Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

October 15, 2020
Project No. 108788003

Ms. Monica Friedl
Hofman Planning and Engineering
3152 Lionshead Avenue
Carlsbad, California 92010

Subject: Limited Phase II Environmental Site Assessment
Good Shepherd Catholic Cemetery
1505 Buena Vista Drive
County of San Diego, California

Dear Ms. Friedl:

Ninyo & Moore performed a Limited Phase II Environmental Site Assessment (ESA) for the proposed Good Shepherd Catholic Cemetery, located at 1505 Buena Vista Drive in an unincorporated area of the County of San Diego, California (site; Figure 1). The site consists of four parcels totaling approximately 14.5 acres (Figure 2). The site was generally undeveloped until orchards were present on the south portion of the site in 1939. The eastern portion of site was developed as a nursery since as early as 1985 and the western portion of the site was developed as a nursery since approximately 1989 (Ninyo & Moore, 2019).

According to the Hazard Memo, the County of San Diego, Planning and Development Services (PDS) requested a Limited Phase II ESA to investigate the former agricultural use of the site, which was identified as a recognized environmental condition (REC) in a 2019 Phase I ESA (Ninyo & Moore, 2019).

SCOPE OF SERVICES

The Phase II ESA was conducted in general accordance with the County of San Diego, Department of Environmental Health, Site Assessment and Mitigation (SAM) Manual and the 2008 Department of Toxic Substances Control (DTSC) Interim Guidance for Sampling Agricultural Properties (Interim Guidance). The recommended sample frequency specified in the DTSC Interim Guidance was followed, which consisted of 27 shallow borings, 7 composited organochlorine pesticides (OCPs) analyses, and 7 discrete analyses for arsenic. The sampling frequency is sufficient to characterize a property up to 17 acres. The scope of services included the following:

SDC PDS RCVD 10-20-23
LP23-060

- Prepared and implemented a site-specific health and safety plan in general accordance with Federal Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard (29 Code of Federal Regulations [CFR] 1910.120) and Title 8 California Code of Regulations (CCR) Section 5192.

- Created a sample grid with randomized sampling locations using ArcGIS.

- Contacted Underground Service Alert prior to the initiation of field activities to clear the locations of utilities.

- Advanced 27 hand auger borings and collected soil samples at depths of 0.5 and 1.5 feet below ground surface (bgs).

- Submitted soil samples to a California-certified analytical laboratory. The 0.5-foot samples were composited into 7 samples by the laboratory following DTSC composite guidance.

- Analyzed the composited samples for OCPs by United States Environmental Protection Agency (EPA) Method 8081A.

- Analyzed seven discrete 0.5-foot soil samples for total arsenic by EPA Method 6010B.

- For quality control purposes, one duplicate composite sample and one co-located discrete arsenic sample were collected and submitted blind to the laboratory for analysis.

- Prepared this letter report that documents field activities, including the sampling data, tabulated analytical data, analytical report accompanied with chain of custody and quality assurance/quality control documentation, and figures and tables.

PHASE II ESA

Soil Sampling

On September 16 and 17, 2020, Ninyo & Moore personnel advanced 27 hand auger borings (B1 to B27) at the locations shown on Figure 2. Soil samples were collected at depths of 0.5 and 1.5 feet below ground surface (bgs). Each sample was placed directly into a glass, laboratory-supplied jar. Each sample jar was immediately labeled to ensure proper identification for tracking by the analytical testing laboratory. The labeling included project number, hand auger boring unique identifier, sample depth, date, and time the sample was collected, and project location. Samples were placed into coolers containing ice and the chain-of-custody forms were maintained through sample pick up by Orange Coast Analytical, Inc.

Sample Compositing and Analytical Testing

In accordance with the DTSC Interim Guidance, the analytical laboratory composited groups of 3 or 4 discrete samples together (0.5-foot samples only) and assigned a new, unique sample identification based on the group of samples and depth [e.g., B(1-4)-0.5]. Prior to compositing, the discrete samples were homogenized and an aliquot from each discrete sample was used for the composite sample. The composite samples were analyzed for OCPs by EPA Method 8081A.

For the arsenic analysis, a discrete 0.5-foot sample was randomly selected from each group of the 0.5 foot samples for a total of 7 samples. The samples were analyzed for arsenic by EPA Method 6010B. The deeper samples were placed on hold at the laboratory.

Decontamination Procedures

Re-usable sampling equipment was decontaminated before and after each use. Decontamination procedures included a non-phosphate detergent and potable water wash followed by potable and distilled water rinses. A new pair of disposable nitrile gloves was worn by the sampling personnel each time a different sample was collected, reducing the potential for cross-contamination.

Backfill, Site Restoration, and Investigation-Derived Waste

Investigation-derived waste was not generated during the environmental sampling. The small amounts of decontamination fluid generated were allowed to percolate into the soil at each boing location. Each boring was backfilled with soil cuttings removed from that location and additional soil from the immediate vicinity of the borehole was used, as necessary, as backfill. The surface area at each location was generally restored to match the surrounding grade.

ANALYTICAL RESULTS

The analytical results are summarized on Tables 1 and 2 and the laboratory analytical report is provided as an attachment. Sample locations are shown on Figure 2.

Organochlorine Pesticides

The composite OCP soil sample results are summarized below and on Table 1.

- OCPs were not detected above their respective laboratory reporting limits in the 7 soil samples analyzed.

- The QA/QC duplicate sample (DUP1-0.5) contained 4,4'- Dichlorodiphenyldichloroethylene (DDE) at a concentration of 6.0 micrograms per kilogram (µg /kg), while the original sample (B20-23)-0.5 did not contain 4,4'-DDE above the laboratory reporting limit of 5.0 µg/kg.

- Relative percent differences in analytical results reported between the primary sample and its duplicate are likely due to sample heterogeneity or laboratory margin of error and are not anticipated to affect data quality or the results of the sampling. The sample results are considered acceptable for their intended use.

- The OCPs were less than their respective United States Environmental Protection Agency (EPA) Regional Screening Level (RSL) for commercial / industrial soil.

