Malibu WWTP - Surface Water Monitoring

Lab ID : SP 1606932-008

Customer ID : 2-25173

Sampled On : June 16, 2016-12:20

Sampled By : Peter S.

Received On : June 16, 2016-16:40

Matrix : Surface Water

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation			Sample Analysis			
							Method	ID	Time	Method	ID	Time	
Wet Chemistry ^{P:1}													
Nitrate Nitrogen	0.0500	0.1	0.032	mg/L	1	J	4500NO3F	207166	06/18/16	05:00	4500NO3F	208772-FI207	06/18/16-07:28AMB
Nitrite Nitrogen	0.0150	0.1	0.011	mg/L	1	J	4500NO2F	207167	06/18/16	05:00	4500NO3F	208771-FI207	06/18/16-07:26AMB
Nitrogen, Organic	0.667	0.5	0.072	mg/L	1	J	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:53AMB
Ammonia Nitrogen	ND	0.2	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-12:53AMB
Kjeldahl Nitrogen	0.667	0.5	0.32	mg/L	1	J	351.2	207297	06/22/16	07:26	EPA351.2	208970-FI206	06/23/16-07:06AMB
Phosphorus, Total	0.114	0.1	0.031	mg/L	1		4500-P B	207159	06/17/16	14:01	4500PE	208650-UV205	06/17/16-16:52SJN
DQF Flags Definition:													
U Constituent results were non-detect.													
J To indicate that result is estimated in cases where result less than PQL; or estimated due to RPD failure.													

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: H2SO4 pH < 2

June 29, 2016

Lab ID : SP 1606932-009

Customer ID : 2-25173

Rincon Consultants, Inc.

Attn: Torin Snyder
 180 N. Ashwood Ave.
 Ventura, CA 93003

Sampled On : June 16, 2016-11:50

Sampled By : Peter S.

Received On : June 16, 2016-16:40

Matrix : Surface Water

Description : L-005

Project : Malibu WWTP - Surface Water Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation			Sample Analysis			
							Method	ID	Time	Method	ID	Time	
Wet Chemistry ^{P:1}													
Nitrate Nitrogen	0.0400	0.1	0.032	mg/L	1	J	4500NO3F	207166	06/18/16	05:00	4500NO3F	208772-FI207	06/18/16-07:49AMB
Nitrite Nitrogen	0.0150	0.1	0.011	mg/L	1	J	4500NO2F	207167	06/18/16	05:00	4500NO3F	208771-FI207	06/18/16-07:47AMB
Nitrogen, Organic	1.16	0.5	0.072	mg/L	1		4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-13:05AMB
Ammonia Nitrogen	ND	0.2	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-13:05AMB
Kjeldahl Nitrogen	1.16	0.5	0.32	mg/L	1		351.2	207355	06/23/16	07:26	EPA351.2	208975-FI206	06/24/16-06:26AMB
Phosphorus, Total	0.133	0.1	0.031	mg/L	1		4500-P B	207159	06/17/16	14:01	4500PE	208650-UV205	06/17/16-16:53SJN
DQF Flags Definition:													
U Constituent results were non-detect.													
J To indicate that result is estimated in cases where result less than PQL; or estimated due to RPD failure.													

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: H2SO4 pH < 2

June 29, 2016

Lab ID : SP 1606932-010

Customer ID : 2-25173

Rincon Consultants, Inc.

Attn: Torin Snyder
 180 N. Ashwood Ave.
 Ventura, CA 93003

Sampled On : June 16, 2016-12:40

Sampled By : Peter S.

