3Roots San Diego Project
Environmental Impact Report

SCH No. 2018041065; Project No. 587128

Appendix L

Phase II Environmental Site Assessment

June 2019

Geosyntec consultants

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5 October 2017

VIA EMAIL

Mr. Marvin Howell
Lehigh Use Planning and Permitting
Lehigh Hanson West Region
Materials South
P.O. Box 639069
San Diego, CA 92163

Subject: Phase II Investigation
Lehigh Hanson – Carroll Canyon Facility
San Diego, California

Dear Mr. Howell:

Geosyntec Consultants (Geosyntec) is pleased to submit this letter report (report) to the Lehigh Hanson West Region (Lehigh Hanson) summarizing the limited phase II site investigation in connection with the Lehigh Hanson facility located at 9255 Camino Santa Fe in San Diego, California (the Site; Figure 1). The Site is located in a mixed-use (commercial/residential/industrial) area east of Camino Santa Fe and north of Trade Street. The Site comprises approximately 412 acres and includes nine contiguous parcels of land identified by the San Diego County Assessors' Office as parcel numbers 341-050-38-00 through 341-050-42-00, 341-051-17-00 through 341-051-19-00, and 341-060-82-00.

Active mining operations at the Site initiated in the early 1960s, and continued until October 2016. In addition to former onsite mining operations, other operations at the Site include A-1 Soils (owned by Lehigh Hanson), and sub-leased facilities including Superior Ready Mix (Superior), Allan Company Recycling, Quikrete, and California Commercial Asphalt, LLC (CCA). An August 2017 Phase I ESA identified Recognized Environmental Conditions (RECs) at the site which would warrant Phase II investigation. These areas included Superior and CCA's underground storage tanks (USTs) and above ground storage tanks (ASTs), Lehigh Hanson's Fuel Truck Location, Lehigh Hanson's Drum Storage Area, the Caterpillar (CAT) Maintenance Building, and Lehigh Hanson's Concrete Washout Area (Figure 2).

The objectives of the limited subsurface investigation described herein were to further evaluate the potential impacts on Site associated with the RECs identified during the August 2017 Phase I ESA, and to assess the potential presence of constituents of concern (COCs) associated with those RECs. Furthermore, Geosyntec understands that Lehigh Hanson's desire was to focus the Phase II investigation on areas at the Site where "gross" contamination may be present resulting from the RECs which may be of concern for future property transactions and development.

SUMMARY OF FIELD ACTIVITIES

Pre-Field Activities

In accordance with the Occupational Safety and Health Administration (OSHA) requirements, a site-specific Task Hazard Analysis (THA) was prepared prior to mobilizing to the Site. Based on proposed boring depths and inferred depth to groundwater at the Site, boring permits were not required. Prior to performing subsurface investigation at the Site, Underground Service Alert (USA) was contacted at least 48-hours prior to initiation of sampling. Additionally, Geosyntec contracted with a third-party to conduct a surface geophysical survey to perform utility clearance for the proposed boring locations at the Site.

Sub-Surface Investigation

On 14 September 2017 Geosyntec mobilized to the Site with CoreProbe International (a subcontractor to Geosyntec) to conduct a subsurface investigation. A total of eighteen borings were completed to evaluate surface and subsurface soil conditions at the Site (Figure 3). All eighteen borings were advanced via direct-push drilling, and soil sampling and laboratory analyses were conducted as follows:

- Four borings were advanced in the vicinity of the Superior (S-3 and S-4) and CCA (CCA-1 and CCA-2) UST locations. Based on the inferred depth to groundwater and depth of USTs, soil samples were collected at: ground surface, four feet, eight feet, and twelve feet below ground surface (bgs). Soil samples were analyzed for Volatile Organic Compounds (VOCs) by USEPA Method 8260B, and Total Petroleum Hydrocarbons (TPH) extended range (C_6-C_{44}) by USEPA Method 8015.
- Four borings were advanced in the vicinity of the Superior (S-1 and S-2) and CCA (CCA-3 and CCA-4) AST locations, two borings were advanced at the Fuel Truck Location (FT-1 and FT-2), two borings were advanced at the Drum Storage Area (D-1 and D-2), and three borings were advanced at the CAT Maintenance Building (CAT-1 through CAT-3). Soil samples were collected for laboratory analysis at ground surface. Samples collected at two feet bgs and four feet bgs were retained for possible analyses if ground surface sample TPH concentrations exceeded 100 milligrams per kilogram (mg/kg). Soil samples were analyzed for TPH extended range (C_6-C_{44}) by USEPA Method 8015. Additionally, the CAT Maintenance Building soil samples were analyzed for VOCs by USEPA 8260B.
- Three borings were advanced at the Concrete Washout Area (C-1 through C-3) and soil samples were collected for laboratory analysis at: ground surface and two feet bgs. Samples were analyzed for pH by USEPA Method 9045C.
- Laboratory analyses were performed on a standard turn-around time.

Each boring was logged and screened in the field with a photoionization detector (PID) by a Geosyntec geologist working under the direction of a California Professional Geologist. At the conclusion of soil sampling activities, borings were backfilled with bentonite grout, and the surface at each boring was repaired with concrete. Investigative-derived waste (IDW) was stored in a 55-gallon drum and characterized to evaluate potential handling or disposal options.

SUMMARY OF ANALYTICAL RESULTS

A general summary of analytical results is described below, a tabulated summary of analytical detections for soil samples is presented in Table 1, and a copy of the laboratory analytical report is included as Attachment A.

Volatile Organic Compounds

VOCs were not detected above the laboratory reporting limits (RLs) specified on the laboratory analytical reports.

pH

Surface sample pH concentrations collected at the Concrete Washout Area ranged from 10.75 to 11.65 pH units, and two-foot samples ranged from 8.90 to 9.19 pH units.

TPH extended range (C_6-C_{44})

Total Petroleum Hydrocarbon extended range (C_6-C_{44}) analytical results were compared to conservative Tier 1 Environmental Screening Levels (ESLs) for unrestricted land use established by the San Francisco Bay Regional Water Quality Control Board [SF-RWQCB, 2016]. The following Tier 1 ESLs for soil were referenced:

- TPHg (gasoline range – C_5-C_{12}): 100 mg/kg
- TPHd (diesel fuel range – C_{10} to C_{24}): 230 mg/kg
- TPHmo (motor oil range – C_{24} to C_{36+}): 5,100 mg/kg

Superior Facility (S-1 through S-4):

TPH extended range (C_6-C_{44}) concentrations in 8 soil samples collected from depths of the ground surface to 12 feet below ground surface at Superior's UST area ranged from <4.9 milligrams per kilogram (mg/kg) (non-detect) to 9.3 mg/kg. None of the soil samples contained TPH at concentrations exceeding the TPHg, TPHd, or TPHmo screening levels.

TPH extended range (C_6-C_{44}) concentrations in 5 soil samples collected from depths of the ground surface to 4 feet below ground surface at Superior's AST area ranged from <5 mg/kg (non-detect) to 2,700 mg/kg. TPH extended range (C_6-C_{44}) concentrations decreased with depth. Only the surface soil samples at locations S-1 and S-2, and the 2-foot soil sample at S-2 contained TPH at concentrations exceeding the TPHd screening level. The deeper samples collected at locations S-1 and S-2 did not contain TPH at concentrations exceeding the TPHg, TPHd, or TPHmo screening levels.

CCA Facility (CCA-1 through CCA-4):

TPH extended range (C_6-C_{44}) concentrations in 8 soil samples collected from depths of the ground surface to 12 feet below ground surface at CCA's UST area ranged from <4.9 mg/kg (non-detect) to 130 mg/kg. None of the soil samples contained TPH at concentrations exceeding the TPHg, TPHd, or TPHmo screening levels.

TPH extended range (C_6-C_{44}) concentrations in 5 soil samples collected from depths of the ground surface to 4 feet below ground surface at CCA's AST area ranged from <4.9 mg/kg (non-detect) to 4,700 mg/kg. Only the 2-foot soil sample at CCA-4 contained TPH at concentrations exceeding the TPHd screening level. The remaining soil samples collected at locations CCA-3 and CCA-4 did not contain TPH at concentrations exceeding the TPHg, TPHd, or TPHmo screening levels.

CAT Maintenance Building (CAT-1 through CAT-3):

TPH extended range (C_6-C_{44}) concentrations in 4 soil samples collected from depths of the ground surface to 2 feet below ground surface at the CAT Maintenance Building ranged from 12 mg/kg to 820 mg/kg. Only the surface soil sample at CAT-3 contained TPH at concentrations exceeding the TPHd screening level. The remaining soil samples collected at locations CAT-1, -2, and -3 did not contain TPH at concentrations exceeding the TPHg, TPHd, or TPHmo screening levels.

Fuel Truck Location (FT-1 and FT-2):

TPH extended range (C_6-C_{44}) concentrations in 3 soil samples collected from depths of the ground surface to 2 feet below ground surface at the Fuel Truck Location ranged from <5 mg/kg (non-detect) to 320 mg/kg. None of the Fuel Truck Location soil samples contained TPH at concentrations exceeding the TPHg, TPHd, or TPHmo screening levels.

Drum Storage Area (D-1 and D-2):

TPH extended range (C_6-C_{44}) concentrations in 4 soil samples collected from depths of the ground surface to 2 feet below ground surface at the Drum Storage Area ranged from <4.9 mg/kg (non-detect) to 7,300 mg/kg. Only the surface soil sample at D-2 contained TPH at concentrations exceeding the TPHd and TPHmo screening level. The remaining soil samples collected at locations D-1 and -2 did not contain TPH at concentrations exceeding the TPHg, TPHd, or TPHmo screening levels.

SUMMARY AND CONCLUSIONS

This report summarizes the results of the limited soil investigation at the Site to evaluate the potential impacts due to recognized environmental conditions and other COCs. Soil samples analyzed for VOCs did not contain detectable concentrations above the RL. Elevated pH concentrations were identified in the surface soil samples at the Concrete Washout Area; however, concentrations decreased at a depth of 2 feet. Soil samples with TPH at concentrations

exceeding established screening levels for TPHd and/or TPHmo were localized. In each instance, the deeper sample at those locations did not contain TPH at concentrations exceeding the TPHg, TPHd, or TPHmo screening levels indicating the localized impacts were vertically delineated. Based on the results of this limited soil investigation, relatively minor soil impacts can be effectively managed through soil management activities to achieve a site suitable for residential and/or commercial redevelopment.