Table 1 – Organochlorine Pesticides Analytical Results in Composite Soil Samples

Boring IDs	Sample Depth (feet bgs)	Sample ID	Sample Date	4,4'-DDE (ug/kg)	Other OCPs (ug/kg)
B1, B2, B3, B4	0.5	B(1-4)-0.5	9/16/2020	<10	ND
B5, B6, B7, B8	0.5	B(5-8)-0.5	9/16/2020	<10	ND
B9, B10, B11, B12	0.5	B(9-12)-0.5	9/16/2020	<10	ND
B13, B14, B15	0.5	B(13-15)-0.5	9/16/2020	<10	ND
B16, B17, B18, B19	0.5	B(16-19)-0.5	9/17/2020	<5.0	ND
B20, B21, B22, B23	0.5	B(20-23)-0.5	9/17/2020	<5.0	ND
		DUP1-0.5	9/17/2020	**6.0**	ND
B24, B25, B26, B27	0.5	B(24-27)-0.5	9/17/2020	<5.0	ND
United States EPA Regional Screening Level – Commercial / Industrial Soil				**9,300**	**Various**

Notes:
bgs – below ground surface
ug/kg – micrograms/kilogram

Arsenic

The discrete soil sample arsenic results are summarized below and on Table 2.

- Arsenic was detected in the 7 samples at concentrations ranging from 2.0 to 3.5 milligrams per kilogram (mg/kg).

- The QA/QC duplicate sample (A-0.5) contained arsenic at a similar concentration (2.5 mg/kg) as the original sample, B20-0.5 (2.3 mg/kg). Relative percent differences in analytical results reported between the primary sample and its duplicate are likely due to sample heterogeneity or laboratory margin of error and are not anticipated to affect data quality or the results of the sampling. The sample results are considered acceptable for their intended use.

- The arsenic concentrations were less than the DTSC's screening level of 12 mg/kg (DTSC, 2008).

Table 2 – Arsenic Results in Discrete Soil Samples

Boring ID	Sample Depth (feet bgs)	Sample ID	Sample Date	Arsenic (mg/kg)
B1	0.5	B1-0.5	9/16/2020	3.0
B6	0.5	B6-0.5	9/16/2020	2.0
B11	0.5	B11-0.5	9/16/2020	2.6
B15	0.5	B15-0.5	9/16/2020	2.3
B19	0.5	B19-0.5	9/17/2020	3.5

Table 2 – Arsenic Results in Discrete Soil Samples				
Boring ID	**Sample Depth (feet bgs)**	**Sample ID**	**Sample Date**	**Arsenic (mg/kg)**
B20	0.5	B20-0.5	9/17/2020	2.3
		A-0.5	9/17/2020	2.5
B25	0.5	B25-0.5	9/17/2020	2.8
DTSC Screening Level				**12**

Note:
bgs – below ground surface
mg/kg – milligrams/kilogram

CONCLUSIONS

The following conclusions are provided:

- The OCP, 4,4-DDE, was detected in a duplicate sample at a concentration below the EPA RSL value for commercial / industrial soil. The remaining samples did not contain OCPs above their respective laboratory reporting limit. Based on the sampling and testing conducted, OCPs do not appear to be a significant human health risk to future site occupants or construction workers.

- Arsenic, which is a naturally-occurring metal, was detected in all the samples at concentrations below the DTSC's screening level. Based on the sampling and testing conducted, arsenic does not appear to be a significant human health risk to future site occupants or construction workers.

RECOMMENDATIONS

Based on the Phase II ESA results, the following is recommended at this time:

- During construction activities, visible dust should be kept to a minimum.

- If, during construction activities, contamination is discovered or suspected, notification to regulatory agencies may be required and exposed/excavated contaminated materials or wastes should be properly managed, particularly if there is the potential to affect worker or public health and safety and/or the environment.

LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities. Please also note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited subsurface assessment and chemical analysis. Further assessment of potential adverse environmental impacts from past onsite and/or nearby use of hazardous materials may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated; however, conditions can vary significantly between sampling locations. Variations in soil and/or groundwater conditions will exist beyond the points explored in this evaluation.

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the site. The testing and analyses have been conducted by an independent laboratory that is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

We appreciate the opportunity to assist you with the project.

Respectfully submitted,
NINYO & MOORE

Adrian Olivares
Senior Environmental Scientist

Stephan A. Beck, PG 4375
Manager, Environmental Sciences Division

AO/SB/gg

Attachments: References
Figure 1 – Site Location
Figure 2 – Site Plan with Boring Locations
Laboratory Analytical Report

Distribution: (1) Addressee (via e-mail)

REFERENCES

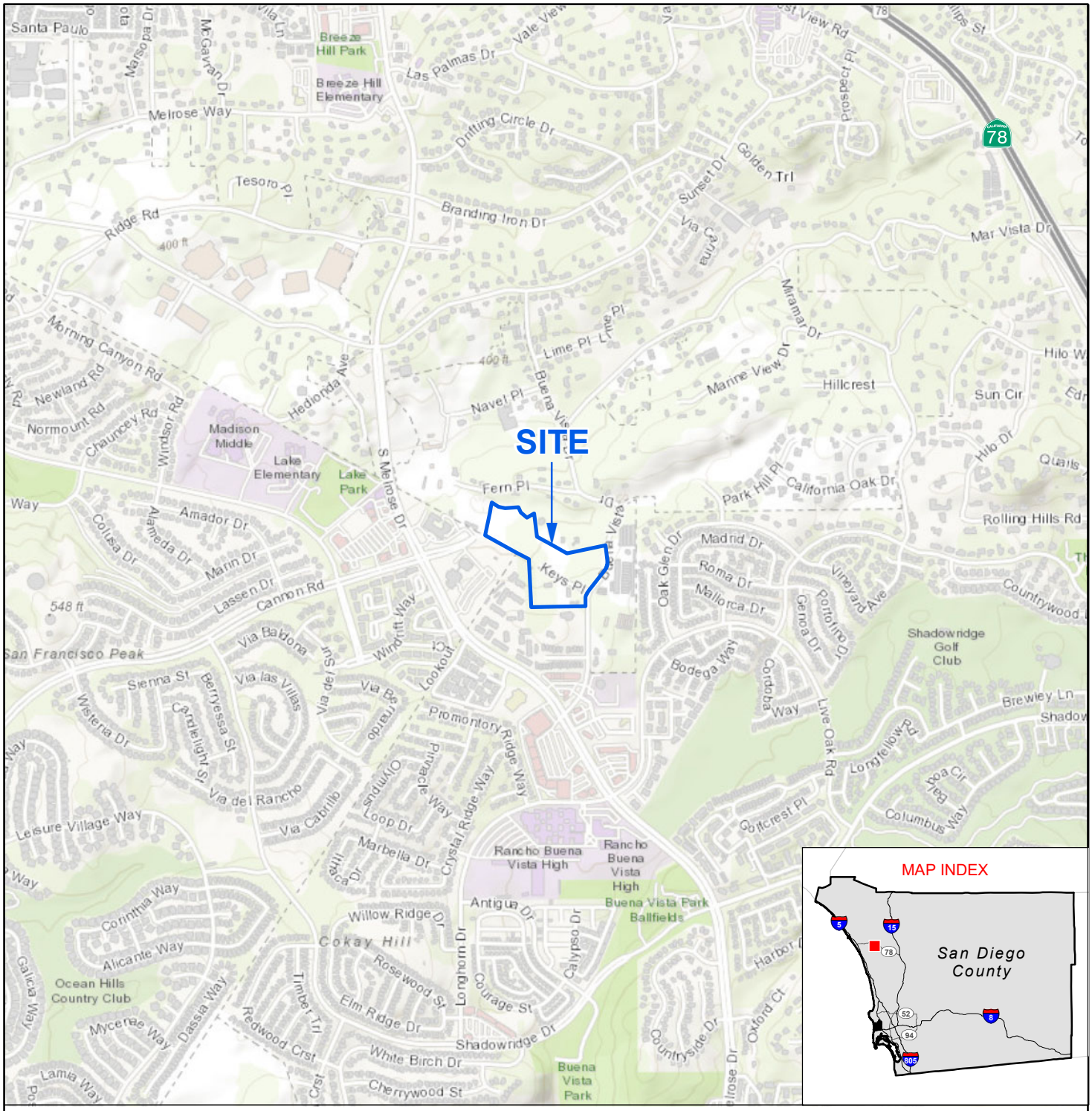
California Department of Toxic Substances Control, 2008, Interim Guidance for Sampling Agricultural Properties (Third Revision): dated August 7.

