Appendix G –
Limited Phase 2 Environmental Site Assessment –
Proposed 9 Lot Subdivision (The Sanctuary)

November 25, 2020 CTE Job No. 10-14212E

Olivenhain Hills LLC
Attention: Mr. Udi Melamed
745 Cole Ranch Road
Encinitas, California 92024
Telephone: (760) 299-3344 Via Email: udi@ermdevelopment.com

Subject: Limited Phase 2 Environmental Site Assessment
Proposed 9 Lot Subdivision (The Sanctuary)
Ranch View Terrace
Encinitas, California

Mr. Melamed:

Construction Testing and Engineering, Inc. (CTE) is pleased to present this Limited Phase 2 Environmental Site Assessment pertinent to the subject proposed subdivision. Location of the site is shown on attached Figure 1, Site Index Map. This Limited Phase 2 (Phase 2) follows the Phase One Environmental Site Assessment (ESA) for the subject site dated February, 18, 2019 as prepared by CTE for Olivenhain Hills, LLC. This Phase 2 was authorized by Mr Udi Melamed on November 5, 2020 through CTE proposal E-0628 dated November 3, 2020. The ESA did not find the presence of a Recognized Environmental Condition on the subject site. However, the ESA noted that a portion of the property was likely utilized for agriculture in the past during a time when organochlorine pesticides (OCPs) were commonly utilized. Such OCP residuals such as DDT were banned in the late 1970s, but may remain in near surface soils to the present day. Furthermore, past agriculture practices could have used metals and metalloids such as copper, lead and arsenic to control insects and unwanted plant growth. The purpose of this Phase 2 is to collect soil samples for laboratory analyses to evaluate the potential presence of OCP and metal/metalloid residuals. This Phase 2 assessment is limited to an evaluation of environmental conditions associated with historic agriculture activities on the site where development is planned.

1.0 TECHNICAL SCOPE

A total of eight near surface soil (approximately six inches to one foot in depth) samples were collected at the site on November 13, 2020. The samples were collected at locations to cover the site in an approximate uniform manner. Sample locations are shown on attached Figure 2. The samples were obtained from hand excavated pits, and were placed in laboratory supplied unused glass containers. Sampling was in general accordance with the current edition of the San Diego County Department of Environmental Health *Site Assessment and Mitigation (SAM)* Manual. The samples were individually packaged and placed on ice in a sealed contained for transport to Orange Coast Analytical, a California Department of Health certified laboratory. The laboratory analyzed the samples to quantify, if at reporting levels, organochlorine pesticides by EPA 8081

and California Title 22 metals by EPA Method 6010A/7471B. The spatial location of sampling, number of samples and selected laboratory analyses follow the referenced California Department of Toxic Substance Control documents per CTE's discretion.

2.0 LABORATORY RESULTS AND DISCUSSION

The laboratory quantified the presence of OCP residuals in two of the eight samples, and an elevated concentration of the metal lead in one of the eight samples. Concentrations of the metalloid arsenic was present in all eight of the samples. However, these chemicals and metal/metalloids are below regulatory values or in the case of arsenic less than typical background values. Laboratory results are attached in Appendix A. The following provides additional discussion of the laboratory results.

The laboratory quantified the presence of OCP residuals in samples L9 and L7. The laboratory did not quantify the presence above reporting levels in the remaining six samples. The quantified OCP residuals are presented in following Table 2.1

Table 2.1 Quantified Laboratory Results

Sample Number	Organochlorine Pesticide Residuals (micrograms per kilogram)				
	Chlordane	4,4'DDD	4,4'DDE	4,4' DDT	Dieldrin
L7	38	<10	<5.0	<10	<2.0
L9	40	16	15	11	2.6

Notes:
Micrograms per kilogram is ug/kg
A less than value (<) indicates less than laboratory reporting level.

The following Table 2.2 provides regulatory screening levels for residential properties according to the California Department of Toxic Substance Control HERO Note 3 (June 2020).

Table 2.2
Regulatory Screening Levels
(micrograms/kilogram)

Chlordane		4,4'-DDD		4,4'-DDE		4,4'DDT		Dieldrin	
cancer	non cancer	cancer	non cancer	cancer	non cancer	cancer	non cancer	cancer	non cancer
1,700	35,000	2,300	1,900	2,000	23,000	1,900	37,000	34	3,200

The laboratory analytical results shown on Table 2.1 are well below those of the regulatory values presented on Table 2.2. Consequently, environmental remedial activities for OCP residuals would not appear to be warranted.

Lead was quantified to range between 3.7 milligrams/kilogram (mg/kg) and 6.3 mg/kg in samples L3 and PK, respectively. However, lead was quantified at a concentration of 37 mg/kg in sample L9. The L9 quantified 37 mg/kg value is well below the residential screening level for lead (non carcinogenic) of 80 mg/kg per DTSC HERO Note 3 (June 2020). Sample L9 was collected in an apparent location of a former stock pond, and may be the result of organic activities that are not related to inorganic lead concentrations of the regulatory screening values. Grading of the site should reduce the lead concentrations as the soils are mixed for developmental activities. Consequently, environmental remedial activities for lead concentrations at the former stock pond location would not appear warranted.