LIMITATIONS

This limited shallow soil investigation was performed according to the agreed upon scope of work with Lehigh Hanson, and does not represent an exhaustive investigation of all potential environmental impacts at the Site. The findings of this report, to the best of our knowledge, are valid as of the date of this work. However, changes in the conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate regulations and standards may occur, whether they result from legislation, from the broadening of knowledge, or from other reasons. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside our control. The work was performed using the degree of care and skill ordinarily exercised under similar circumstances by environmental consultants practicing in this or similar localities. No other warranty or guarantee, expressed or implied, is made as to the findings, opinions, conclusions, and recommendations included in this report.

Geosyntec appreciates this opportunity to provide environmental consulting services to Lehigh Hanson. If you have any questions or require additional information please contact us at the numbers listed below.

Sincerely,

Veryl Wittig, PG, CHG
Project Director
(858) 716-2903

Chris Lieder, PG
Senior Geologist
(619) 810-4034

Attachments:

Table 1 – Summary of Soil Analytical Results
Figure 1 – Site Location
Figure 2 – Site Features
Figure 3 – Soil Sample Locations
Appendix A – Laboratory Analytical Data

References:

San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs) for Tier 1 Soil (February 2016).

Table

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Table 1
Summary of Soil Analytical Results
Carroll Canyon PIIESA
San Diego, California

		Superior ASTs					Superior USTs								CCA UST							
		S-1			S-2		S-3				S-4				CCA-1				CCA-2			
	Units	S	2 ft	4 ft	S	2 ft	S	4 ft	8 ft	12 ft	S	4 ft	8 ft	12 ft	S	4 ft	8 ft	12 ft	S	4 ft	8 ft	12 ft
pH	pH units	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TPH																						
C6	mg/kg	<5.0	<4.9	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	<5.0
C7	mg/kg	<5.0	<4.9	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	<5.0
C8	mg/kg	<5.0	<4.9	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	<5.0
C9-C10	mg/kg	7.2	<4.9	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	<5.0
C11-C12	mg/kg	44	<4.9	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	<5.0
C13-C14	mg/kg	85	5.5	<5.0	82	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	<5.0
C15-C16	mg/kg	130	<4.9	<5.0	69	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	<5.0
C17-C18	mg/kg	160	<4.9	<5.0	56	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	<5.0
C19-C20	mg/kg	120	74	<5.0	600	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	8.7
C21-C22	mg/kg	83	330	<5.0	940	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	11
C23-C24	mg/kg	49	34	<5.0	450	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	13
C25-C28	mg/kg	68	13	<5.0	280	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	34
C29-C32	mg/kg	42	5.0	<5.0	140	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	44
C33-C36	mg/kg	<5.0	<4.9	<5.0	56	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	15
C37-C40	mg/kg	<5.0	<4.9	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	<5.0
C41-C44	mg/kg	<5.0	<4.9	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<4.9	<5.0	<5.0	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	<5.0	<5.0
C6-C44 Total	mg/kg	790	470	<5.0	2700	<5.0	<5.0	9.3	<5.0	<5.0	5.4	<5.0	6.3	<4.9	<5.0	<5.0	<5.0	<4.9	<4.9	<5.0	11	130
Volatile Organic Compounds																						
2-Butanone	µg/L	NA	NA	NA	NA	NA	<51	<50	<50	<50	<50	<50	<50	<50	<49	<50	<50	<50	<50	<50	<50	<50
Acetone	µg/L	NA	NA	NA	NA	NA	<130	<130	<120	<120	<130	<120	<120	<130	<120	<120	<120	<120	<120	<120	<120	<130

Notes:
EB - Equipment Blank
µg/L - micrograms per liter
mg/kg - milligram per kilogram
NA - Not analyzed□
< Not detected at concentrations greater than or equal to the laboratory reporting limit (RL)
S = Surface Sample

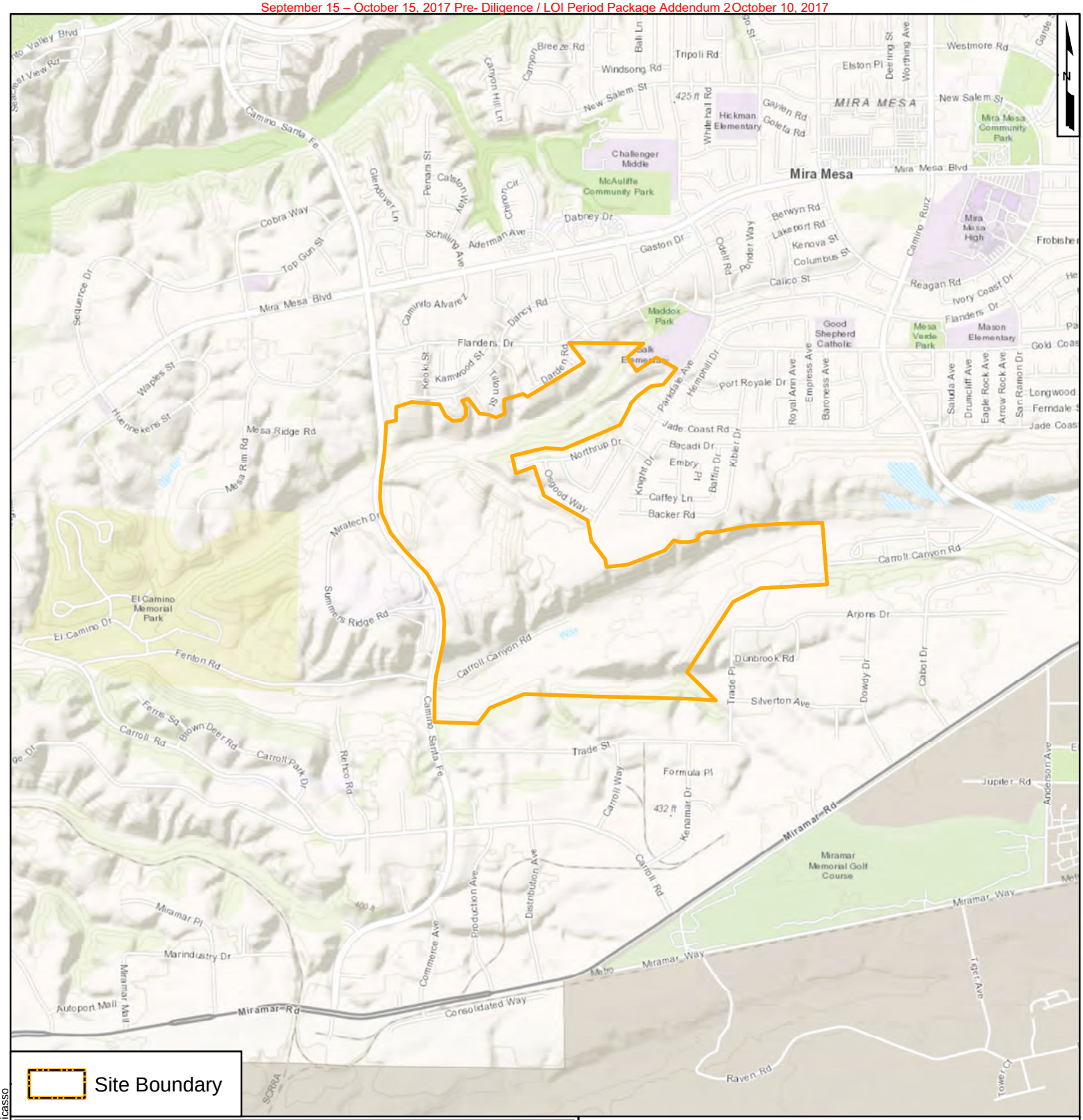
Geosyntec consultants

Table 1
Summary of Soil Analytical Results
Carroll Canyon PIIESA
San Diego, California

		CCA ASTs					Fuel Truck			Drum Storage Area				CAT Maintenance Building				Concrete Washout Area						Quality Control Sample
		CCA -3		CCA-4			FT-1	FT-2		D-1		D-2		CAT-1	CAT-2	CAT-3		C-1		C-2		C-3		EB-20170914
	Units	S	2 ft	S	2 ft	4 ft	S	S	2 ft	S	2 ft	S	2 ft	S	S	S	2 ft	S	2 ft	S	2 ft	S	2 ft	
pH	pH units	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.65	9.19	10.84	8.90	10.75	9.13	NA
TPH																								
C6	mg/kg	<50	<4.9	<99	<25	<5.1	<5.0	<4.9	<5.0	<5.0	<4.9	<50	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA
C7	mg/kg	<50	<4.9	<99	<25	<5.1	<5.0	<4.9	<5.0	<5.0	<4.9	<50	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA
C8	mg/kg	<50	<4.9	<99	<25	<5.1	<5.0	<4.9	<5.0	<5.0	<4.9	<50	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA
C9-C10	mg/kg	<50	<4.9	<99	<25	<5.1	<5.0	<4.9	<5.0	<5.0	<4.9	<50	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA
C11-C12	mg/kg	<50	<4.9	<99	90	<5.1	<5.0	<4.9	<5.0	<5.0	<4.9	<50	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA
C13-C14	mg/kg	<50	<4.9	<99	240	<5.1	<5.0	<4.9	<5.0	<5.0	<4.9	<50	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA
C15-C16	mg/kg	<50	<4.9	<99	340	<5.1	<5.0	<4.9	<5.0	<5.0	<4.9	<50	<5.0	<5.0	<5.0	6.2	<5.0	NA	NA	NA	NA	NA	NA	NA
C17-C18	mg/kg	<50	<4.9	<99	320	<5.1	<5.0	<4.9	<5.0	<5.0	<4.9	81	<5.0	<5.0	<5.0	21	<5.0	NA	NA	NA	NA	NA	NA	NA
C19-C20	mg/kg	<50	<4.9	<99	210	<5.1	<5.0	7.0	<5.0	<5.0	<4.9	140	22	<5.0	<5.0	41	<5.0	NA	NA	NA	NA	NA	NA	NA
C21-C22	mg/kg	<50	<4.9	<99	310	<5.1	<5.0	22	<5.0	14	<4.9	330	38	<5.0	<5.0	77	<5.0	NA	NA	NA	NA	NA	NA	NA
C23-C24	mg/kg	<50	<4.9	<99	580	<5.1	9.6	45	<5.0	26	<4.9	950	13	<5.0	6.4	140	<5.0	NA	NA	NA	NA	NA	NA	NA
C25-C28	mg/kg	110	<4.9	160	1400	<5.1	23	110	<5.0	48	<4.9	2700	7.9	<5.0	14	270	6.9	NA	NA	NA	NA	NA	NA	NA
C29-C32	mg/kg	110	<4.9	280	1100	<5.1	19	84	<5.0	29	<4.9	2000	5.0	<5.0	9.2	210	<5.0	NA	NA	NA	NA	NA	NA	NA
C33-C36	mg/kg	<50	<4.9	110	140	<5.1	11	39	<5.0	8.0	<4.9	810	<5.0	<5.0	<5.0	42	<5.0	NA	NA	NA	NA	NA	NA	NA
C37-C40	mg/kg	<50	<4.9	<99	<25	<5.1	<5.0	13	<5.0	<5.0	<4.9	140	<5.0	<5.0	<5.0	5.8	<5.0	NA	NA	NA	NA	NA	NA	NA
C41-C44	mg/kg	<50	<4.9	<99	<25	<5.1	<5.0	<4.9	<5.0	<5.0	<4.9	<50	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA
C6-C44 Total	mg/kg	340	<4.9	740	4700	<5.1	75	320	<5.0	130	<4.9	7300	94	12	44	820	17	NA	NA	NA	NA	NA	NA	NA
Volatile Organic Compounds																								
2-Butanone	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<51	<49	<50	NA	NA	NA	NA	NA	NA	NA	5.3
Acetone	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<130	<120	<120	NA	NA	NA	NA	NA	NA	NA	26