County of San Diego, Department of Environmental Health, 2004, Site Assessment and Mitigation Manual: updated August 2011.

County of San Diego, Planning and Development Services, Project Planning Division, 2020, [Hazard Memo] PDS2020-MUP-20-004, Good Shepherd Catholic Cemetery: dated June 11.

Ninyo & Moore, 2019, Phase I Environmental Site Assessment, Proposed Catholic Cemetery, County of San Diego, California, APNs: 169-210-02-00 and 169-220-01, -02, and -03: dated April 26.

United States Environmental Protection Agency, 2020, Regional Screening Levels (RSLs) – Generic Tables: Updated May.



1_108788003_SL.mxd 10/13/2020 JDL

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCE: ESRI WORLD TOPO, 2020

N

FEET

0 1,500 3,000

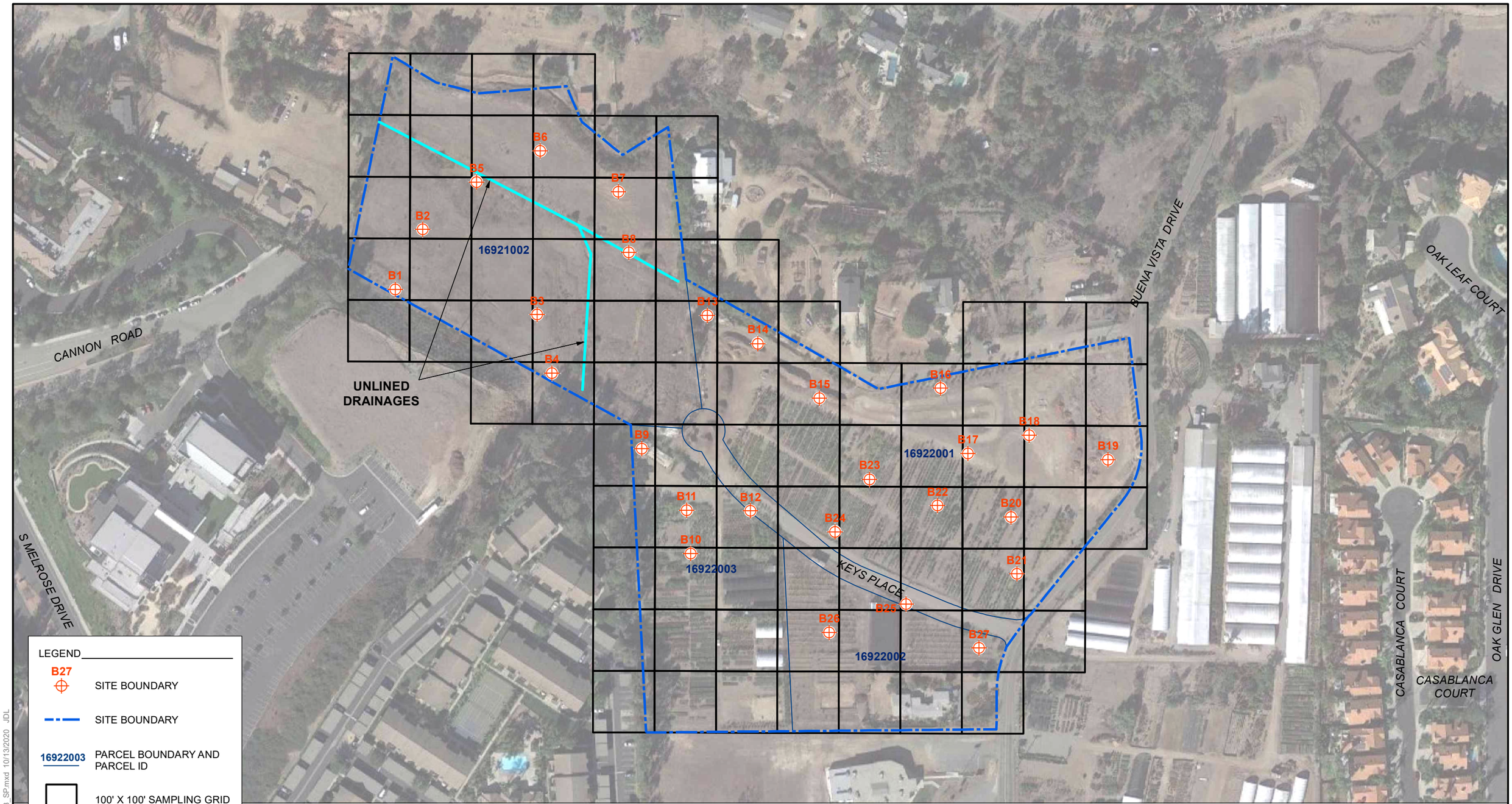
FIGURE 1

SITE LOCATION

GOOD SHEPHERD CATHOLIC CEMETERY
1505 BUENA VISTA DRIVE, COUNTY OF SAN DIEGO, CALIFORNIA

108788003 | 10/20

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants



2_108788003_SP.mxd 10/13/2020 JDL

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE. | SOURCE: GOOGLE EARTH, 2019, PARCELS - SANDAG, 2019

FIGURE 2

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

SITE PLAN WITH BORING LOCATIONS

GOOD SHEPHERD CATHOLIC CEMETERY
1505 BUENA VISTA DRIVE, COUNTY OF SAN DIEGO, CALIFORNIA

108788003 | 10/20

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:	Ninyo & Moore
Laboratory Reference:	NAM 25442
Project Name:	Good Shepherd
Project Number:	108788003
Date Received:	9/18/2020
Date Reported:	9/29/2020
Chain of Custody Received:	☑
Analytical Method:	8081A, 6010B,

Mark Noorani, Laboratory Director

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Case Narrative

Sample Receipt:

All samples on the Chain of Custody were received by OCA at 1ºC, on ice.