Arsenic was quantified at concentrations between 3.7 mg/kg and 8.8 mg/kg in samples L7 and L9, respectively. DTSC HERO Note 3 (June 2020) presents arsenic carcinogenic risk and non carcinogenic risk values of 0.11 mg/kg and 0.41 mg/kg, respectively. However, that document notes that it is not uncommon for naturally occurring arsenic values to be well above regulatory values, and site specific background should be considered. It is not unusual for arsenic to be at concentrations greater than these values in the southwestern United States. As an example, the Kearney Foundation (1996) evaluated background concentrations of trace elements in soils in California. Three of their samples were in the San Diego area with location and results as:

- Location -117*13’ longitude; 32°54’latititude=11.0 mg/kg
- Location -116* 47’ longitude; 32°49’latitude=0.6 mg/kg
- Location -116* 54’ longitude; 32°43’latitude=10.4 mg/kg

The document entitled “Determination of a Southern California Regional Arsenic Concentration in Soil” (undated) by Chernoff et. al. of the California Department of Toxic Substance Control (DTSC) evaluated background concentrations of arsenic in southern California. Their statistical analyses were based upon arsenic concentrations from samples collected at 19 school sites in Los Angeles County that was further validated by 52 (total) school sites in southern California including three in San Diego. The results indicated arsenic concentrations ranging between 0.15 and 19.63 mg/kg and an upper bound limit for naturally occurring arsenic as 12 mg/kg. Chernoff et. al. suggest an upper bound value of 12 mg/kg as a presumptive screening level for arsenic. Based upon the relative consistency of arsenic concentrations at the site it appears the laboratory values indicate typical background levels for the area. The quantified values are below two of three values found by the Kearny Foundation and below the typical screening values presented by Chernoff et. al. Consequently, arsenic does not appear to present an environmental concern greater than the general area of the San Diego region.

3.0 FINDINGS AND CONCLUSIONS

The laboratory results indicate environmental remedial activities are not necessary for this project. As such, the laboratory results should not preclude development of the site from an environmental perspective.

4.0 LIMITATIONS AND ASSUMPTIONS

The field evaluation, laboratory testing, and results presented in this report have been conducted according to current environmental practice and the standard of care exercised by reputable consultants performing similar tasks in this area. No other warranty, expressed or implied, is made regarding this report. Variations may exist and conditions not observed or described in this report may be present. CTE should be notified of possible variations so that CTE may re-evaluate the findings of this report.

CTE appreciates this opportunity to be of service on this project. If there are any questions regarding this report, please do not hesitate to contact the undersigned.

Respectfully submitted,

CONSTRUCTION TESTING & ENGINEERING, INC.

Dan T. Math, RCE #61013
Principal Engineer

Gregory F. Rzonca, CEG #1191
Senior Engineering Geologist

GFR/DTM:ach

Attachments
Figure 1 Site Index Map
Figure 2 Sample Location Map

Appendix A Laboratory Analytical Results

REFERENCES

1) Construction Testing and Engineering, *Phase One Environmental Site Assessment, Ranch View Terrace, Undeveloped Property at Proposed Nine Lot Subdivision, Encinitas*, California, dated February 18, 2019, prepared for Olivenhain Hills, LLC, CTE project 10.14212E.

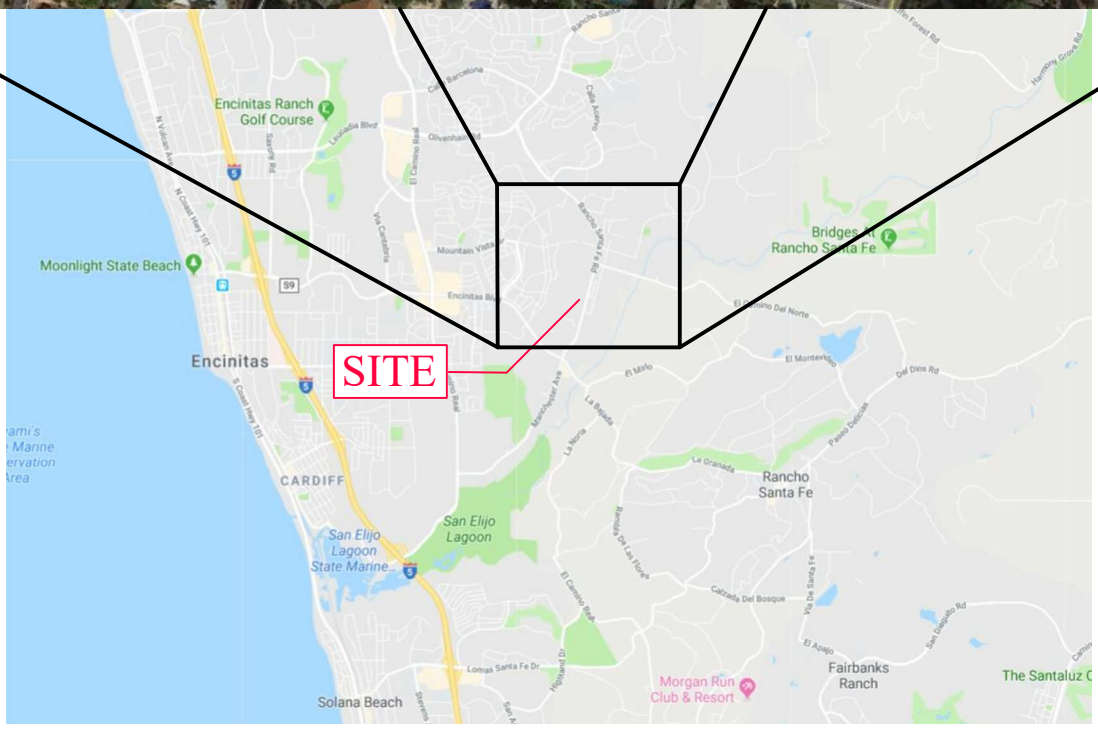
2) California Department of Toxic Substance Control *Interim Guidance for Sampling Agriculture Fields for School Sites (Second Revision),* dated August 26, 2002.