Notes:
EB - Equipment Blank
µg/L - micrograms per liter
mg/kg - milligram per kilogram
NA - Not analyzed□
< Not detected at concentrations greater tha
S = Surface Sample

Figures



2,000 1,000 0 2,000 Feet

Site Location

Carroll Canyon
9255 Camino Santa Fe
San Diego, California

Geosyntec consultants

San Diego	October 2017	Figure 1

V:\GIS\SC0897 CarrollCanyon\PIIESA\SiteLocation.mxd APicasso

150 75 0 150 Feet

Site Features

Carroll Canyon
9255 Camino Santa Fe
San Diego, California

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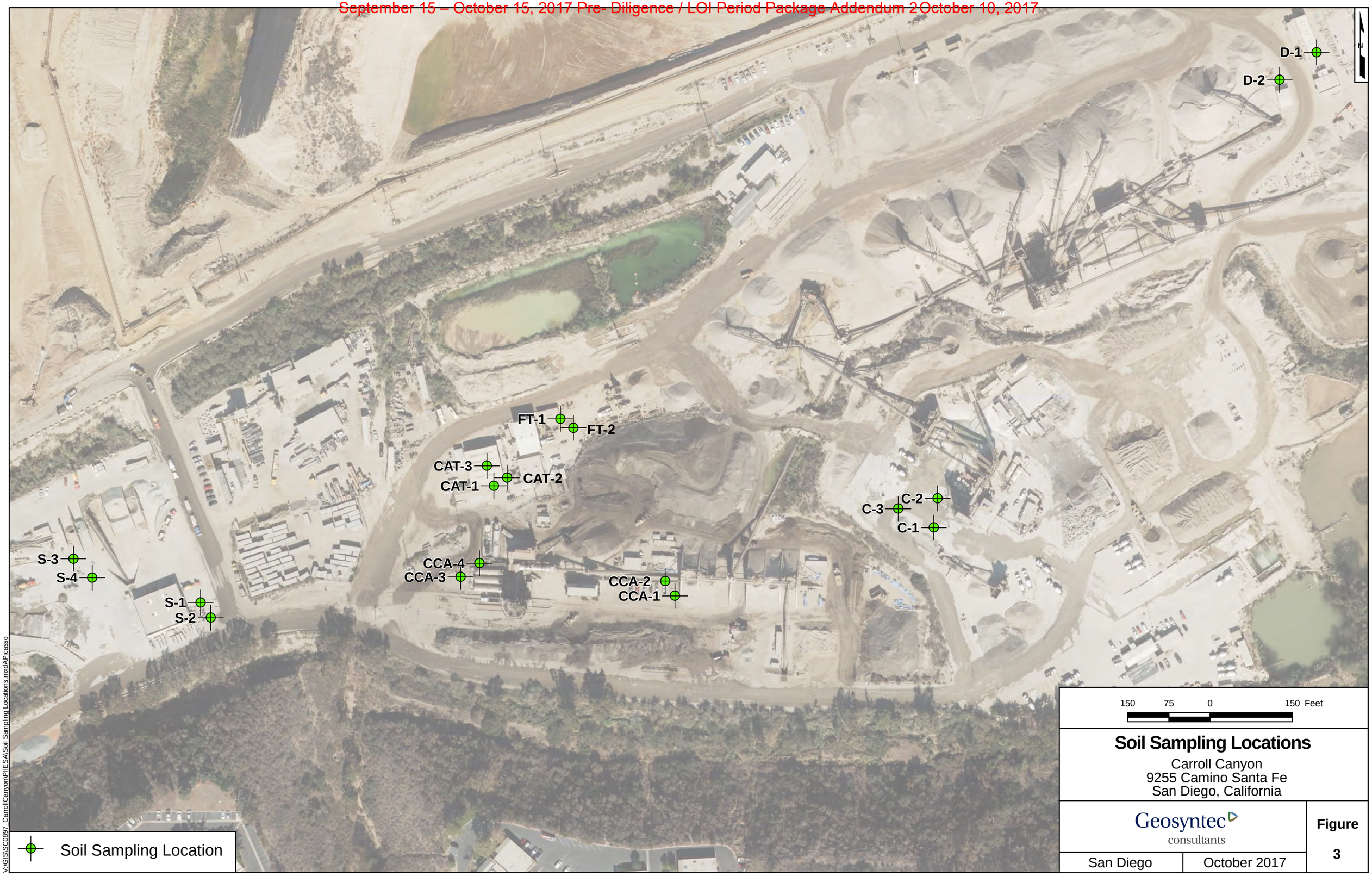
San Diego | October 2017

Figure 2

V:\GIS\SC0897_CarrollCanyon\PIIES\ASiteFeatures.mxd\Picasso



Soil Sampling Locations

Carroll Canyon
9255 Camino Santa Fe
San Diego, California

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San Diego | October 2017

Figure 3

V:\GIS\SC0897_CarrollCanyonPIIES\A\Soil Sampling Locations.mxd\APicasso

Laboratory Analytical Data

eurofins | Calscience

WORK ORDER NUMBER: 17-09-1117

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Geosyntec Consultants

Client Project Name: PII ESA Carroll Canyon / SC0897

Attention: Chris Lieder
16644 West Bernardo Drive
Suite 301
San Diego, CA 92127-1901

Approved for release on 09/25/2017 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

eurofins | Calscience

Contents

Client Project Name: PII ESA Carroll Canyon / SC0897
Work Order Number: 17-09-1117

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Work Order Narrative

Work Order: 17-09-1117 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/14/17. They were assigned to Work Order 17-09-1117.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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Sample Summary

Client:	Geosyntec Consultants	Work Order:	17-09-1117
	16644 West Bernardo Drive, Suite 301	Project Name:	PII ESA Carroll Canyon / SC0897
	San Diego, CA 92127-1901	PO Number:	
		Date/Time Received:	09/14/17 19:05
		Number of Containers:	6
Attn:	Chris Lieder		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
C-1-S	17-09-1117-1	09/14/17 14:45	1	Solid
C-1-2	17-09-1117-2	09/14/17 14:45	1	Solid
C-2-S	17-09-1117-3	09/14/17 14:55	1	Solid
C-2-2	17-09-1117-4	09/14/17 14:57	1	Solid
C-3-S	17-09-1117-5	09/14/17 15:09	1	Solid
C-3-2	17-09-1117-6	09/14/17 15:10	1	Solid

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Detections Summary

Client:	Geosyntec Consultants	Work Order:	17-09-1117
	16644 West Bernardo Drive, Suite 301	Project Name:	PII ESA Carroll Canyon / SC0897
	San Diego, CA 92127-1901	Received:	09/14/17
Attn:	Chris Lieder		Page 1 of 1

Client SampleID Analyte	Result	Qualifiers	RL	Units	Method	Extraction
C-1-S (17-09-1117-1)						
pH	11.65		0.01	pH units	EPA 9045C	N/A
C-1-2 (17-09-1117-2)						
pH	9.19		0.01	pH units	EPA 9045C	N/A
C-2-S (17-09-1117-3)						
pH	10.84		0.01	pH units	EPA 9045C	N/A
C-2-2 (17-09-1117-4)						
pH	8.90		0.01	pH units	EPA 9045C	N/A
C-3-S (17-09-1117-5)						
pH	10.75		0.01	pH units	EPA 9045C	N/A
C-3-2 (17-09-1117-6)						
pH	9.13		0.01	pH units	EPA 9045C	N/A

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/14/17
Work Order: 17-09-1117
Preparation: N/A
Method: EPA 9045C
Units: pH units

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-S	**17-09-1117-1-A**	**09/14/17 14:45**	**Solid**	**PH 4**	**09/15/17**	**09/15/17 19:45**	**H0915PHD2**

Parameter	Result	RL	DF	Qualifiers
pH	11.65	0.01	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-1-2	**17-09-1117-2-A**	**09/14/17 14:45**	**Solid**	**PH 4**	**09/15/17**	**09/15/17 19:45**	**H0915PHD2**

Parameter	Result	RL	DF	Qualifiers
pH	9.19	0.01	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-2-S	**17-09-1117-3-A**	**09/14/17 14:55**	**Solid**	**PH 4**	**09/15/17**	**09/15/17 19:45**	**H0915PHD2**

Parameter	Result	RL	DF	Qualifiers
pH	10.84	0.01	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-2-2	**17-09-1117-4-A**	**09/14/17 14:57**	**Solid**	**PH 4**	**09/15/17**	**09/15/17 19:45**	**H0915PHD2**

Parameter	Result	RL	DF	Qualifiers
pH	8.90	0.01	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-3-S	**17-09-1117-5-A**	**09/14/17 15:09**	**Solid**	**PH 4**	**09/15/17**	**09/15/17 19:45**	**H0915PHD2**

Parameter	Result	RL	DF	Qualifiers
pH	10.75	0.01	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
C-3-2	**17-09-1117-6-A**	**09/14/17 15:10**	**Solid**	**PH 4**	**09/15/17**	**09/15/17 19:45**	**H0915PHD2**

Parameter	Result	RL	DF	Qualifiers
pH	9.13	0.01	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Sample Duplicate

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Project: PII ESA Carroll Canyon / SC0897

Date Received: 09/14/17
Work Order: 17-09-1117
Preparation: N/A
Method: EPA 9045C

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
C-3-S	**Sample**	**Solid**	**PH 4**	**09/15/17 00:00**	**09/15/17 19:45**	**H0915PHD2**
C-3-S	**Sample Duplicate**	**Solid**	**PH 4**	**09/15/17 00:00**	**09/15/17 19:45**	**H0915PHD2**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
pH	10.75	10.67	1	0-25	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-09-1117 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 9045C	N/A	1068	PH 4	1

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Glossary of Terms and Qualifiers

Work Order: 17-09-1117 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Document Number: 11153

Analysis Request and Chain of Custody Record

Project Name: PIESA carrollcanyon	Project Number: SC0897	Required Analyses: VOCs by ____; Metals; SVOCs by 8270; pH (9045C)
Samplers Names: A. Picasso	Project Contact: Chris Lieder (clieder@geosyntec.com)	
Laboratory Name: Eurofins Calscience	Lab Contact: Stephen Nowak	
Lab Address: 7440 Lincoln Way Garden Grove CA 92841	Lab Phone: (714) 895 5494	
	Carrier/Waybill No.	