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. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B1-0.5	25442-001	9/18/2020	9/16/2020	Soil
B2-0.5	25442-002	9/18/2020	9/16/2020	Soil
B3-0.5	25442-003	9/18/2020	9/16/2020	Soil
B4-0.5	25442-004	9/18/2020	9/16/2020	Soil
B5-0.5	25442-005	9/18/2020	9/16/2020	Soil
B6-0.5	25442-006	9/18/2020	9/16/2020	Soil
B7-0.5	25442-007	9/18/2020	9/16/2020	Soil
B8-0.5	25442-008	9/18/2020	9/16/2020	Soil
B9-0.5	25442-009	9/18/2020	9/16/2020	Soil
B10-0.5	25442-010	9/18/2020	9/16/2020	Soil
B11-0.5	25442-011	9/18/2020	9/16/2020	Soil
B12-0.5	25442-012	9/18/2020	9/16/2020	Soil
B13-0.5	25442-013	9/18/2020	9/16/2020	Soil
B14-0.5	25442-014	9/18/2020	9/16/2020	Soil
B15-0.5	25442-015	9/18/2020	9/16/2020	Soil
B16-0.5	25442-016	9/18/2020	9/17/2020	Soil
B17-0.5	25442-017	9/18/2020	9/17/2020	Soil
B18-0.5	25442-018	9/18/2020	9/17/2020	Soil
B19-0.5	25442-019	9/18/2020	9/17/2020	Soil
B20-0.5	25442-020	9/18/2020	9/17/2020	Soil
B21-0.5	25442-021	9/18/2020	9/17/2020	Soil
B22-0.5	25442-022	9/18/2020	9/17/2020	Soil
B23-0.5	25442-023	9/18/2020	9/17/2020	Soil
B24-0.5	25442-024	9/18/2020	9/17/2020	Soil
B25-0.5	25442-025	9/18/2020	9/17/2020	Soil
B26-0.5	25442-026	9/18/2020	9/17/2020	Soil
B27-0.5	25442-027	9/18/2020	9/17/2020	Soil
A-0.5	25442-028	9/18/2020	9/17/2020	Soil
B-0.5	25442-029	9/18/2020	9/17/2020	Soil
C-0.5	25442-030	9/18/2020	9/17/2020	Soil
D-0.5	25442-031	9/18/2020	9/17/2020	Soil
B1-1.5	25442-032	9/18/2020	9/16/2020	Soil
B2-1.5	25442-033	9/18/2020	9/16/2020	Soil
B3-1.5	25442-034	9/18/2020	9/16/2020	Soil
B4-1.5	25442-035	9/18/2020	9/16/2020	Soil
B5-1.5	25442-036	9/18/2020	9/16/2020	Soil
B6-1.5	25442-037	9/18/2020	9/16/2020	Soil
B7-1.5	25442-038	9/18/2020	9/16/2020	Soil

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Client Sample Summary

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B8-1.5	25442-039	9/18/2020	9/16/2020	Soil
B9-1.5	25442-040	9/18/2020	9/16/2020	Soil
B10-1.5	25442-041	9/18/2020	9/16/2020	Soil
B11-1.5	25442-042	9/18/2020	9/16/2020	Soil
B12-1.5	25442-043	9/18/2020	9/16/2020	Soil
B13-1.5	25442-044	9/18/2020	9/16/2020	Soil
B14-1.5	25442-045	9/18/2020	9/16/2020	Soil
B15-1.5	25442-046	9/18/2020	9/16/2020	Soil
B16-1.5	25442-047	9/18/2020	9/17/2020	Soil
B17-1.5	25442-048	9/18/2020	9/17/2020	Soil
B18-1.5	25442-049	9/18/2020	9/17/2020	Soil
B19-1.5	25442-050	9/18/2020	9/17/2020	Soil
B20-1.5	25442-051	9/18/2020	9/17/2020	Soil
B21-1.5	25442-052	9/18/2020	9/17/2020	Soil
B22-1.5	25442-053	9/18/2020	9/17/2020	Soil
B23-1.5	25442-054	9/18/2020	9/17/2020	Soil
B24-1.5	25442-055	9/18/2020	9/17/2020	Soil
B25-1.5	25442-056	9/18/2020	9/17/2020	Soil
B26-1.5	25442-057	9/18/2020	9/17/2020	Soil
B27-1.5	25442-058	9/18/2020	9/17/2020	Soil
B(1-4)-0.5	25442-059	9/18/2020	9/16/2020	Soil
B(5-8)-0.5	25442-060	9/18/2020	9/16/2020	Soil
B(9-12)-0.5	25442-061	9/18/2020	9/16/2020	Soil
B(13-15)-0.5	25442-062	9/18/2020	9/16/2020	Soil
B(16-19)-0.5	25442-063	9/18/2020	9/17/2020	Soil
B(20-23)-0.5	25442-064	9/18/2020	9/17/2020	Soil
B(24-27)-0.5	25442-065	9/18/2020	9/17/2020	Soil
DUP1-0.5	25442-066	9/18/2020	9/17/2020	Soil

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B(1-4)-0.5	25442-059	9/18/2020 11:52	9/16/2020 7:35	9/23/2020 10:04	9/28/2020 20:19	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

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B(5-8)-0.5	25442-060	9/18/2020 11:52	9/16/2020 9:25	9/23/2020 10:04	9/28/2020 20:34	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<4.0
alpha-BHC	319-84-6	<10
beta-BHC	319-85-7	<10
gamma-BHC (Lindane)	58-89-9	<10
delta-BHC	319-86-8	<20
Chlordane	57-74-9	<60
4,4'-DDD	72-54-8	<20
4,4'-DDE	72-55-9	<10
4,4'-DDT	50-29-3	<20
Dieldrin	60-57-1	<4.0
Endosulfan I	959-98-8	<20
Endosulfan II	33213-65-9	<10
Endosulfan sulfate	1031-07-8	<20
Endrin	72-20-8	<20
Endrin aldehyde	7421-93-4	<20
Endrin ketone	53494-70-5	<10
Heptachlor	76-44-8	<4.0
Heptachlor epoxide	1024-57-3	<10
Methoxychlor	72-43-5	<20
Toxaphene	8001-35-2	<80