3) California Department of Toxic Substance Control *Interim Guidance for Sampling Agriculture Properties, (Third Revison),* dated August 7, 2008.

4) California Department of Toxic Substance Control (DTSC), Human and Ecological Risk Office (HERO) *Human Health Risk Assessment (HHRA) Note Number 3, DTSC-modified Screening Levels (DTSC-SLs).* Dated June 2020.

5) Chernoff et.al. *Determination of a Southern California Regional Arsenic Concentration in Soil,* undated.

6) Kearny Foundation, *Background Concentrations of Trace Elements in California Soils,* 1996.

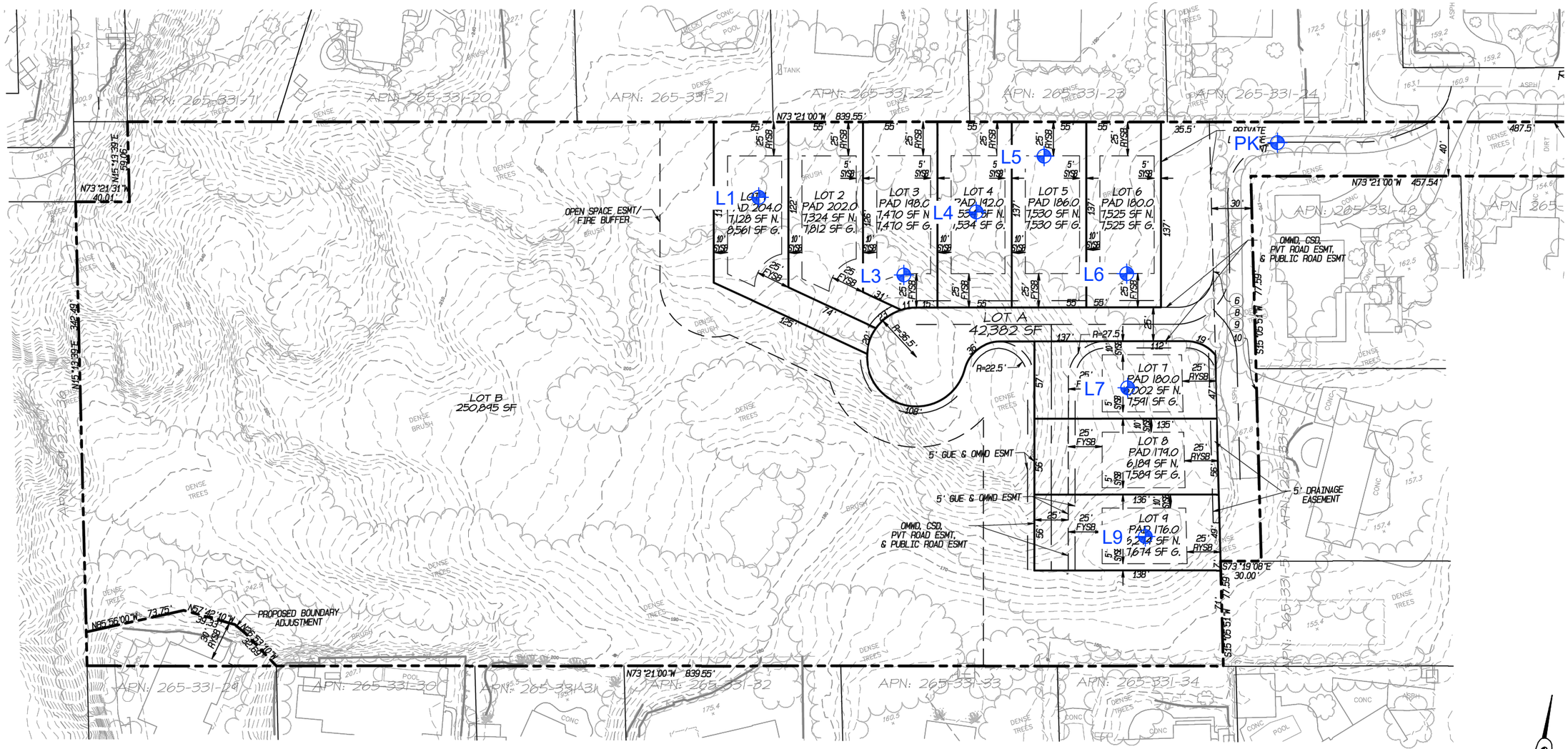


Approximate property boundary location

CTE INC. Construction Testing & Engineering, Inc.
1441 Montiel Rd Ste 115, Escondido, CA 92026 Ph (760) 746-4955