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17-09-1117

White copy: to accompany samples

Yellow copy: field copy

	Sample Name	Date	Time	Sample Type	Bottle Type and Volume/Preservative / Number of Containers	Comments	Lab Use Only: Condition of Bottles
1	~~S-1-SAP~~ C-1-S	9/14/17	1445	Soil	X		
2	~~S-1-2AP~~ C-1-2		1445		X		
3	~~S-1-4AP~~ C-2-S		1455		X		
4	C-2-2		1457		X		
5	C-3-S		1509		X		
6	C-3-2		1510		X		

Special Instructions:

Turn-around Time: ☒ Normal ☐ Rush: _____

1. Relinquished by (Signiture/Affiliation)	Date 9/14/17 Time 1615	1. Received by (Signiture/Affiliation)	Date 09/14/17 Time 1615
2. Relinquished by (Signiture/Affiliation)	Date 09/14/17 Time 19:05	2. Received by (Signiture/Affiliation)	Date 9/14/17 Time 19:05
3. Relinquished by (Signiture/Affiliation)	Date Time	3. Received by (Signiture/Affiliation)	Date Time

Geosyntec consultants
10875 Rancho Bernardo Road, Suite 200, San Diego, CA 92127 (858) 674-6559 Fax: (858) 674-6586

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WORK ORDER NUMBER: 17-09-1117

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: GeoSyntec

DATE: 09/14/2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 3.1 °C (w/ CF): 3.3 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 671

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 1017

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☐	☑	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	☐	☐	☑
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB ☐ 125PB**znna** (pH__9)

☐ 250AGB ☐ 250CGB ☐ 250CGB**s** (pH__2) ☐ 250PB ☐ 250PB**n** (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s** (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** (pH__2) ☐ 1AGB**s** (O&G) ☐ 1PB ☐ 1PB**na** (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☑ 8ozCGJ (1) ☐ 16ozCGJ ☐ Sleeve (___) ☐ EnCores® (___) ☐ TerraCores® (___) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, Labeled/Checked by: 1017

s = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH Reviewed by: 720

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WORK ORDER NUMBER: 17-09- 1117

SAMPLE ANOMALY REPORT

DATE: 09 / 14 / 2017

SAMPLES, CONTAINERS, AND LABELS: | **Comments**

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☐ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ pH outside acceptable range (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☑ Client sample label(s) do not match COC (comment) — (-2) Collection time per label is 1446.
  - ☐ Project information
  - ☐ Client sample ID
  - ☑ Sampling date and/or time
  - ☐ Number of container(s)
  - ☐ Requested analysis
- ☐ Sample container(s) compromised (comment)
  - ☐ Broken
  - ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
  - ☐ Flat
  - ☐ Very low in volume
  - ☐ Leaking (not transferred; duplicate bag submitted)
  - ☐ Leaking (transferred into ECI Tedlar™ bags*)
  - ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

MISCELLANEOUS: (Describe) | **Comments**

HEADSPACE:

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments: ______

Reported by: 1017

Reviewed by: [signature]

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

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WORK ORDER NUMBER: 17-09-1241

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Geosyntec Consultants

Client Project Name: PII ESA Carroll Canyon / SC0897

Attention: Chris Lieder
16644 West Bernardo Drive
Suite 301
San Diego, CA 92127-1901

Approved for release on 09/25/2017 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

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Client Project Name: PII ESA Carroll Canyon / SC0897
Work Order Number: 17-09-1241

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Work Order Narrative

Work Order: 17-09-1241 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/15/17. They were assigned to Work Order 17-09-1241.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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Sample Summary

Client:	Geosyntec Consultants 16644 West Bernardo Drive, Suite 301 San Diego, CA 92127-1901	Work Order:	17-09-1241
		Project Name:	PII ESA Carroll Canyon / SC0897
		PO Number:	
		Date/Time Received:	09/15/17 18:40
		Number of Containers:	50
Attn:	Chris Lieder		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
S-1-S	17-09-1241-1	09/14/17 08:57	1	Solid
S-1-2	17-09-1241-2	09/14/17 08:58	1	Solid
S-1-4	17-09-1241-3	09/14/17 09:00	1	Solid
S-2-S	17-09-1241-4	09/14/17 09:08	1	Solid
S-2-2	17-09-1241-5	09/14/17 09:09	1	Solid
S-2-4	17-09-1241-6	09/14/17 09:10	1	Solid
S-4-S	17-09-1241-7	09/14/17 09:39	1	Solid
S-4-4	17-09-1241-8	09/14/17 09:40	1	Solid
S-4-8	17-09-1241-9	09/14/17 09:44	1	Solid
S-4-12	17-09-1241-10	09/14/17 09:47	1	Solid
S-3-S	17-09-1241-11	09/14/17 10:00	1	Solid
S-3-4	17-09-1241-12	09/14/17 10:01	1	Solid
S-3-8	17-09-1241-13	09/14/17 10:05	1	Solid
S-3-12	17-09-1241-14	09/14/17 10:07	1	Solid
CCA-1-S	17-09-1241-15	09/14/17 10:44	1	Solid
CCA-1-4	17-09-1241-16	09/14/17 10:45	1	Solid
CCA-1-8	17-09-1241-17	09/14/17 10:50	1	Solid
CCA-1-12	17-09-1241-18	09/14/17 11:04	1	Solid
CCA-2-S	17-09-1241-19	09/14/17 11:12	1	Solid
CCA-2-4	17-09-1241-20	09/14/17 11:15	1	Solid
CCA-2-8	17-09-1241-21	09/14/17 11:25	1	Solid
CCA-2-12	17-09-1241-22	09/14/17 11:50	1	Solid
EB-20170914	17-09-1241-23	09/14/17 11:50	1	Aqueous
CCA-3-S	17-09-1241-24	09/14/17 12:52	1	Solid
CCA-3-2	17-09-1241-25	09/14/17 12:54	1	Solid
CCA-3-4	17-09-1241-26	09/14/17 12:55	1	Solid
CCA-4-S	17-09-1241-27	09/14/17 13:02	1	Solid
CCA-4-2	17-09-1241-28	09/14/17 13:04	1	Solid
CCA-4-4	17-09-1241-29	09/14/17 13:06	1	Solid
CAT-1-S	17-09-1241-30	09/14/17 13:25	1	Solid
CAT-1-2	17-09-1241-31	09/14/17 13:27	1	Solid
CAT-1-4	17-09-1241-32	09/14/17 13:28	1	Solid
CAT-2-S	17-09-1241-33	09/14/17 13:42	1	Solid
CAT-2-2	17-09-1241-34	09/14/17 13:43	1	Solid
CAT-2-4	17-09-1241-35	09/14/17 13:45	1	Solid
CAT-3-S	17-09-1241-36	09/14/17 14:07	1	Solid
CAT-3-2	17-09-1241-37	09/14/17 14:09	1	Solid
CAT-3-4	17-09-1241-38	09/14/17 14:10	1	Solid
FT-2-S	17-09-1241-39	09/14/17 14:17	1	Solid
FT-2-2	17-09-1241-40	09/14/17 14:18	1	Solid
FT-2-4	17-09-1241-41	09/14/17 14:19	1	Solid
FT-1-S	17-09-1241-42	09/14/17 14:20	1	Solid

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Sample Summary

Client:	Geosyntec Consultants 16644 West Bernardo Drive, Suite 301 San Diego, CA 92127-1901	Work Order:	17-09-1241
		Project Name:	PII ESA Carroll Canyon / SC0897
		PO Number:	
		Date/Time Received:	09/15/17 18:40
		Number of Containers:	50
Attn:	Chris Lieder		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
FT-1-2	17-09-1241-43	09/14/17 14:22	1	Solid
FT-1-4	17-09-1241-44	09/14/17 14:24	1	Solid
D-1-S	17-09-1241-45	09/14/17 15:27	1	Solid
D-1-2	17-09-1241-46	09/14/17 15:28	1	Solid
D-1-4	17-09-1241-47	09/14/17 15:29	1	Solid
D-2-S	17-09-1241-48	09/14/17 15:39	1	Solid
D-2-2	17-09-1241-49	09/14/17 15:40	1	Solid
D-2-4	17-09-1241-50	09/14/17 15:41	1	Solid

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Detections Summary

Client: Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Work Order: 17-09-1241
Project Name: PII ESA Carroll Canyon / SC0897
Received: 09/15/17

Attn: Chris Lieder

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
S-1-S (17-09-1241-1)						
C9-C10	7.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C11-C12	44		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	85		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	130		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	160		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	120		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	83		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	49		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	68		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	42		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	790		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
S-2-S (17-09-1241-4)						
C13-C14	82		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	69		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	56		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	600		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	940		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	450		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	280		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	140		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	56		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	2700		25	mg/kg	EPA 8015B (M)	EPA 3550B
S-4-S (17-09-1241-7)						
C6-C44 Total	5.4		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
S-4-8 (17-09-1241-9)						
C6-C44 Total	6.3		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
S-3-4 (17-09-1241-12)						
C6-C44 Total	9.3		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
CCA-2-8 (17-09-1241-21)						
C6-C44 Total	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
CCA-2-12 (17-09-1241-22)						
C19-C20	8.7		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	34		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	44		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	15		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	130		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

* MDL is shown

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Detections Summary

Client: Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Work Order: 17-09-1241
Project Name: PII ESA Carroll Canyon / SC0897
Received: 09/15/17