Surrogate:	% RC*
Decachlorobiphenyl	85

* Acceptable Recovery: 53-135 %

Dilution Factor: 2

Data Qualifiers: D1,

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B(9-12)-0.5	25442-061	9/18/2020 11:52	9/16/2020 11:20	9/23/2020 10:04	9/28/2020 20:49	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<4.0
alpha-BHC	319-84-6	<10
beta-BHC	319-85-7	<10
gamma-BHC (Lindane)	58-89-9	<10
delta-BHC	319-86-8	<20
Chlordane	57-74-9	<60
4,4'-DDD	72-54-8	<20
4,4'-DDE	72-55-9	<10
4,4'-DDT	50-29-3	<20
Dieldrin	60-57-1	<4.0
Endosulfan I	959-98-8	<20
Endosulfan II	33213-65-9	<10
Endosulfan sulfate	1031-07-8	<20
Endrin	72-20-8	<20
Endrin aldehyde	7421-93-4	<20
Endrin ketone	53494-70-5	<10
Heptachlor	76-44-8	<4.0
Heptachlor epoxide	1024-57-3	<10
Methoxychlor	72-43-5	<20
Toxaphene	8001-35-2	<80

Surrogate:	% RC*
Decachlorobiphenyl	77

* Acceptable Recovery: 53-135 %

Dilution Factor: 2

Data Qualifiers: D1,

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B(13-15)-0.5	25442-062	9/18/2020 11:52	9/16/2020 13:55	9/23/2020 10:04	9/28/2020 21:04	Soil

ANALYTE	CAS #	µg/kg
Aldrin	309-00-2	<4.0
alpha-BHC	319-84-6	<10
beta-BHC	319-85-7	<10
gamma-BHC (Lindane)	58-89-9	<10
delta-BHC	319-86-8	<20
Chlordane	57-74-9	<60
4,4'-DDD	72-54-8	<20
4,4'-DDE	72-55-9	<10
4,4'-DDT	50-29-3	<20
Dieldrin	60-57-1	<4.0
Endosulfan I	959-98-8	<20
Endosulfan II	33213-65-9	<10
Endosulfan sulfate	1031-07-8	<20
Endrin	72-20-8	<20
Endrin aldehyde	7421-93-4	<20
Endrin ketone	53494-70-5	<10
Heptachlor	76-44-8	<4.0
Heptachlor epoxide	1024-57-3	<10
Methoxychlor	72-43-5	<20
Toxaphene	8001-35-2	<80

Surrogate:	% RC*
Decachlorobiphenyl	80

* Acceptable Recovery: 53-135 %

Dilution Factor: 2

Data Qualifiers: D1,

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B(16-19)-0.5	25442-063	9/18/2020 11:52	9/17/2020 7:20	9/23/2020 10:04	9/24/2020 14:23	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	87

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B(20-23)-0.5	25442-064	9/18/2020 11:52	9/17/2020 9:30	9/23/2020 10:04	9/28/2020 21:20	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	99

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
B(24-27)-0.5	25442-065	9/18/2020 11:52	9/17/2020 12:20	9/23/2020 10:04	9/28/2020 21:35	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	91

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
DUP1-0.5	25442-066	9/18/2020 11:52	9/17/2020 9:30	9/25/2020 18:05	9/29/2020 11:56	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	6.0
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	98

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBBL0923201			9/23/2020 10:04	9/24/2020 10:19	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	91

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Organochlorine Pesticides (EPA 8081A)

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Date Extracted	Date Analyzed	Matrix
Method Blank	MBBL0925202			9/25/2020 18:05	9/28/2020 18:32	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	89

* Acceptable Recovery: 53-135 %

Dilution Factor: 1

Data Qualifiers: None

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B1-0.5	25442-001	9/18/2020 11:52	9/16/2020 7:35	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Arsenic	6010B	3.0	mg/kg	09/21/20 16:00	09/24/20 15:53	--	1

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B6-0.5	25442-006	9/18/2020 11:52	9/16/2020 9:50	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Arsenic	6010B	2.0	mg/kg	09/21/20 16:00	09/24/20 15:55	--	1

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B11-0.5	25442-011	9/18/2020 11:52	9/16/2020 12:50	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Arsenic	6010B	2.6	mg/kg	09/21/20 16:00	09/24/20 15:57	--	1

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B15-0.5	25442-015	9/18/2020 11:52	9/16/2020 14:50	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Arsenic	6010B	2.3	mg/kg	09/21/20 16:00	09/24/20 15:59	--	1

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B19-0.5	25442-019	9/18/2020 11:52	9/17/2020 8:55	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Arsenic	6010B	3.5	mg/kg	09/21/20 16:00	09/24/20 16:01	--	1

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B20-0.5	25442-020	9/18/2020 11:52	9/17/2020 9:30	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Arsenic	6010B	2.3	mg/kg	09/21/20 16:00	09/24/20 16:03	--	1

Mr. Adrian Olivares
Ninyo & Moore
5710 Ruffin Rd
San Diego, CA, 92123

Lab Reference #: NAM 25442
Project Name: Good Shepherd
Project #: 108788003

Metals

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
B25-0.5	25442-025	9/18/2020 11:52	9/17/2020 12:55	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Arsenic	6010B	2.8	mg/kg	09/21/20 16:00	09/24/20 16:04	--	1

Client Sample ID	Lab Sample Number	Date Received	Date Sampled	Matrix
A-0.5	25442-028	9/18/2020 11:52	9/17/2020 9:30	Soil

ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
Arsenic	6010B	2.5	mg/kg	09/21/20 16:00	09/24/20 16:06	--	1

Method Blank						Soil	
MB ID	ANALYTE	EPA Method	Result	Units	Date Extracted	Date Analyzed	Qual	DF
MBSR0921201	Arsenic	6010B	<2.0	mg/kg	09/21/20 16:00	09/22/20 15:34	--	1

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

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

Date of Extraction: 9/23/2020 10:04
Date of Analysis: 9/24/2020 11:50
Dup Date of Analysis: 9/24/2020 12:06
Laboratory Sample #: 25442-063
MS/MSD Qualifiers: None
Reference #: NAM 25442

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Gamma-BHC	0.00	20.0	13.2	14.1	66	71	7	45-130	24	☐
Heptachlor	0.00	20.0	13.4	14.4	67	72	7	41-130	25	☐
Aldrin	0.00	20.0	13.3	13.9	67	69	4	44-130	26	☐
Dieldrin	0.00	40.0	31.0	32.7	77	82	5	41-139	21	☐
Endrin	0.00	40.0	31.8	32.1	79	80	1	45-145	21	☐
DDT	0.00	40.0	33.9	36.5	85	91	7	48-151	20	☐