Received On : June 16, 2016-16:40

Matrix : Surface Water

Description : L-006

Project : Malibu WWTP - Surface Water Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation			Sample Analysis				
							Method	ID	Time	Method	ID	Time		
Wet Chemistry ^{P,1}														
Nitrate Nitrogen	ND	0.1	0.032	mg/L	1	U	4500NO3F	207166	06/18/16	05:00	4500NO3F	208772-FI207	06/18/16-06:47	AMB
Nitrite Nitrogen	0.0140	0.1	0.011	mg/L	1	J	4500NO2F	207167	06/18/16	05:00	4500NO3F	208771-FI207	06/18/16-06:45	AMB
Nitrogen, Organic	1.18	0.5	0.072	mg/L	1		4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-13:07	AMB
Ammonia Nitrogen	ND	0.2	0.072	mg/L	1	U	4500NH3G	207239	06/21/16	08:00	4500NH3G	208835-FI207	06/21/16-13:07	AMB
Kjeldahl Nitrogen	1.18	0.5	0.32	mg/L	1		351.2	207297	06/22/16	07:26	EPA351.2	208970-FI206	06/23/16-07:07	AMB
Phosphorus, Total	0.172	0.1	0.031	mg/L	1		4500-P B	207159	06/17/16	14:01	4500PE	208650-UV205	06/17/16-16:54	SJN
DQF Flags Definition:														
U Constituent results were non-detect.														
J To indicate that result is estimated in cases where result less than PQL; or estimated due to RPD failure.														

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (P) Plastic Preservatives: H2SO4 pH < 2



June 29, 2016
Rincon Consultants, Inc.

Lab ID : SP 1606932
Customer : 2-25173

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem Nitrogen, Total Kjeldahl	351.2	06/22/16:207297jmg (STK1637341-006)	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	86.4 %	73-124	
			MS	mg/L	12.00	84.1 %	54-136	
			MSD	mg/L	12.00	87.0 %	54-136	
	351.2	06/23/16:207355jmg (SP 1606932-003)	MSRPD	mg/L	12.00	3.4%	≤27	
			Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	88.3 %	73-124	
			MS	mg/L	12.00	70.8 %	54-136	
			MSD	mg/L	12.00	70.7 %	54-136	
			MSRPD	mg/L	12.00	0.06%	≤27	
Ammonia Nitrogen	4500NH3G	(SP 1606886-011)	MS	mg/L	2.000	113 %	70-130	
			MSD	mg/L	2.000	112 %	70-130	
			MSRPD	mg/L	2.000	1.3%	≤20	
			MS	mg/L	2.000	111 %	70-130	
	4500NH3G	06/21/16:208835AMB	MSD	mg/L	2.000	111 %	70-130	
			MSRPD	mg/L	2.000	0.09%	≤20	
			CCB	mg/L		-0.058	0.2	
			CCV	mg/L	2.000	104 %	90-110	
			CCB	mg/L		-0.061	0.2	
			CCV	mg/L	2.000	107 %	90-110	
Nitrite as Nitrogen	4500NO2F	(CH 1674436-001)	MS	mg/L	1.270	94.4 %	50-150	
			MSD	mg/L	1.270	93.9 %	50-150	
			MSRPD	mg/L	1.270	0.5%	≤30	
		(CH 1674447-001)	MS	mg/L	1.270	101 %	50-150	
			MSD	mg/L	1.270	99.2 %	50-150	
			MSRPD	mg/L	1.270	1.4%	≤30	
Nitrate + Nitrite as N	4500NO3F	(CH 1674436-001)	MS	mg/L	10.00	108 %	5-285	
			MSD	mg/L	10.00	108 %	5-285	
			MSRPD	mg/L	10.00	0.1%	≤30.4	
			MS	mg/L	10.00	112 %	5-285	
			MSD	mg/L	10.00	113 %	5-285	
			MSRPD	mg/L	10.00	0.9%	≤30.4	
	4500NO3F	06/18/16:208772AMB	CCB	mg/L		0.034	0.1	
			CCV	mg/L	11.27	97.8 %	90-110	
			CCB	mg/L		0.054	0.1	
			CCB	mg/L		0.059	0.1	
			CCV	mg/L	11.27	98.7 %	90-110	
			CCB	mg/L		0.043	0.1	
			CCB	mg/L		0.039	0.1	
			CCV	mg/L	11.27	100 %	90-110	
Nitrite as Nitrogen	4500NO3F	06/18/16:208771AMB	CCB	mg/L		0.013	0.2	
			CCV	mg/L	1.270	95.7 %	90-110	
			CCB	mg/L		0.013	0.2	
			CCB	mg/L		0.013	0.2	
			CCV	mg/L	1.270	96.5 %	90-110	
			CCB	mg/L		0.013	0.2	
			CCB	mg/L		0.014	0.2	
			CCV	mg/L	1.270	98.0 %	90-110	
Phosphorus	4500-P B	06/17/16:207159sjn	Blank	mg/L		ND	<0.1	