Attn: Chris Lieder

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
EB-20170914 (17-09-1241-23)						
2-Butanone	5.3		5.0	ug/L	EPA 8260B	EPA 5030C
Acetone	26		10	ug/L	EPA 8260B	EPA 5030C
CCA-3-S (17-09-1241-24)						
C25-C28	110		50	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	110		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	340		50	mg/kg	EPA 8015B (M)	EPA 3550B
CCA-4-S (17-09-1241-27)						
C25-C28	160		99	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	280		99	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	110		99	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	740		99	mg/kg	EPA 8015B (M)	EPA 3550B
CAT-1-S (17-09-1241-30)						
C6-C44 Total	12		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
CAT-2-S (17-09-1241-33)						
C23-C24	6.4		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	9.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	44		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
CAT-3-S (17-09-1241-36)						
C15-C16	6.2		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	21		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	41		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	77		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	140		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	270		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	210		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	42		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	5.8		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	820		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
FT-2-S (17-09-1241-39)						
C19-C20	7.0		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	22		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	45		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	110		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	84		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	39		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	13		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	320		4.9	mg/kg	EPA 8015B (M)	EPA 3550B

* MDL is shown

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Detections Summary

Client: Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Work Order: 17-09-1241
Project Name: PII ESA Carroll Canyon / SC0897
Received: 09/15/17

Attn: Chris Lieder

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
FT-1-S (17-09-1241-42)						
C23-C24	9.6		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	23		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	19		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	75		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
D-1-S (17-09-1241-45)						
C21-C22	14		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	26		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	48		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	29		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	8.0		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	130		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
D-2-S (17-09-1241-48)						
C17-C18	81		50	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	140		50	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	330		50	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	950		50	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	2700		50	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	2000		50	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	810		50	mg/kg	EPA 8015B (M)	EPA 3550B
C37-C40	140		50	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	7300		50	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-1-S	**17-09-1241-1-A**	**09/14/17 08:57**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 20:59**	**170918B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	7.2	5.0	1.00	
C11-C12	44	5.0	1.00	
C13-C14	85	5.0	1.00	
C15-C16	130	5.0	1.00	
C17-C18	160	5.0	1.00	
C19-C20	120	5.0	1.00	
C21-C22	83	5.0	1.00	
C23-C24	49	5.0	1.00	
C25-C28	68	5.0	1.00	
C29-C32	42	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	790	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	109	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-2-S	**17-09-1241-4-A**	**09/14/17 09:08**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 21:53**	**170918B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	ND	25	5.00	
C11-C12	ND	25	5.00	
C13-C14	82	25	5.00	
C15-C16	69	25	5.00	
C17-C18	56	25	5.00	
C19-C20	600	25	5.00	
C21-C22	940	25	5.00	
C23-C24	450	25	5.00	
C25-C28	280	25	5.00	
C29-C32	140	25	5.00	
C33-C36	56	25	5.00	
C37-C40	ND	25	5.00	
C41-C44	ND	25	5.00	
C6-C44 Total	2700	25	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	120	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-4-S	**17-09-1241-7-A**	**09/14/17 09:39**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 21:40**	**170918B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	5.4	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	114	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-4-4	**17-09-1241-8-A**	**09/14/17 09:40**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 21:59**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-4-8	**17-09-1241-9-A**	**09/14/17 09:44**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 22:20**	**170918B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	6.3	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-4-12	**17-09-1241-10-A**	**09/14/17 09:47**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 22:40**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-S	**17-09-1241-11-A**	**09/14/17 10:00**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 23:00**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	108	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-4	**17-09-1241-12-A**	**09/14/17 10:01**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 23:20**	**170918B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	9.3	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-8	**17-09-1241-13-A**	**09/14/17 10:05**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 23:40**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	107	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-12	**17-09-1241-14-A**	**09/14/17 10:07**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 00:00**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-1-S	**17-09-1241-15-A**	**09/14/17 10:44**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 00:20**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-1-4	**17-09-1241-16-A**	**09/14/17 10:45**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 00:40**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-1-8	**17-09-1241-17-A**	**09/14/17 10:50**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 01:00**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-1-12	**17-09-1241-18-A**	**09/14/17 11:04**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 01:20**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	109	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-2-S	**17-09-1241-19-A**	**09/14/17 11:12**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 01:41**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-2-4	**17-09-1241-20-A**	**09/14/17 11:15**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 02:00**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-2-8	**17-09-1241-21-A**	**09/14/17 11:25**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 02:21**	**170918B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	11	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	106	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-2-12	**17-09-1241-22-A**	**09/14/17 11:50**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 02:41**	**170918B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	8.7	5.0	1.00	
C21-C22	11	5.0	1.00	
C23-C24	13	5.0	1.00	
C25-C28	34	5.0	1.00	
C29-C32	44	5.0	1.00	
C33-C36	15	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	130	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-3-S	**17-09-1241-24-A**	**09/14/17 12:52**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 03:01**	**170918B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10.0	
C7	ND	50	10.0	
C8	ND	50	10.0	
C9-C10	ND	50	10.0	
C11-C12	ND	50	10.0	
C13-C14	ND	50	10.0	
C15-C16	ND	50	10.0	
C17-C18	ND	50	10.0	
C19-C20	ND	50	10.0	
C21-C22	ND	50	10.0	
C23-C24	ND	50	10.0	
C25-C28	110	50	10.0	
C29-C32	110	50	10.0	
C33-C36	ND	50	10.0	
C37-C40	ND	50	10.0	
C41-C44	ND	50	10.0	
C6-C44 Total	340	50	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	121	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-4-S	**17-09-1241-27-A**	**09/14/17 13:02**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 03:21**	**170918B12**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	99	20.0	
C7	ND	99	20.0	
C8	ND	99	20.0	
C9-C10	ND	99	20.0	
C11-C12	ND	99	20.0	
C13-C14	ND	99	20.0	
C15-C16	ND	99	20.0	
C17-C18	ND	99	20.0	
C19-C20	ND	99	20.0	
C21-C22	ND	99	20.0	
C23-C24	ND	99	20.0	
C25-C28	160	99	20.0	
C29-C32	280	99	20.0	
C33-C36	110	99	20.0	
C37-C40	ND	99	20.0	
C41-C44	ND	99	20.0	
C6-C44 Total	740	99	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	126	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897 Page 21 of 29

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CAT-1-S	**17-09-1241-30-A**	**09/14/17 13:25**	**Solid**	**GC 45**	**09/18/17**	**09/19/17 14:33**	**170918B13**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	12	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CAT-2-S	**17-09-1241-33-A**	**09/14/17 13:42**	**Solid**	**GC 45**	**09/18/17**	**09/19/17 14:54**	**170918B13**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	6.4	5.0	1.00	
C25-C28	14	5.0	1.00	
C29-C32	9.2	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	44	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	97	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CAT-3-S	**17-09-1241-36-A**	**09/14/17 14:07**	**Solid**	**GC 45**	**09/18/17**	**09/19/17 15:17**	**170918B13**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	6.2	5.0	1.00	
C17-C18	21	5.0	1.00	
C19-C20	41	5.0	1.00	
C21-C22	77	5.0	1.00	
C23-C24	140	5.0	1.00	
C25-C28	270	5.0	1.00	
C29-C32	210	5.0	1.00	
C33-C36	42	5.0	1.00	
C37-C40	5.8	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	820	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	81	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FT-2-S	**17-09-1241-39-A**	**09/14/17 14:17**	**Solid**	**GC 45**	**09/18/17**	**09/19/17 15:39**	**170918B13**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	7.0	4.9	1.00	
C21-C22	22	4.9	1.00	
C23-C24	45	4.9	1.00	
C25-C28	110	4.9	1.00	
C29-C32	84	4.9	1.00	
C33-C36	39	4.9	1.00	
C37-C40	13	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	320	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	102	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FT-1-S	**17-09-1241-42-A**	**09/14/17 14:20**	**Solid**	**GC 45**	**09/18/17**	**09/19/17 16:01**	**170918B13**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	9.6	5.0	1.00	
C25-C28	23	5.0	1.00	
C29-C32	19	5.0	1.00	
C33-C36	11	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	75	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	94	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1-S	**17-09-1241-45-A**	**09/14/17 15:27**	**Solid**	**GC 45**	**09/18/17**	**09/19/17 16:23**	**170918B13**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	14	5.0	1.00	
C23-C24	26	5.0	1.00	
C25-C28	48	5.0	1.00	
C29-C32	29	5.0	1.00	
C33-C36	8.0	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	130	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	96	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-2-S	**17-09-1241-48-A**	**09/14/17 15:39**	**Solid**	**GC 45**	**09/18/17**	**09/21/17 19:33**	**170918B13**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	50	10.0	
C7	ND	50	10.0	
C8	ND	50	10.0	
C9-C10	ND	50	10.0	
C11-C12	ND	50	10.0	
C13-C14	ND	50	10.0	
C15-C16	ND	50	10.0	
C17-C18	81	50	10.0	
C19-C20	140	50	10.0	
C21-C22	330	50	10.0	
C23-C24	950	50	10.0	
C25-C28	2700	50	10.0	
C29-C32	2000	50	10.0	
C33-C36	810	50	10.0	
C37-C40	140	50	10.0	
C41-C44	ND	50	10.0	
C6-C44 Total	7300	50	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	116	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-2810**	**N/A**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 19:38**	**170918B12**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	103	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-2812**	**N/A**	**Solid**	**GC 45**	**09/18/17**	**09/19/17 13:05**	**170918B13**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	94	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-4-S	**17-09-1241-7-A**	**09/14/17 09:39**	**Solid**	**GC/MS Q**	**09/16/17**	**09/18/17 23:38**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	106	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-4-4	**17-09-1241-8-A**	**09/14/17 09:40**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 00:05**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-4-8	**17-09-1241-9-A**	**09/14/17 09:44**	**Solid**	**GC/MS Q**	**09/16/17**	**09/18/17 21:49**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-4-12	**17-09-1241-10-A**	**09/14/17 09:47**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 00:32**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	60-132	
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-S	**17-09-1241-11-A**	**09/14/17 10:00**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 00:59**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	97	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-4	**17-09-1241-12-A**	**09/14/17 10:01**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 01:26**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-8	**17-09-1241-13-A**	**09/14/17 10:05**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 01:54**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-3-12	**17-09-1241-14-A**	**09/14/17 10:07**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 02:21**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-1-S	**17-09-1241-15-A**	**09/14/17 10:44**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 02:48**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-1-4	**17-09-1241-16-A**	**09/14/17 10:45**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 03:15**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-1-8	**17-09-1241-17-A**	**09/14/17 10:50**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 03:42**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	99	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-1-12	**17-09-1241-18-A**	**09/14/17 11:04**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 04:09**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-2-S	**17-09-1241-19-A**	**09/14/17 11:12**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 11:36**	**170919L004**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	104	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-2-4	**17-09-1241-20-A**	**09/14/17 11:15**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 18:52**	**170919L004**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	104	63-141	
1,2-Dichloroethane-d4	107	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-2-8	**17-09-1241-21-A**	**09/14/17 11:25**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 19:19**	**170919L004**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	106	62-146	
Toluene-d8	97	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-2-12	**17-09-1241-22-A**	**09/14/17 11:50**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 20:19**	**170919L004**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	103	63-141	
1,2-Dichloroethane-d4	106	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CAT-1-S	**17-09-1241-30-A**	**09/14/17 13:25**	**Solid**	**GC/MS OO**	**09/16/17**	**09/20/17 13:39**	**170920L001**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	60-132	
Dibromofluoromethane	9	63-141	2,6
1,2-Dichloroethane-d4	120	62-146	
Toluene-d8	100	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CAT-2-S	**17-09-1241-33-A**	**09/14/17 13:42**	**Solid**	**GC/MS LL**	**09/16/17**	**09/21/17 18:40**	**170921L014**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	60-132	
Dibromofluoromethane	27	63-141	2,6
1,2-Dichloroethane-d4	108	62-146	
Toluene-d8	100	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CAT-3-S	**17-09-1241-36-A**	**09/14/17 14:07**	**Solid**	**GC/MS OO**	**09/16/17**	**09/20/17 14:37**	**170920L001**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	60-132	
Dibromofluoromethane	11	63-141	2,6
1,2-Dichloroethane-d4	125	62-146	
Toluene-d8	102	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-314-798**	**N/A**	**Solid**	**GC/MS Q**	**09/18/17**	**09/18/17 20:55**	**170918L021**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	60-132	
Dibromofluoromethane	99	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	99	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-314-799**	**N/A**	**Solid**	**GC/MS Q**	**09/19/17**	**09/19/17 10:42**	**170919L004**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-314-800**	**N/A**	**Solid**	**GC/MS OO**	**09/20/17**	**09/20/17 10:40**	**170920L001**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	60-132	
Dibromofluoromethane	105	63-141	
1,2-Dichloroethane-d4	111	62-146	
Toluene-d8	100	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-314-801**	**N/A**	**Solid**	**GC/MS LL**	**09/21/17**	**09/21/17 12:27**	**170921L014**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	99	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EB-20170914	**17-09-1241-23-A**	**09/14/17 11:50**	**Aqueous**	**GC/MS L**	**09/20/17**	**09/21/17 03:20**	**170920L047**