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
Decachlorobiphenyl	76	84	☐

LCS	LCSD	Qual
88	91	☐

ACP % RC
53-135

Laboratory Control Sample

Date of Extraction: 9/23/2020 10:04
Date of Analysis: 9/24/2020 10:34
Dup Date of Analysis: 9/24/2020 10:49
Laboratory Sample #: BL0923201A
LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Gamma-BHC	20.0	12.9	13.4	64	67	4	42-130	26	☐
Heptachlor	20.0	11.8	11.7	59	58	1	35-130	28	☐
Aldrin	20.0	12.6	12.3	63	62	2	43-130	28	☐
Dieldrin	40.0	29.6	30.1	74	75	2	41-134	20	☐
Endrin	40.0	30.2	30.8	75	77	2	48-136	20	☐
DDT	40.0	31.6	32.7	79	82	3	47-152	20	☐

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

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

Date of Extraction: 9/25/2020 18:05
Date of Analysis: 9/29/2020 11:25
Dup Date of Analysis: 9/29/2020 11:40
Laboratory Sample #: 25450-001
MS/MSD Qualifiers: None
Reference #: NAM 25442

Analyte	R1	SPC CONC	MS	MSD	%MS	%MSD	RPD	ACP %MS	ACP RPD	Qual
Gamma-BHC	0.00	20.0	13.0	13.2	65	66	2	45-130	24	☐
Heptachlor	0.00	20.0	12.5	12.7	63	63	2	41-130	25	☐
Aldrin	0.00	20.0	13.0	13.2	65	66	2	44-130	26	☐
Dieldrin	0.00	40.0	32.9	33.3	82	83	1	41-139	21	☐
Endrin	0.00	40.0	32.6	32.8	81	82	1	45-145	21	☐
DDT	0.00	40.0	35.8	36.5	89	91	2	48-151	20	☐

Surrogate Recoveries for Spike Samples

Surrogate (%RC)	MS	MSD	Qual
Decachlorobiphenyl	91	85	☐

LCS	LCSD	Qual
91	91	☐

ACP % RC
53-135

Laboratory Control Sample

Date of Extraction: 9/25/2020 18:05
Date of Analysis: 9/29/2020 10:54
Dup Date of Analysis: 9/29/2020 11:10
Laboratory Sample #: BL0925202A
LCS Qualifiers: None

Analyte	SPC CONC	LCS	LCSD	%LCS	%LCSD	RPD	ACP %LCS	ACP RPD	Qual
Gamma-BHC	20.0	15.2	15.2	76	76	0	42-130	26	☐
Heptachlor	20.0	13.8	14.3	69	72	4	35-130	28	☐
Aldrin	20.0	15.2	15.2	76	76	0	43-130	28	☐
Dieldrin	40.0	33.0	33.0	82	82	0	41-134	20	☐
Endrin	40.0	32.3	32.6	81	81	1	48-136	20	☐
DDT	40.0	34.4	34.1	86	85	1	47-152	20	☐

QA/QC Report
for
Metals

Reference #: NAM 25442 Reporting units: ppm

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

Laboratory Sample #: 25444-001 **Date of Extraction:** 09/21/20 16:00

Analyte	MS Date of Analysis	MSD Date of Analysis	R1	SPC CONC	MS	MSD	% MS	% MSD	RPD	ACP %MS	ACP RPD	Qualifiers
Arsenic	09/22/20 15:48	09/22/20 15:53	2.70	20.0	19.7	20.8	85	90	5	75-125	20	--

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

Laboratory Sample #: SR0921201 **Date of Extraction:** 09/21/20 16:00

Analyte	LCS Date of Analysis	LCSD Date of Analysis		SPC CONC	LCS	LCSD	% LCS	% LCSD	RPD	ACP %LCS	ACP RPD	Qualifiers
Arsenic	09/22/20 15:37	09/22/20 15:41	--	20.0	19.3	19.2	96	96	1	80-120	20	--

Data Qualifier Definitions

Qualifier

D1 = Sample required dilution due to matrix.

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

Miriam Molina

From: Adrian Olivares <aolivares@ninyoandmoore.com>
Sent: Monday, September 21, 2020 4:35 PM
To: Mark Noorani
Cc: Tracy Thompson; Stephan Beck; Miriamm; Orange Coast Analytical
Subject: RE: 108788003 COC

Mark,

Please run the following eight (8) discrete samples for arsenic:
25442
B1-0.5 – 1
B6-0.5 – 6
B11-0.5 – 11
B15-0.5 – 15
B19-0.5 – 19
B20-0.5 – 20
B25-0.5 – 25
A-0.5 – 28

We don't need any of the composite samples analyzed for arsenic at this time.

Thanks,

Adrian Olivares
Senior Environmental Scientist
Ninyo & Moore
858.576.1000 (**x11257**)

From: Mark Noorani [mailto:markn@ocalab.com]
Sent: Monday, September 21, 2020 1:20 PM
To: Adrian Olivares <aolivares@ninyoandmoore.com>
Cc: Tracy Thompson <tthompson@ninyoandmoore.com>; Stephan Beck <sbeck@ninyoandmoore.com>; Miriamm <miriamm@ocalab.com>; Orange Coast Analytical <ocalab@sbcglobal.net>
Subject: Re: 108788003 COC
Importance: High

No problem Adrian. Thank you, Mark

On 2020-09-21 13:09, Adrian Olivares wrote:

> Mark,
>
> Can you please put the arsenic analyses on hold? The arsenic test should be done on discrete samples as oppose to composites. I'll send you a revised COC later today.

Analysis Request & Chain of Custody Record

Lab Job No.: 25442 Page: 1 of 5

ORANGE COAST ANALYTICAL, INC.