SITE INDEX MAP
PROPOSED NINE LOT SUBDIVISION
RANCH VIEW TERRACE
ENCINITAS, CALIFORNIA

SCALE:	DATE:
NONE	11/20
CTE JOB NO.:	FIGURE:
10-14212E	1



GRAPHIC SCALE

100' 0 50' 100'

1 inch = 100 ft.

LEGEND

L1 ⊕ Approximate Sample Location

CTE INC. Construction Testing & Engineering, Inc.
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SAMPLE LOCATION MAP
PROPOSED NINE LOT SUBDIVISION
THE SANCTUARY
ENCINITAS, CALIFORNIA

CTE JOB NO:	10-14212E
SCALE:	1" = 100'
DATE: 11/20	FIGURE: 2

APPENDIX A

LABORATORY ANALYTICAL RESULTS

Orange Coast Analytical, Inc.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

ORANGE COAST ANALYTICAL, INC.

3002 Dow Suite 532 Tustin, CA 92780

(714) 832-0064

Laboratory Certification (ELAP) No.:2576
Expiration Date: 2021
Los Angeles County Sanitation District Lab ID# 10206

Laboratory Director's Name:
Mark Noorani

Client:	Construction Testing & Engineering, Inc.
Laboratory Reference:	CTE 25528
Project Name:	The Sanctuary
Project Number:	10.14212E
Date Received:	11/17/2020
Date Reported:	11/19/2020
Chain of Custody Received:	☑
Analytical Method:	8081A, 6010B, 7471A,

Mark Noorani, Laboratory Director

Mr. Greg Rzonca
Construction Testing & Engineering, Inc.
1441 Montiel Rd Ste 115
Escondido, CA, 92026

Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 17ºC.

Holding Times:

All samples were analyzed within required holding times unless otherwise noted in the data qualifier section of the report.

Analytical Methods:

Sample analysis was performed following the analytical methods listed on the cover page.

Data Qualifiers:

Within this report, data qualifiers may have been assigned to clarify deviations in common laboratory procedures or any divergence from laboratory QA/QC criteria. If a data qualifier has been used, it will appear in the back of the report along with its description. All method QA/QC criteria have been met unless otherwise noted in the data qualifier section.

Definition of Terms:

The definitions of common terms and acronyms used in the report have been placed at the back of the report to assist data users.

Comments:

None

Mr. Greg Rzonca
Construction Testing & Engineering, Inc.
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Escondido, CA, 92026

Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
L9	25528-001	11/17/2020	11/13/2020	Soil
L1	25528-002	11/17/2020	11/13/2020	Soil
L3	25528-003	11/17/2020	11/13/2020	Soil
L4	25528-004	11/17/2020	11/13/2020	Soil
L5	25528-005	11/17/2020	11/13/2020	Soil
L6	25528-006	11/17/2020	11/13/2020	Soil
PK	25528-007	11/17/2020	11/13/2020	Soil
L7	25528-008	11/17/2020	11/13/2020	Soil

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
L9	25528-001	11/17/2020 8:30	11/13/2020 10:05	11/17/2020 9:00	11/17/2020 14:52	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	40
4,4'-DDD	72-54-8	16
4,4'-DDE	72-55-9	15
4,4'-DDT	50-29-3	11
Dieldrin	60-57-1	2.6
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	91

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: C8,

Mr. Greg Rzonca
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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
L1	25528-002	11/17/2020 8:30	11/13/2020 10:15	11/17/2020 9:00	11/17/2020 15:08	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	84

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

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Project Name: The Sanctuary
Project #: 10.14212E

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
L3	25528-003	11/17/2020 8:30	11/13/2020 10:27	11/17/2020 9:00	11/17/2020 15:23	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	88

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
L4	25528-004	11/17/2020 8:30	11/13/2020 10:32	11/17/2020 9:00	11/17/2020 15:58	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	87

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
L5	25528-005	11/17/2020 8:30	11/13/2020 10:37	11/17/2020 9:00	11/17/2020 16:09	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	83

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
L6	25528-006	11/17/2020 8:30	11/13/2020 10:43	11/17/2020 9:00	11/18/2020 10:41	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	88

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
PK	25528-007	11/17/2020 8:30	11/13/2020 10:50	11/17/2020 9:00	11/18/2020 10:56	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	83

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Greg Rzonca
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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
L7	25528-008	11/17/2020 8:30	11/13/2020 10:54	11/17/2020 9:00	11/18/2020 11:11	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	38
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	86