Parameter	Result	RL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Butanone	5.3	5.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
2-Hexanone	ND	10	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	26	10	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	0.50	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Ethylbenzene	ND	0.50	1.00	
Isopropylbenzene	ND	0.50	1.00	
Methylene Chloride	ND	1.0	1.00	
Naphthalene	ND	1.0	1.00	
Styrene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Acetate	ND	5.0	1.00	
Vinyl Chloride	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
c-1,2-Dichloroethene	ND	0.50	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	68-120	
Dibromofluoromethane	112	80-127	
1,2-Dichloroethane-d4	111	80-128	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-446-249**	**N/A**	**Aqueous**	**GC/MS L**	**09/20/17**	**09/20/17 23:45**	**170920L047**

Parameter	Result	RL	DF	Qualifiers
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Butanone	ND	5.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
2-Hexanone	ND	10	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	0.50	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: PII ESA Carroll Canyon / SC0897

Parameter	Result	RL	DF	Qualifiers
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Ethylbenzene	ND	0.50	1.00	
Isopropylbenzene	ND	0.50	1.00	
Methylene Chloride	ND	1.0	1.00	
Naphthalene	ND	1.0	1.00	
Styrene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Acetate	ND	5.0	1.00	
Vinyl Chloride	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
c-1,2-Dichloroethene	ND	0.50	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	83	68-120	
Dibromofluoromethane	107	80-127	
1,2-Dichloroethane-d4	105	80-128	
Toluene-d8	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants	Date Received:	09/15/17
16644 West Bernardo Drive, Suite 301	Work Order:	17-09-1241
San Diego, CA 92127-1901	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)
Project: PII ESA Carroll Canyon / SC0897		Page 1 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
FT-2-S	**Sample**	**Solid**	**GC 45**	**09/18/17**	**09/19/17 15:39**	**170918S13**
FT-2-S	**Matrix Spike**	**Solid**	**GC 45**	**09/18/17**	**09/19/17 13:49**	**170918S13**
FT-2-S	**Matrix Spike Duplicate**	**Solid**	**GC 45**	**09/18/17**	**09/19/17 14:11**	**170918S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	320.2	400.0	607.1	72	654.2	84	64-130	7	0-15	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Project: PII ESA Carroll Canyon / SC0897

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CCA-1-S	**Sample**	**Solid**	**GC 50**	**09/18/17**	**09/19/17 00:20**	**170918S12**
CCA-1-S	**Matrix Spike**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 20:19**	**170918S12**
CCA-1-S	**Matrix Spike Duplicate**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 20:38**	**170918S12**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	359.1	90	364.1	91	64-130	1	0-15	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
S-4-8	**Sample**	**Solid**	**GC/MS Q**	**09/16/17**	**09/18/17 21:49**	**170918S010**
S-4-8	**Matrix Spike**	**Solid**	**GC/MS Q**	**09/16/17**	**09/18/17 22:17**	**170918S010**
S-4-8	**Matrix Spike Duplicate**	**Solid**	**GC/MS Q**	**09/16/17**	**09/18/17 22:44**	**170918S010**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acetone	ND	50.00	40.27	81	40.64	81	70-130	1	0-20	
Benzene	ND	50.00	40.30	81	40.77	82	61-127	1	0-20	
Bromobenzene	ND	50.00	41.61	83	41.15	82	70-130	1	0-20	
Bromochloromethane	ND	50.00	41.91	84	41.08	82	70-130	2	0-20	
Bromodichloromethane	ND	50.00	43.61	87	43.35	87	70-130	1	0-20	
Bromoform	ND	50.00	35.70	71	35.58	71	70-130	0	0-20	
Bromomethane	ND	50.00	38.85	78	37.15	74	70-130	4	0-20	
2-Butanone	ND	50.00	38.89	78	39.46	79	70-130	1	0-20	
n-Butylbenzene	ND	50.00	41.38	83	41.96	84	77-123	1	0-25	
sec-Butylbenzene	ND	50.00	42.19	84	42.61	85	70-130	1	0-20	
tert-Butylbenzene	ND	50.00	42.24	84	42.22	84	70-130	0	0-20	
Carbon Disulfide	ND	50.00	39.63	79	41.43	83	70-130	4	0-20	
Carbon Tetrachloride	ND	50.00	42.51	85	44.20	88	51-135	4	0-29	
Chlorobenzene	ND	50.00	40.23	80	40.55	81	57-123	1	0-20	
Chloroethane	ND	50.00	44.28	89	45.11	90	70-130	2	0-20	
Chloroform	ND	50.00	41.93	84	41.86	84	70-130	0	0-20	
Chloromethane	ND	50.00	39.94	80	40.29	81	70-130	1	0-20	
2-Chlorotoluene	ND	50.00	40.58	81	40.78	82	70-130	0	0-20	
4-Chlorotoluene	ND	50.00	40.77	82	40.94	82	70-130	0	0-20	
Dibromochloromethane	ND	50.00	39.94	80	40.08	80	70-130	0	0-20	
1,2-Dibromo-3-Chloropropane	ND	50.00	42.06	84	40.70	81	70-130	3	0-20	
1,2-Dibromoethane	ND	50.00	43.46	87	42.66	85	64-124	2	0-20	
Dibromomethane	ND	50.00	42.61	85	41.50	83	70-130	3	0-20	
1,2-Dichlorobenzene	ND	50.00	41.48	83	41.08	82	35-131	1	0-25	
1,3-Dichlorobenzene	ND	50.00	40.29	81	40.26	81	70-130	0	0-20	
1,4-Dichlorobenzene	ND	50.00	39.51	79	39.55	79	70-130	0	0-20	
Dichlorodifluoromethane	ND	50.00	44.88	90	44.94	90	70-130	0	0-20	
1,1-Dichloroethane	ND	50.00	42.72	85	42.82	86	70-130	0	0-20	
1,2-Dichloroethane	ND	50.00	42.48	85	41.25	83	70-130	3	0-20	
1,1-Dichloroethene	ND	50.00	40.87	82	41.91	84	47-143	3	0-25	
c-1,2-Dichloroethene	ND	50.00	41.56	83	41.19	82	70-130	1	0-20	
t-1,2-Dichloroethene	ND	50.00	41.20	82	42.30	85	70-130	3	0-20	
1,2-Dichloropropane	ND	50.00	43.27	87	43.07	86	79-115	0	0-25	
1,3-Dichloropropane	ND	50.00	42.14	84	41.05	82	70-130	3	0-20	
2,2-Dichloropropane	ND	50.00	40.45	81	40.84	82	70-130	1	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloropropene	ND	50.00	41.38	83	42.20	84	70-130	2	0-20	
c-1,3-Dichloropropene	ND	50.00	43.11	86	42.91	86	70-130	0	0-20	
t-1,3-Dichloropropene	ND	50.00	40.87	82	40.58	81	70-130	1	0-20	
Ethylbenzene	ND	50.00	41.19	82	41.66	83	57-129	1	0-22	
2-Hexanone	ND	50.00	42.27	85	41.01	82	70-130	3	0-20	
Isopropylbenzene	ND	50.00	42.00	84	42.38	85	70-130	1	0-20	
p-Isopropyltoluene	ND	50.00	42.02	84	42.52	85	70-130	1	0-20	
Methylene Chloride	ND	50.00	40.62	81	40.32	81	70-130	1	0-20	
4-Methyl-2-Pentanone	ND	50.00	42.10	84	41.13	82	70-130	2	0-20	
Naphthalene	ND	50.00	42.02	84	41.14	82	70-130	2	0-20	
n-Propylbenzene	ND	50.00	41.21	82	41.74	83	70-130	1	0-20	
Styrene	ND	50.00	41.57	83	41.85	84	70-130	1	0-20	
1,1,1,2-Tetrachloroethane	ND	50.00	44.59	89	44.47	89	70-130	0	0-20	
1,1,2,2-Tetrachloroethane	ND	50.00	43.89	88	42.86	86	70-130	2	0-20	
Tetrachloroethene	ND	50.00	40.76	82	39.78	80	70-130	2	0-20	
Toluene	ND	50.00	41.10	82	41.30	83	63-123	0	0-20	
1,2,3-Trichlorobenzene	ND	50.00	40.36	81	40.08	80	70-130	1	0-20	
1,2,4-Trichlorobenzene	ND	50.00	40.26	81	40.55	81	70-130	1	0-20	
1,1,1-Trichloroethane	ND	50.00	41.20	82	41.90	84	70-130	2	0-20	
1,1,2-Trichloroethane	ND	50.00	42.66	85	41.33	83	70-130	3	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50.00	41.59	83	42.45	85	70-130	2	0-20	
Trichloroethene	ND	50.00	41.80	84	42.05	84	44-158	1	0-20	
1,2,3-Trichloropropane	ND	50.00	42.27	85	41.54	83	70-130	2	0-20	
1,2,4-Trimethylbenzene	ND	50.00	41.10	82	41.30	83	70-130	0	0-20	
Trichlorofluoromethane	ND	50.00	45.06	90	45.59	91	70-130	1	0-20	
1,3,5-Trimethylbenzene	ND	50.00	41.29	83	41.68	83	70-130	1	0-20	
Vinyl Acetate	ND	50.00	26.80	54	27.32	55	70-130	2	0-20	3
Vinyl Chloride	ND	50.00	45.23	90	46.21	92	49-139	2	0-47	
p/m-Xylene	ND	100.0	81.68	82	82.28	82	70-130	1	0-20	
o-Xylene	ND	50.00	42.12	84	42.12	84	70-130	0	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	42.89	86	41.94	84	57-123	2	0-21	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CCA-2-S	**Sample**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 11:36**	**170919S005**
CCA-2-S	**Matrix Spike**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 12:03**	**170919S005**
CCA-2-S	**Matrix Spike Duplicate**	**Solid**	**GC/MS Q**	**09/16/17**	**09/19/17 12:30**	**170919S005**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acetone	ND	50.00	71.24	142	91.08	182	70-130	24	0-20	3,4
Benzene	ND	50.00	35.53	71	36.94	74	61-127	4	0-20	
Bromobenzene	ND	50.00	38.05	76	39.24	78	70-130	3	0-20	
Bromochloromethane	ND	50.00	38.98	78	39.64	79	70-130	2	0-20	
Bromodichloromethane	ND	50.00	42.09	84	43.28	87	70-130	3	0-20	
Bromoform	ND	50.00	33.63	67	35.02	70	70-130	4	0-20	3
Bromomethane	ND	50.00	36.39	73	36.67	73	70-130	1	0-20	
2-Butanone	ND	50.00	39.80	80	39.15	78	70-130	2	0-20	
n-Butylbenzene	ND	50.00	32.70	65	33.85	68	77-123	3	0-25	3
sec-Butylbenzene	ND	50.00	35.57	71	37.57	75	70-130	5	0-20	
tert-Butylbenzene	ND	50.00	34.78	70	36.27	73	70-130	4	0-20	
Carbon Disulfide	ND	50.00	21.59	43	23.09	46	70-130	7	0-20	3
Carbon Tetrachloride	ND	50.00	35.94	72	37.75	76	51-135	5	0-29	
Chlorobenzene	ND	50.00	37.19	74	38.26	77	57-123	3	0-20	
Chloroethane	ND	50.00	43.63	87	47.56	95	70-130	9	0-20	
Chloroform	ND	50.00	40.18	80	41.10	82	70-130	2	0-20	
Chloromethane	ND	50.00	38.43	77	41.72	83	70-130	8	0-20	
2-Chlorotoluene	ND	50.00	36.12	72	37.43	75	70-130	4	0-20	
4-Chlorotoluene	ND	50.00	35.47	71	36.54	73	70-130	3	0-20	
Dibromochloromethane	ND	50.00	38.75	78	39.36	79	70-130	2	0-20	
1,2-Dibromo-3-Chloropropane	ND	50.00	38.89	78	39.92	80	70-130	3	0-20	
1,2-Dibromoethane	ND	50.00	40.40	81	40.45	81	64-124	0	0-20	
Dibromomethane	ND	50.00	40.16	80	40.15	80	70-130	0	0-20	
1,2-Dichlorobenzene	ND	50.00	37.12	74	37.97	76	35-131	2	0-25	
1,3-Dichlorobenzene	ND	50.00	34.62	69	35.55	71	70-130	3	0-20	3
1,4-Dichlorobenzene	ND	50.00	34.53	69	35.29	71	70-130	2	0-20	3
Dichlorodifluoromethane	ND	50.00	42.83	86	46.03	92	70-130	7	0-20	
1,1-Dichloroethane	ND	50.00	38.89	78	40.27	81	70-130	3	0-20	
1,2-Dichloroethane	ND	50.00	39.58	79	40.12	80	70-130	1	0-20	
1,1-Dichloroethene	ND	50.00	30.94	62	32.85	66	47-143	6	0-25	
c-1,2-Dichloroethene	ND	50.00	37.57	75	38.92	78	70-130	4	0-20	
t-1,2-Dichloroethene	ND	50.00	32.73	65	34.01	68	70-130	4	0-20	3
1,2-Dichloropropane	ND	50.00	40.47	81	41.55	83	79-115	3	0-25	
1,3-Dichloropropane	ND	50.00	40.08	80	40.21	80	70-130	0	0-20	
2,2-Dichloropropane	ND	50.00	31.18	62	32.67	65	70-130	5	0-20	3