Quality Control - Inorganic

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem Phosphorus	4500-P B	06/17/16:207159sjn (CC 1682098-001)	LCS	mg/L	0.5000	103 %	90-116	
			MS	mg/L	0.2500	-561 %	<¼	
			MSD	mg/L	0.2500	-583 %	<¼	
			MSRPD	mg/L	0.2500	1.0%	≤13.2	
Total Phosphorus	4500PE	06/17/16:208650SjN	CCB	mg/L		0.006	0.1	
			CCV	mg/L	0.5000	99.4 %	90-110	
			CCB	mg/L		-0.016	0.1	
			CCV	mg/L	0.5000	96.1 %	90-110	
Nitrogen, Total Kjeldahl	EPA351.2	06/23/16:208970AMB	CCB	mg/L		-0.230	0.5	
			CCV	mg/L	5.000	98.7 %	90-110	
			CCB	mg/L		-0.122	0.5	
			CCV	mg/L	5.000	98.5 %	90-110	
			CCB	mg/L		-0.047	0.5	
			CCV	mg/L	5.000	98.7 %	90-110	
	EPA351.2	06/24/16:208975AMB	CCB	mg/L		-0.004	0.5	
			CCV	mg/L	5.000	106 %	90-110	
			CCB	mg/L		0.000	0.5	
			CCV	mg/L	5.000	101 %	90-110	

Definition	
CCV	: Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
CCB	: Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
Blank	: Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS	: Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
MS	: Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSD	: Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSRPD	: MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
ND	: Non-detect - Result was below the DQO listed for the analyte.
<¼	: High Sample Background - Spike concentration was less than one fourth of the sample concentration.
DQO	: Data Quality Objective - This is the criteria against which the quality control data is compared.

4053:06/06/2016				TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information																			
Client: Rincon Consultants, Inc. Address: Attn: Torin Snyder 180 N. Ashwood Ave. Ventura, CA 93003 Phone: (760)918-9444ext209 Fax: Contact Person: Torin Snyder Project Name: Malibu WWTP - SW Monitoring Purchase Order Number: Quote Number: SP 20150526-01				Method of Sampling: Composite(C) Grab(G) Type of Sample: **SEE REVERSE SIDE** Potable(P) Non-Potable(NP) Ag Water(AgW) Bacit Type: Other(O) System(SYS) Source(SR) Waste(W) Bacit Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL)	Coliform-LTB-Series 15 Tube 120m(PBa)-Na2S2O3 Wet Chemistry-NO3-N,NO2-N,N-Organic,Total P,NH3-N 16oz(P), 16oz(P)-H2SO4																		
Sampler(s): Peter S. Sampling Fee: _____ Pickup Fee: _____ Compositor Setup Date: 11/1/12 Time: 1/																							
Lab Number: SP 1101938 2-25173																							
Samp Num	Location Description	Date Sampled	Time Sampled																				
1	N-001	6-16-16	1300	G	SW																		
2	N-002		1320	G	SW																		
3	N-003		1140	G	SW																		
4	N-004		1345	G	SW																		
5	L-001		1100	G	SW																		
6	L-002		1440	G	SW																		
7	L-003		1120	G	SW																		
8	L-004		1120	G	SW																		
9	L-005		1150	G	SW																		
10	L-006		1240	G	SW																		
Remarks:				Relinquished		Date: 6-16-16		Time: 1140		Relinquished		Date:		Time:		Relinquished		Date:		Time:			
				Received By: [Signature]		Date: 6/16/16		Time: 1140		Received By:		Date:		Time:		Received By:		Date:		Time:			