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: C8,

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Escondido, CA, 92026

Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBAV1117201			11/17/2020 9:00	11/17/2020 14:07	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<2.0
alpha-BHC	319-84-6	<5.0
beta-BHC	319-85-7	<5.0
gamma-BHC (Lindane)	58-89-9	<5.0
delta-BHC	319-86-8	<10
Chlordane	57-74-9	<30
4,4'-DDD	72-54-8	<10
4,4'-DDE	72-55-9	<5.0
4,4'-DDT	50-29-3	<10
Dieldrin	60-57-1	<2.0
Endosulfan I	959-98-8	<10
Endosulfan II	33213-65-9	<5.0
Endosulfan sulfate	1031-07-8	<10
Endrin	72-20-8	<10
Endrin aldehyde	7421-93-4	<10
Endrin ketone	53494-70-5	<5.0
Heptachlor	76-44-8	<2.0
Heptachlor epoxide	1024-57-3	<5.0
Methoxychlor	72-43-5	<10
Toxaphene	8001-35-2	<40

Surrogate:	% RC*
Decachlorobiphenyl	84

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

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Construction Testing & Engineering, Inc.
1441 Montiel Rd Ste 115
Escondido, CA, 92026

Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
L9	25528-001	11/17/2020 8:30	11/13/2020 10:05	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Antimony	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Arsenic	6010B	8.8	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Barium	6010B	69	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Beryllium	6010B	0.64	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Cadmium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Chromium	6010B	16	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Cobalt	6010B	6.2	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Copper	6010B	8.6	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Lead	6010B	37	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Mercury	7471A	<0.10	mg/kg	11/18/20 11:30	11/18/20 15:21	--	1
Molybdenum	6010B	<1.0	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Nickel	6010B	6.5	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Selenium	6010B	<4.8	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Silver	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Thallium	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Vanadium	6010B	37	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1
Zinc	6010B	47	mg/kg	11/17/20 11:00	11/17/20 16:08	--	1

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
L1	25528-002	11/17/2020 8:30	11/13/2020 10:15	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Antimony	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Arsenic	6010B	4.9	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Barium	6010B	22	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Beryllium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Cadmium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Chromium	6010B	5.0	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Cobalt	6010B	2.4	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Copper	6010B	<5.0	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Lead	6010B	3.8	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Mercury	7471A	<0.10	mg/kg	11/18/20 11:30	11/18/20 15:26	--	1
Molybdenum	6010B	<1.0	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Nickel	6010B	1.8	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Selenium	6010B	<4.8	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Silver	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Thallium	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Vanadium	6010B	13	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1
Zinc	6010B	15	mg/kg	11/17/20 11:00	11/17/20 16:17	--	1

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
L3	25528-003	11/17/2020 8:30	11/13/2020 10:27	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Antimony	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Arsenic	6010B	4.7	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Barium	6010B	22	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Beryllium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Cadmium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Chromium	6010B	5.0	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Cobalt	6010B	2.5	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Copper	6010B	<5.0	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Lead	6010B	3.7	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Mercury	7471A	<0.10	mg/kg	11/18/20 11:30	11/18/20 15:28	--	1
Molybdenum	6010B	<1.0	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Nickel	6010B	1.8	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Selenium	6010B	<4.8	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Silver	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Thallium	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Vanadium	6010B	13	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1
Zinc	6010B	15	mg/kg	11/17/20 11:00	11/17/20 16:20	--	1

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
L4	25528-004	11/17/2020 8:30	11/13/2020 10:32	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Antimony	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Arsenic	6010B	5.6	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Barium	6010B	24	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Beryllium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Cadmium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Chromium	6010B	5.0	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Cobalt	6010B	2.6	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Copper	6010B	<5.0	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Lead	6010B	5.1	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Mercury	7471A	<0.10	mg/kg	11/18/20 11:30	11/18/20 15:30	--	1
Molybdenum	6010B	<1.0	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Nickel	6010B	1.9	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Selenium	6010B	<4.8	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Silver	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Thallium	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Vanadium	6010B	14	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1
Zinc	6010B	17	mg/kg	11/17/20 11:00	11/17/20 16:23	--	1

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
L5	25528-005	11/17/2020 8:30	11/13/2020 10:37	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Antimony	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Arsenic	6010B	6.1	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Barium	6010B	37	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Beryllium	6010B	0.54	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Cadmium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Chromium	6010B	7.0	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Cobalt	6010B	4.9	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Copper	6010B	<5.0	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Lead	6010B	5.5	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Mercury	7471A	<0.10	mg/kg	11/18/20 11:30	11/18/20 15:32	--	1
Molybdenum	6010B	<1.0	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Nickel	6010B	3.9	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Selenium	6010B	<4.8	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Silver	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Thallium	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Vanadium	6010B	17	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1
Zinc	6010B	28	mg/kg	11/17/20 11:00	11/17/20 16:32	--	1