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1-Dichloropropene	ND	50.00	33.75	67	35.27	71	70-130	4	0-20	3
c-1,3-Dichloropropene	ND	50.00	36.85	74	37.51	75	70-130	2	0-20	
t-1,3-Dichloropropene	ND	50.00	35.25	71	35.43	71	70-130	1	0-20	
Ethylbenzene	ND	50.00	36.16	72	37.66	75	57-129	4	0-22	
2-Hexanone	ND	50.00	35.77	72	36.12	72	70-130	1	0-20	
Isopropylbenzene	ND	50.00	36.66	73	38.43	77	70-130	5	0-20	
p-Isopropyltoluene	ND	50.00	34.74	69	36.24	72	70-130	4	0-20	3
Methylene Chloride	ND	50.00	36.63	73	37.02	74	70-130	1	0-20	
4-Methyl-2-Pentanone	ND	50.00	40.35	81	40.08	80	70-130	1	0-20	
Naphthalene	ND	50.00	36.08	72	36.32	73	70-130	1	0-20	
n-Propylbenzene	ND	50.00	35.21	70	36.70	73	70-130	4	0-20	
Styrene	ND	50.00	37.78	76	39.06	78	70-130	3	0-20	
1,1,1,2-Tetrachloroethane	ND	50.00	43.67	87	44.57	89	70-130	2	0-20	
1,1,2,2-Tetrachloroethane	ND	50.00	33.17	66	34.75	70	70-130	5	0-20	3
Tetrachloroethene	ND	50.00	53.41	107	54.62	109	70-130	2	0-20	
Toluene	ND	50.00	36.02	72	37.40	75	63-123	4	0-20	
1,2,3-Trichlorobenzene	ND	50.00	31.97	64	31.95	64	70-130	0	0-20	3
1,2,4-Trichlorobenzene	ND	50.00	30.90	62	30.80	62	70-130	0	0-20	3
1,1,1-Trichloroethane	ND	50.00	36.62	73	38.24	76	70-130	4	0-20	
1,1,2-Trichloroethane	ND	50.00	41.59	83	41.96	84	70-130	1	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50.00	30.98	62	32.10	64	70-130	4	0-20	3
Trichloroethene	ND	50.00	43.78	88	44.17	88	44-158	1	0-20	
1,2,3-Trichloropropane	ND	50.00	38.53	77	39.92	80	70-130	4	0-20	
1,2,4-Trimethylbenzene	ND	50.00	34.78	70	35.34	71	70-130	2	0-20	
Trichlorofluoromethane	ND	50.00	45.57	91	48.66	97	70-130	7	0-20	
1,3,5-Trimethylbenzene	ND	50.00	35.46	71	36.41	73	70-130	3	0-20	
Vinyl Acetate	ND	50.00	1.330	3	0.9609	2	70-130	32	0-20	3,4
Vinyl Chloride	ND	50.00	45.15	90	48.66	97	49-139	7	0-47	
p/m-Xylene	ND	100.0	69.75	70	72.67	73	70-130	4	0-20	
o-Xylene	ND	50.00	37.19	74	38.75	77	70-130	4	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	40.35	81	40.41	81	57-123	0	0-21	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-09-1482-1	**Sample**	**Solid**	**GC/MS LL**	**09/20/17**	**09/21/17 17:43**	**170921S001**
17-09-1482-1	**Matrix Spike**	**Solid**	**GC/MS LL**	**09/20/17**	**09/21/17 15:30**	**170921S001**
17-09-1482-1	**Matrix Spike Duplicate**	**Solid**	**GC/MS LL**	**09/20/17**	**09/21/17 16:17**	**170921S001**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	41.08	82	43.91	88	61-127	7	0-20	
Carbon Tetrachloride	ND	50.00	31.31	63	42.63	85	51-135	31	0-29	4
Chlorobenzene	ND	50.00	39.43	79	40.73	81	57-123	3	0-20	
1,2-Dibromoethane	ND	50.00	40.48	81	47.21	94	64-124	15	0-20	
1,2-Dichlorobenzene	ND	50.00	36.58	73	36.65	73	35-131	0	0-25	
1,2-Dichloroethane	ND	50.00	42.19	84	47.02	94	80-120	11	0-20	
1,1-Dichloroethene	ND	50.00	51.23	102	46.48	93	47-143	10	0-25	
Ethylbenzene	ND	50.00	40.02	80	41.77	84	57-129	4	0-22	
Toluene	ND	50.00	40.97	82	42.96	86	63-123	5	0-20	
Trichloroethene	ND	50.00	42.80	86	44.46	89	44-158	4	0-20	
Vinyl Chloride	ND	50.00	45.96	92	45.62	91	49-139	1	0-47	
p/m-Xylene	ND	100.0	78.44	78	82.27	82	70-130	5	0-30	
o-Xylene	ND	50.00	39.51	79	41.49	83	70-130	5	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	13.93	28	47.34	95	57-123	109	0-21	3,4