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

www.ocalab.com

4620 East Elwood Street, Suite 4
Phoenix, AZ 85040
Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Ninyo & Moore	Project Name:	Good Shepherd
Send Report To:	Adrian Olivares	Project Number/PO:	108788003
Email:	aolivares@ninyoandmoore.com	Site Address:	1505 Buena Vista Drive
Address:	5710 Ruffin Rd.	Address (City / State):	San Diego, CA
	San Diego, CA 92123	EDD Required:	No
Phone:	858.576.1000 Fax: 858.576.9600	Sampled By:	Tracy Thompson

	Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type	Organochlorine Pesticides (OCP's) EPA Method 8081A	Total Arsenic EPSA Method 6010B	REMARKS / INSTRUCTIONS
1	B1-0.5	1	9/16/20	0735	Soil	Jar	X	X	-059
2	B2-0.5	1		0805					
3	B3-0.5	1		0830					
4	B4-0.5	1		0855					
5	B5-0.5	1	9/16/20	0925	Soil	Jar	X	X	-060
6	B6-0.5	1		0950					
7	B7-0.5	1		1020					
8	B8-0.5	1		1055					
9	B9-0.5	1	9/16/20	1120	Soil	Jar	X	X	-061
10	B10-0.5	1		1155					
11	B11-0.5	1		1250					
12	B12-0.5	1		1320					

Composite* name as B(1-4)-0.5

Composite* name as B(5-8)-0.5

Composite* name as B(9-12)-0.5

REQUESTED TURN-AROUND-TIME
Standard: X
72 Hour:
48 Hour:
24 Hour:

No. of Samples: Method of Shipment: Preservative: 1 = Ice 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Relinquished By: [signature]	Date: 9/18/20 Time: 1150 Company: Ninyo + Moore	Received By: [signature]	Date: 9/18/20 Time: 11:52 Company:
Relinquished By:	Date: Time: Company:	Received By:	Date: Time: Company:
Relinquished By:	Date: Time: Company:	Received For OCA By:	Date: Time: Company:

Sample Matrix: DW - Drinking Water; GW - Groundwater; AQ - Aqueous; WW - Wastewater; SS - Soil / Solid; SW - Stormwater; OT - Other ~~FD~~ #3

Sample Integrity: Intact: ✓ On Ice: (Yes) / No @ 1 °C

1-0=

* Please hold remaining sample material from each individual sample container for potential further analyses.

Analysis Request & Chain of Custody Record

Lab Job No.: 25442 Page: 2 of 5

ORANGE COAST ANALYTICAL, INC.

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

www.ocalab.com

4620 East Elwood Street, Suite 4
Phoenix, AZ 85040
Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Ninyo & Moore	Project Name:	Good Shepherd
Send Report To:	Adrian Olivares	Project Number/PO:	108788003
Email:	aolivares@ninyoandmoore.com	Site Address:	1505 Buena Vista Drive
Address:	5710 Ruffin Rd.	Address (City / State):	San Diego, CA
	San Diego, CA 92123	EDD Required:	No
Phone:	858.576.1000 Fax: 858.576.9600	Sampled By:	Tracy Thompson

ANALYSIS REQUEST / PRESERVATION

REQUESTED TURN-AROUND-TIME: Standard: X; 72 Hour: ; 48 Hour: ; 24 Hour:

	Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type	Organochlorine Pesticides (OCP's) EPA Method 8081A	Total Arsenic EPSA Method 6010B	REMARKS / INSTRUCTIONS
13	B13-0.5	1	9/16/20	1355	Soil	Jar	X	X	-062
14	B14-0.5	1	9/16/20	1420					
15	B15-0.5	1	9/16/20	1450					
16	B16-0.5	1	9/17/20	0720	Soil	Jar	X	X	-063
17	B17-0.5	1		0755					
18	B18-0.5	1		0825					
19	B19-0.5	1		0855					
20	B20-0.5	1	9/17/20	0930	Soil	Jar	X	X	-064
21	B21-0.5	1		1005					
22	B22-0.5	1		1035					
23	B23-0.5	1		1105					

Composite* name as B(13-15)-0.5

Composite* name as B(16-19)-0.5

Composite* name as B(20-23)-0.5

No. of Samples: Method of Shipment: Preservative: 1 = Ice 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Relinquished By:	Date: 9/18/20	Received By:	Date: 9/18/20
	Time: 1150		Time: 11:52
Company: Ninyo & Moore		Company:	
Relinquished By:	Date:	Received By:	Date:
	Time:		Time:
Company:		Company:	
Relinquished By:	Date:	Received For OCA By:	Date:
	Time:		Time:
Company:		Company:	

Sample Matrix: DW - Drinking Water; GW - Groundwater; AQ - Aqueous; WW - Wastewater; SS - Soil / Solid; SW - Stormwater; OT - Other IR#3

Sample Integrity: 1-0= Intact: N On Ice: (Yes) / No @ 1 °C

* Please hold remaining sample material from each individual sample container for potential further analyses.

Analysis Request & Chain of Custody Record

Lab Job No.: 25447 Page: 3 of 5

ORANGE COAST ANALYTICAL, INC. www.ocalab.com

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

4620 East Elwood Street, Suite 4
Phoenix, AZ 85040
Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Ninyo & Moore	Project Name:	Good Shepherd
Send Report To:	Adrian Olivares	Project Number/PO:	108788003
Email:	aolivares@ninyoandmoore.com	Site Address:	1505 Buena Vista Drive
Address:	5710 Ruffin Rd.	Address (City / State):	San Diego, CA
	San Diego, CA 92123	EDD Required:	No
Phone:	858.576.1000 Fax: 858.576.9600	Sampled By:	Tracy Thompson

REQUESTED TURN-AROUND-TIME

Standard: X
72 Hour:
48 Hour:
24 Hour:

	Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type	Organochlorine Pesticides (OCP's) EPA Method 8081A	Total Arsenic EPSA Method 6010B	REMARKS / INSTRUCTIONS
24	B24-0.5	1	9/17/20	1220	Soil	Jar	X	X	-065
25	B25-0.5	1		1255					
26	B26-0.5	1		1335					
27	B27-0.5	1		1410					
28	A-0.5	1	9/17/20	0930	Soil	Jar	X	X	-066
29	B-0.5	1		1005					
30	C-0.5	1		1055					
31	D-0.5	1		1105					

Composite* name as B(24-27)-0.5

Composite* name as DUP-0.5

No. of Samples: Method of Shipment:

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

Relinquished By: Company: Ninyo & Moore	Date: 9/18/20 Time: 1150	Received By: Company:	Date: 9/18/20 Time: 11:52
Relinquished By: Company:	Date: Time:	Received By: Company:	Date: Time:
Relinquished By: Company:	Date: Time:	Received For OCA By: Company:	Date: Time:

Sample Matrix: DW - Drinking Water; GW - Groundwater; AQ - Aqueous; WW - Wastewater; SS - Soil / Solid; SW - Stormwater; OT - Other IRB

Sample Integrity: Intact: ✓ On Ice: (Yes) No @ 1 °C

1-0=

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

* Please hold remaining sample material from each individual sample container for potential further analyses.