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
L6	25528-006	11/17/2020 8:30	11/13/2020 10:43	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Antimony	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Arsenic	6010B	5.2	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Barium	6010B	25	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Beryllium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Cadmium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Chromium	6010B	4.9	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Cobalt	6010B	2.6	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Copper	6010B	<5.0	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Lead	6010B	4.8	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Mercury	7471A	<0.10	mg/kg	11/18/20 11:30	11/18/20 15:39	--	1
Molybdenum	6010B	<1.0	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Nickel	6010B	1.9	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Selenium	6010B	<4.8	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Silver	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Thallium	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Vanadium	6010B	13	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1
Zinc	6010B	18	mg/kg	11/17/20 11:00	11/17/20 16:35	--	1

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
PK	25528-007	11/17/2020 8:30	11/13/2020 10:50	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Antimony	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Arsenic	6010B	7.8	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Barium	6010B	28	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Beryllium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Cadmium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Chromium	6010B	5.9	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Cobalt	6010B	3.4	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Copper	6010B	<5.0	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Lead	6010B	6.3	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Mercury	7471A	<0.10	mg/kg	11/18/20 11:30	11/18/20 15:41	--	1
Molybdenum	6010B	<1.0	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Nickel	6010B	2.6	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Selenium	6010B	<4.8	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Silver	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Thallium	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Vanadium	6010B	17	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1
Zinc	6010B	36	mg/kg	11/17/20 11:00	11/17/20 16:38	--	1

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
L7	25528-008	11/17/2020 8:30	11/13/2020 10:54	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Antimony	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Arsenic	6010B	3.3	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Barium	6010B	15	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Beryllium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Cadmium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Chromium	6010B	4.4	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Cobalt	6010B	1.7	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Copper	6010B	<5.0	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Lead	6010B	6.1	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Mercury	7471A	<0.10	mg/kg	11/18/20 11:30	11/18/20 15:43	--	1
Molybdenum	6010B	<1.0	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Nickel	6010B	1.5	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Selenium	6010B	<4.8	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Silver	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Thallium	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Vanadium	6010B	10	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1
Zinc	6010B	11	mg/kg	11/17/20 11:00	11/17/20 16:41	--	1

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Lab Reference #: CTE 25528
Project Name: The Sanctuary
Project #: 10.14212E

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
Method Blank				Soil

MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
MBIR1117201	Antimony	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Arsenic	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Barium	6010B	<1.0	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Beryllium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Cadmium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Chromium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Cobalt	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Copper	6010B	<5.0	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Lead	6010B	<0.80	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1118203	Mercury	7471A	<0.10	mg/kg	11/18/20 11:30	11/18/20 15:44	--	1
MBIR1117201	Molybdenum	6010B	<1.0	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Nickel	6010B	<1.0	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Selenium	6010B	<4.8	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Silver	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Thallium	6010B	<2.0	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Vanadium	6010B	<0.50	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1
MBIR1117201	Zinc	6010B	<5.0	mg/kg	11/17/20 11:00	11/17/20 15:59	--	1

QA/QC Report
for
Organochlorine Pesticides (EPA 8081A)
Reporting units: ppb

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date of Extraction: 11/17/2020 9:00
Date of Analysis: 11/18/2020 11:27
Dup Date of Analysis: 11/18/2020 11:42
Laboratory Sample #: 25528-005
MS/MSD Qualifiers: None
Reference #: CTE 25528

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Gamma-BHC	0.00	20.0	16.2	18.0	81	90	11	45-130	24	☐
Heptachlor	0.00	20.0	15.2	17.2	76	86	12	41-130	25	☐
Aldrin	0.00	20.0	14.5	17.1	73	86	16	44-130	26	☐
Dieldrin	0.00	40.0	37.7	41.5	94	104	10	41-139	21	☐
Endrin	0.00	40.0	36.5	41.9	91	105	14	45-145	21	☐
DDT	0.00	40.0	40.7	44.5	102	111	9	48-151	20	☐

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
Decachlorobiphenyl	81	85	☐

LCS	LCSD	Qual
95	92	☐

ACP % RC
53-135

Laboratory Control Sample

Date of Extraction: 11/17/2020 9:00
Date of Analysis: 11/17/2020 14:22
Dup Date of Analysis: 11/17/2020 14:37
Laboratory Sample #: AV1117201
LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Gamma-BHC	20.0	13.7	13.8	69	69	1	42-130	26	☐
Heptachlor	20.0	11.9	11.1	59	56	7	35-130	28	☐
Aldrin	20.0	13.1	11.8	66	59	10	43-130	28	☐
Dieldrin	40.0	33.6	35.3	84	88	5	41-134	20	☐
Endrin	40.0	33.4	35.3	84	88	6	48-136	20	☐
DDT	40.0	37.4	39.9	94	100	6	47-152	20	☐

QA/QC Report
for
Metals

Reference #: CTE 25528 Reporting units: ppm

Matrix Spike (MS) / Matrix Spike Duplicate (MSD) **6010B/7471A**

Laboratory Sample #: 25528-001 **Date of Extraction:** 11/17/20 11:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Antimony	11/17/20 16:11	11/17/20 16:14	0.00	20.0	1.43	1.85	7	9	26	75-125	20	M2, R2,
Arsenic	11/17/20 16:11	11/17/20 16:14	8.80	20.0	26.1	25.8	87	85	1	75-125	20	--
Barium	11/17/20 16:11	11/17/20 16:14	69.0	20.0	85.3	87.1	82	90	2	75-125	20	--
Beryllium	11/17/20 16:11	11/17/20 16:14	0.64	20.0	19.1	19.1	92	92	0	75-125	20	--
Cadmium	11/17/20 16:11	11/17/20 16:14	0.00	20.0	17.7	17.6	89	88	1	75-125	20	--
Chromium	11/17/20 16:11	11/17/20 16:14	16.0	20.0	34.5	35.0	93	95	1	75-125	20	--
Cobalt	11/17/20 16:11	11/17/20 16:14	6.20	20.0	24.9	25.5	93	97	2	75-125	20	--
Copper	11/17/20 16:11	11/17/20 16:14	8.60	20.0	28.2	28.3	98	98	0	75-125	20	--
Lead	11/17/20 16:11	11/17/20 16:14	37.0	20.0	54.1	53.8	85	84	1	75-125	20	--
Molybdenum	11/17/20 16:11	11/17/20 16:14	0.00	20.0	10.3	11.5	52	57	11	75-125	20	M2,
Nickel	11/17/20 16:11	11/17/20 16:14	6.50	20.0	25.2	25.3	94	94	0	75-125	20	--
Selenium	11/17/20 16:11	11/17/20 16:14	0.00	20.0	18.9	17.2	94	86	9	75-125	20	--
Silver	11/17/20 16:11	11/17/20 16:14	0.00	20.0	17.0	16.9	85	84	1	75-125	20	--
Thallium	11/17/20 16:11	11/17/20 16:14	0.00	20.0	16.9	16.4	84	82	3	75-125	20	--
Vanadium	11/17/20 16:11	11/17/20 16:14	37.0	20.0	53.8	54.0	84	85	0	75-125	20	--
Zinc	11/17/20 16:11	11/17/20 16:14	47.0	20.0	65.1	65.5	90	93	1	75-125	20	--

Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD) **6010B/7471A**

Laboratory Sample #: IR1117201 **Date of Extraction:** 11/17/20 11:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Antimony	11/17/20 16:02	11/17/20 16:05	--	20.0	18.5	18.5	93	93	0	80-120	20	--
Arsenic	11/17/20 16:02	11/17/20 16:05	--	20.0	19.2	19.0	96	95	1	80-120	20	--
Barium	11/17/20 16:02	11/17/20 16:05	--	20.0	20.0	19.9	100	99	1	80-120	20	--
Beryllium	11/17/20 16:02	11/17/20 16:05	--	20.0	19.7	19.4	99	97	2	80-120	20	--
Cadmium	11/17/20 16:02	11/17/20 16:05	--	20.0	18.4	18.2	92	91	1	80-120	20	--
Chromium	11/17/20 16:02	11/17/20 16:05	--	20.0	20.9	20.8	104	104	0	80-120	20	--
Cobalt	11/17/20 16:02	11/17/20 16:05	--	20.0	21.2	21.2	106	106	0	80-120	20	--
Copper	11/17/20 16:02	11/17/20 16:05	--	20.0	20.0	19.8	100	99	1	80-120	20	--
Lead	11/17/20 16:02	11/17/20 16:05	--	20.0	21.2	21.1	106	106	0	80-120	20	--
Molybdenum	11/17/20 16:02	11/17/20 16:05	--	20.0	18.4	18.3	92	91	1	80-120	20	--
Nickel	11/17/20 16:02	11/17/20 16:05	--	20.0	21.7	21.4	109	107	1	80-120	20	--
Selenium	11/17/20 16:02	11/17/20 16:05	--	20.0	19.6	18.2	98	91	7	80-120	20	--
Silver	11/17/20 16:02	11/17/20 16:05	--	20.0	19.6	19.4	98	97	1	80-120	20	--
Thallium	11/17/20 16:02	11/17/20 16:05	--	20.0	20.0	19.9	100	99	1	80-120	20	--
Vanadium	11/17/20 16:02	11/17/20 16:05	--	20.0	19.4	19.2	97	96	1	80-120	20	--
Zinc	11/17/20 16:02	11/17/20 16:05	--	20.0	21.2	21.0	106	105	1	80-120	20	--

Matrix Spike (MS) / Matrix Spike Duplicate (MSD) **6010B/7471A**

Laboratory Sample #: 25528-001 **Date of Extraction:** 11/18/20 11:30

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Mercury	11/18/20 15:23	11/18/20 15:25	0.00	1.00	1.40	1.40	140	140	0	80-120	20	M1,

QA/QC Report
for
Metals

Reference #: CTE 25528 Reporting units: ppm

Laboratory Control Spike (LCS) / Laboratory Control Spike Duplicate (LCSD) **6010B/7471A**

Laboratory Sample #: IR1118203 **Date of Extraction:** 11/18/20 11:30

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Mercury	11/18/20 16:36	11/18/20 15:19	--	1.00	1.12	1.09	112	109	3	80-120	20	--

Data Qualifier Definitions

Qualifier

C8 = Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000C, the lower value was reported as there was no evidence of chromatographic problems.