Analysis Request & Chain of Custody Record

Lab Job No.: 35412 Page: 4 of 5

ORANGE COAST ANALYTICAL, INC. www.ocalab.com

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

4620 East Elwood Street, Suite 4
Phoenix, AZ 85040
Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION

Company: Ninyo & Moore
Send Report To: Adrian Olivares
Email: aolivares@ninyoandmoore.com
Address: 5710 Ruffin Rd.
San Diego, CA 92123
Phone: 858.576.1000 Fax: 858.576.9600

PROJECT INFORMATION

Project Name: Good Shepherd
Project Number/PO: 108788003
Site Address: 1505 Buena Vista Drive
Address (City / State): San Diego, CA
EDD Required: No
Sampled By: Tracy Thompson

REQUESTED TURN-AROUND-TIME

Standard: X
72 Hour:
48 Hour:
24 Hour:

ANALYSIS REQUEST / PRESERVATION

	Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type	Organochlorine Pesticides (OCP's) EPA Method 8081A	Total Arsenic EPSA Method 6010B					Hold – pending analysis of composite samples		REMARKS / INSTRUCTIONS
32	B1-1.5	1	9/16/20	0750	Soil	Jar							X		
33	B2-1.5	1	9/16/20	0820	Soil	Jar							X		
34	B3-1.5	1	9/16/20	0845	Soil	Jar							X		
35	B4-1.5	1	9/16/20	0910	Soil	Jar							X		
36	B5-1.5	1	9/16/20	0945	Soil	Jar							X		
37	B6-1.5	1	9/16/20	1015	Soil	Jar							X		
38	B7-1.5	1	9/16/20	1040	Soil	Jar							X		
39	B8-1.5	1	9/16/20	1110	Soil	Jar							X		
40	B9-1.5	1	9/16/20	1140	Soil	Jar							X		
41	B10-1.5	1	9/16/20	1210	Soil	Jar							X		
42	B11-1.5	1	9/16/20	1310	Soil	Jar							X		
43	B12-1.5	1	9/16/20	1340	Soil	Jar							X		
44	B13-1.5	1	9/16/20	1410	Soil	Jar							X		
45	B14-1.5	1	9/16/20	1435	Soil	Jar							X		

No. of Samples: 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
Relinquished By: [signature] Company: Ninyo + Moore	Date: 9/18/20 Time: 1150	Received By: [signature] Company:	Date: 9/18/20 Time: 11:50
Relinquished By: Company:	Date: Time:	Received By: Company:	Date: Time:
Relinquished By: Company:	Date: Time:	Received For OCA By: Company:	Date: Time:

Sample Matrix:
DW - Drinking Water
GW - Groundwater
AQ - Aqueous
WW - Wastewater
SS - Soil / Solid
SW - Stormwater
OT - Other IR#3

Sample Integrity: ✓ 1-0=
Intact: ✓ On Ice: (Yes) / No @ 1 °C

Analysis Request & Chain of Custody Record

Lab Job No.: 25442 Page: 5 of 5

ORANGE COAST ANALYTICAL, INC. www.ocalab.com

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

4620 East Elwood Street, Suite 4, Phoenix, AZ 85040 — Phone: (480) 736-0960 Fax: (480) 736-0970

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Ninyo & Moore	Project Name:	Good Shepherd
Send Report To:	Adrian Olivares	Project Number/PO:	108788003
Email:	aolivares@ninyoandmoore.com	Site Address:	1505 Buena Vista Drive
Address:	5710 Ruffin Rd.	Address (City / State):	San Diego, CA
	San Diego, CA 92123	EDD Required:	No
Phone:	858.576.1000 Fax: 858.576.9600	Sampled By:	Tracy Thompson

ANALYSIS REQUEST / PRESERVATION: Organochlorine Pesticides (OCP's) EPA Method 8081A; Total Arsenic EPSA Method 6010B; Hold - pending analysis of composite samples

REQUESTED TURN-AROUND-TIME: Standard: X; 72 Hour: ; 48 Hour: ; 24 Hour:

	Customer Sample IDs	No. of Containers	Sample Date	Sample Time	Sample Matrix	Container Type	OCP 8081A		Total Arsenic 6010B				Hold - pending analysis of composite samples			REMARKS / INSTRUCTIONS
46	B15-1.5	1	9/16/20	1505	Soil	Jar							X			
47	B16-1.5	↓	9/17/20	0750	↓	↓							X			
48	B17-1.5	↓	↓	0810	↓	↓							X			
49	B18-1.5	↓	↓	0850	↓	↓							X			
50	B19-1.5	↓	↓	0925	↓	↓							X			
51	B20-1.5	↓	↓	1000	↓	↓							X			
52	B21-1.5	↓	↓	1030	↓	↓							X			
53	B22-1.5	↓	↓	1100	↓	↓							X			
54	B23-1.5	↓	↓	1130	↓	↓							X			
55	B24-1.5	↓	↓	1250	↓	↓							X			
56	B25-1.5	↓	↓	1325	↓	↓							X			
57	B26-1.5	↓	↓	1405	↓	↓							X			
58	B27-1.5	↓	↓	1430	↓	↓							X			

No. of Samples: 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
[signature] Company: Ninyo & Moore	Date: 9/18/20 Time: 1150	[signature] Company:	Date: 9/18/20 Time: 11:50
Relinquished By: Company:	Date: Time:	Received By: Company:	Date: Time:
Relinquished By: Company:	Date: Time:	Received For OCA By: Company:	Date: Time:

Sample Matrix: DW - Drinking Water; GW - Groundwater; AQ - Aqueous; WW - Wastewater; SS - Soil / Solid; SW - Stormwater; OT - Other

IR#3

Sample Integrity: Intact: ✓ On Ice: (Yes) / No @ 1°C

1-0=

By signing above, client acknowledges responsibility for payment of all services requested on this chain of custody form and any additional services provided in support of this project. Payment is due within 30 days of invoice date unless otherwise agreed upon, in writing, by Orange Coast Analytical, Inc. All samples remain the property of the client. A disposal fee may be imposed if client fails to pickup samples upon completion of all analyses.

Sample Receipt Report

Laboratory Reference: NAM 25442 Logged in by: MM

Received:	09/18/20 11:52	Company Name:	Ninyo & Moore
Method of Shipment:	Hand Delivered	Project Manager:	Mr. Adrian Olivares
Shipping Container:	Cooler	Project Name:	Good Shepherd
# Shipping Containers:	1	Project #:	108788003

Sample Quantity
66 Soil

Chain of Custody		Complete ☑	Incomplete ☐	None ☐
Samples On Ice		Yes, Wet ☑	Yes, Blue ☐	No ☐
Observed Temp. (°C):	1	Thermometer ID: IR#3	Adjusted Temp.:	1+(-0)=1
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 _____