25528-001	8081A			4,4' -DDT
25528-008	8081A			Chlordane (technical)

M1 = Matrix spike recovery was high, the associated blank spike recovery was acceptable.

25528-001	6010B	Mercury	MS/MSD

M2 = Matrix spike recovery was low, the associated blank spike recovery was acceptable.

25528-001	6010B	Antimony	MS/MSD
25528-001	6010B	Molybdenum	MS/MSD

R2 = RPD/RSD exceeded the laboratory acceptance limit.

25528-001	6010B	Antimony	MS/MSD

Definition of terms:

R1	Result of unspiked laboratory sample used for matrix spike determination.
SP CONC (or Spike Conc.)	Spike concentration added to sample or blank
MS	Matrix Spike sample result
MSD	Matrix Spike Duplicate sample result
%MS	Percent recovery of MS: {(MS-R1) / SP CONC} x100
%MSD	Percent recovery of MSD: {(MSD-R1) / SP CONC} x 100
RPD (for MS/MSD)	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2
LCS	Laboratory Control Sample result
LCSD	Laboratory Control Sample Duplicate result
%LCS	Percent recovery of LCS: {(LCS) / SP CONC} x100
%LCSD	Percent recovery of LCSD: {(LCSD) / SP CONC} x 100
RPD (for LCS/LCSD)	Relative Percent Difference: {(LCS-LCSD) / (LCS+LCSD)} x 100 x 2
ACP %LCS	Acceptable percent recovery range for Laboratory Control Samples.
ACP %MS	Acceptable percent recovery range for Matrix Spike samples
ACP RPD	Acceptable Relative Percent Difference
D	Detectable, result must be greater than zero
Qual	A checked box indicates a data qualifier was utilized and/or required for this analyte see attached explanation.
ND	Analyte Not Detected

Analysis Request and Chain of Custody Record

Lab Job No: 25528
Page 1 of 1

ORANGE COAST ANALYTICAL, INC. www.ocalab.com

3002 Dow, Suite 532
Tustin, CA 92780
(714) 832-0064 Fax (714) 832-0067

4620 E. Elwood, Suite 4
Phoenix, AZ 85040
(480) 736-0960 Fax (480) 736-0970

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Construction Testing & Engineering	PROJECT NAME: The Sanctuary
SEND REPORT TO: Greg Rzonca	NUMBER: 10.14212E
ADDRESS: 1441 Montiel Rd, ste 115	ADDRESS:
Escondido, CA92026	
EMAIL: greg@cte-inc.net	P.O. #: 10.14212E
PHONE: 7607464955 FAX:	SAMPLED BY: G Rzonca

REQUIRED TAT: Standard

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	REMARKS / PRECAUTIONS
L9	1	11/13/20	10:05	SS	
L1	1		10:15		
L3	1		10:27		
L4	1		10:32		
L5	1		10:37		
L6	1		1043		
PK	1		1050		
L7	1		1054		

ANALYSIS / CONTAINER / PRESERVATIVE

EPA 8081 Organochlorine Pesticides
EPA 8270 SIM PAHs

Total No. of Samples: 8

Method of Shipment:

Preservative: 1 = Ice 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Relinquished By:	Date/Time:	Received By:	Date/Time:
Greg Rzonca	11/13/20 1200P		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: Mark Mans OCA, CA	Date/Time: 11-17-20 0830

Sample Matrix: WW - Wastewater; DW - Drinkingwater; SS - Soil/Solid; GW - Groundwater; OT- Other

Sample Integrity: 17+0=17.00°C
Intact _____ On Ice ND °C TR#3

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

Sample Receipt Report

Laboratory Reference: CTE 25528 Logged in by: AR

Received:	11/17/20 08:30	Company Name:	Construction Testing & Engineering, In
Method of Shipment:	OnTrac	Project Manager:	Mr. Greg Rzonca
Shipping Container:	Cooler	Project Name:	The Sanctuary
# Shipping Containers:	1	Project #:	10.14212E

Sample Quantity

Chain of Custody		Complete ☑	Incomplete ☐	None ☐
Samples On Ice		Yes, Wet ☐	Yes, Blue ☐	No ☑
Observed Temp. (°C):	17	Thermometer ID: IR#3	Adjusted Temp.:	17+(-0)=17
Shipping Intact		Yes ☑	N/A ☐	No ☐
Shipping Custody Seals Intact		Yes ☐	N/A ☑	No ☐
Samples Intact		Yes ☑		No ☐
Sample Custody Seals Intact		Yes ☐	N/A ☑	No ☐
Custody Seals Signed & Dated		Yes ☐	N/A ☑	No ☐
Proper Test Containers		Yes ☑		No ☐
Proper Test Preservations		Yes ☐		No ☑
Samples Within Hold Times		Yes ☑		No ☐
VOAs Have Zero Headspace		Yes ☐	N/A ☑	No ☐
Sample Labels		Complete ☑	Incomplete ☐	None ☐
Sample Information Matches COC		Yes ☑	N/A ☐	No ☐

Notes

Client Notified _____ By _____ On _____