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-09-1418-1	**Sample**	**Solid**	**GC/MS OO**	**09/19/17**	**09/20/17 11:43**	**170920S001**
17-09-1418-1	**Matrix Spike**	**Solid**	**GC/MS OO**	**09/19/17**	**09/20/17 12:12**	**170920S001**
17-09-1418-1	**Matrix Spike Duplicate**	**Solid**	**GC/MS OO**	**09/19/17**	**09/20/17 12:41**	**170920S001**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	49.93	100	49.69	99	61-127	0	0-20	
Carbon Tetrachloride	ND	50.00	52.25	104	53.03	106	51-135	1	0-29	
Chlorobenzene	ND	50.00	48.75	98	48.66	97	57-123	0	0-20	
1,2-Dibromoethane	ND	50.00	49.09	98	49.79	100	64-124	1	0-20	
1,2-Dichlorobenzene	ND	50.00	44.93	90	45.22	90	35-131	1	0-25	
1,2-Dichloroethane	ND	50.00	49.81	100	49.99	100	80-120	0	0-20	
1,1-Dichloroethene	ND	50.00	48.47	97	49.70	99	47-143	3	0-25	
Ethylbenzene	ND	50.00	51.06	102	51.21	102	57-129	0	0-22	
Toluene	ND	50.00	51.43	103	50.78	102	63-123	1	0-20	
Trichloroethene	ND	50.00	52.22	104	52.53	105	44-158	1	0-20	
Vinyl Chloride	ND	50.00	45.67	91	47.22	94	49-139	3	0-47	
p/m-Xylene	ND	100.0	105.7	106	105.0	105	70-130	1	0-30	
o-Xylene	ND	50.00	52.62	105	52.63	105	70-130	0	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	43.38	87	44.99	90	57-123	4	0-21	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants		Date Received:	09/15/17
16644 West Bernardo Drive, Suite 301		Work Order:	17-09-1241
San Diego, CA 92127-1901		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: PII ESA Carroll Canyon / SC0897			Page 9 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-09-0976-25	**Sample**	**Aqueous**	**GC/MS L**	**09/20/17**	**09/21/17 00:16**	**170920S019**
17-09-0976-25	**Matrix Spike**	**Aqueous**	**GC/MS L**	**09/20/17**	**09/21/17 00:47**	**170920S019**
17-09-0976-25	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**09/20/17**	**09/21/17 01:17**	**170920S019**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,1,1,2-Tetrachloroethane	ND	10.00	11.10	111	11.51	115	75-127	4	0-20	
1,1,1-Trichloroethane	ND	10.00	9.000	90	9.692	97	72-132	7	0-20	
1,1,2,2-Tetrachloroethane	ND	10.00	8.292	83	8.679	87	75-132	5	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10.00	8.772	88	9.126	91	70-130	4	0-20	
1,1,2-Trichloroethane	ND	10.00	9.057	91	9.293	93	75-125	3	0-20	
1,1-Dichloroethane	ND	10.00	8.642	86	9.370	94	68-128	8	0-20	
1,1-Dichloroethene	ND	10.00	9.541	95	10.35	104	66-126	8	0-20	
1,1-Dichloropropene	ND	10.00	8.643	86	9.152	92	74-134	6	0-20	
1,2,3-Trichlorobenzene	ND	10.00	8.059	81	8.506	85	75-125	5	0-20	
1,2,3-Trichloropropane	ND	10.00	10.00	100	9.534	95	75-125	5	0-20	
1,2,4-Trichlorobenzene	ND	10.00	7.768	78	8.582	86	75-125	10	0-20	
1,2,4-Trimethylbenzene	ND	10.00	8.750	87	9.257	93	75-125	6	0-20	
1,2-Dibromo-3-Chloropropane	ND	10.00	7.973	80	8.311	83	75-127	4	0-20	
1,2-Dibromoethane	ND	10.00	9.016	90	9.453	95	75-126	5	0-20	
1,2-Dichlorobenzene	ND	10.00	9.081	91	9.541	95	75-125	5	0-20	
1,2-Dichloroethane	ND	10.00	9.291	93	9.232	92	75-127	1	0-20	
1,2-Dichloropropane	ND	10.00	9.240	92	9.335	93	75-125	1	0-20	
1,3,5-Trimethylbenzene	ND	10.00	9.796	98	10.31	103	75-127	5	0-20	
1,3-Dichlorobenzene	ND	10.00	8.978	90	9.409	94	75-126	5	0-20	
1,3-Dichloropropane	ND	10.00	8.901	89	9.326	93	75-125	5	0-20	
1,4-Dichlorobenzene	ND	10.00	8.886	89	9.355	94	75-125	5	0-20	
2,2-Dichloropropane	ND	10.00	6.787	68	7.500	75	52-160	10	0-20	
2-Butanone	ND	10.00	7.718	77	8.025	80	20-180	4	0-40	
2-Chlorotoluene	ND	10.00	9.584	96	10.05	100	75-128	5	0-20	
2-Hexanone	ND	10.00	7.732	77	8.033	80	74-122	4	0-20	
4-Chlorotoluene	ND	10.00	8.782	88	9.316	93	75-125	6	0-20	
4-Methyl-2-Pentanone	ND	10.00	7.103	71	7.687	77	65-137	8	0-20	
Acetone	ND	10.00	9.368	94	10.95	110	20-180	16	0-52	
Benzene	ND	10.00	9.427	94	9.692	97	75-125	3	0-20	
Bromobenzene	ND	10.00	9.969	100	10.26	103	75-125	3	0-20	
Bromochloromethane	ND	10.00	8.968	90	9.237	92	75-128	3	0-20	
Bromodichloromethane	ND	10.00	9.735	97	9.928	99	75-125	2	0-20	
Bromoform	ND	10.00	10.01	100	10.65	106	71-137	6	0-20	
Bromomethane	ND	10.00	9.591	96	9.489	95	37-181	1	0-22	
Carbon Disulfide	ND	10.00	9.188	92	10.12	101	58-136	10	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon Tetrachloride	ND	10.00	9.427	94	10.17	102	69-135	8	0-20	
Chlorobenzene	ND	10.00	9.464	95	9.976	100	75-125	5	0-20	
Chloroethane	ND	10.00	10.08	101	10.34	103	20-180	3	0-20	
Chloroform	ND	10.00	8.858	89	9.367	94	75-128	6	0-20	
Chloromethane	ND	10.00	9.866	99	10.76	108	41-149	9	0-20	
Dibromochloromethane	ND	10.00	8.658	87	9.077	91	75-125	5	0-20	
Dibromomethane	ND	10.00	8.852	89	8.981	90	75-129	1	0-20	
Dichlorodifluoromethane	ND	10.00	8.490	85	8.456	85	28-172	0	0-20	
Ethylbenzene	ND	10.00	9.639	96	10.05	101	75-125	4	0-20	
Isopropylbenzene	ND	10.00	9.626	96	10.29	103	75-130	7	0-20	
Methylene Chloride	ND	10.00	8.668	87	9.560	96	74-128	10	0-20	
Naphthalene	ND	10.00	7.389	74	7.916	79	75-136	7	0-20	3
Styrene	ND	10.00	9.083	91	9.476	95	28-166	4	0-30	
Tetrachloroethene	17.14	10.00	25.92	88	26.12	90	58-124	1	0-20	
Toluene	ND	10.00	9.736	97	10.01	100	75-125	3	0-20	
t-1,2-Dichloroethene	ND	10.00	9.050	91	10.26	103	73-133	13	0-20	
Trichloroethene	6.246	10.00	14.66	84	14.84	86	75-125	1	0-20	
Trichlorofluoromethane	ND	10.00	11.09	111	11.10	111	68-134	0	0-20	
Vinyl Acetate	ND	10.00	5.402	54	5.661	57	65-137	5	0-20	3
Vinyl Chloride	ND	10.00	10.67	107	10.86	109	52-142	2	0-20	
c-1,3-Dichloropropene	ND	10.00	8.081	81	8.354	84	75-128	3	0-20	
c-1,2-Dichloroethene	1.520	10.00	10.39	89	11.10	96	75-130	7	0-20	
n-Butylbenzene	ND	10.00	8.370	84	8.964	90	75-125	7	0-20	
n-Propylbenzene	ND	10.00	9.715	97	10.17	102	75-129	5	0-20	
o-Xylene	ND	10.00	9.496	95	10.08	101	75-127	6	0-20	
p-Isopropyltoluene	ND	10.00	8.791	88	9.428	94	75-125	7	0-20	
sec-Butylbenzene	ND	10.00	8.886	89	9.509	95	75-129	7	0-20	
t-1,3-Dichloropropene	ND	10.00	7.682	77	8.139	81	75-125	6	0-20	
tert-Butylbenzene	ND	10.00	9.163	92	9.677	97	75-129	5	0-20	
p/m-Xylene	ND	20.00	19.40	97	20.48	102	75-125	5	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	7.847	78	8.643	86	71-131	10	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Geosyntec Consultants		Date Received:	09/15/17
16644 West Bernardo Drive, Suite 301		Work Order:	17-09-1241
San Diego, CA 92127-1901		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: PII ESA Carroll Canyon / SC0897			Page 1 of 12

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-2812	**LCS**	**Solid**	**GC 45**	**09/18/17**	**09/19/17 13:27**	**170918B13**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	425.3	106	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Geosyntec Consultants		Date Received:	09/15/17
16644 West Bernardo Drive, Suite 301		Work Order:	17-09-1241
San Diego, CA 92127-1901		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: PII ESA Carroll Canyon / SC0897			Page 2 of 12

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-2810	**LCS**	**Solid**	**GC 50**	**09/18/17**	**09/18/17 19:58**	**170918B12**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	365.2	91	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-314-798	**LCS**	**Solid**	**GC/MS Q**	**09/18/17**	**09/18/17 20:01**	**170918L021**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Acetone	50.00	46.06	92	70-130	60-140	
Benzene	50.00	44.74	89	78-120	71-127	
Bromobenzene	50.00	46.74	93	70-130	60-140	
Bromochloromethane	50.00	46.92	94	70-130	60-140	
Bromodichloromethane	50.00	49.03	98	70-130	60-140	
Bromoform	50.00	41.10	82	70-130	60-140	
Bromomethane	50.00	40.72	81	70-130	60-140	
2-Butanone	50.00	49.36	99	70-130	60-140	
n-Butylbenzene	50.00	46.96	94	77-123	69-131	
sec-Butylbenzene	50.00	46.81	94	70-130	60-140	
tert-Butylbenzene	50.00	47.43	95	70-130	60-140	
Carbon Disulfide	50.00	44.43	89	70-130	60-140	
Carbon Tetrachloride	50.00	47.02	94	49-139	34-154	
Chlorobenzene	50.00	45.03	90	79-120	72-127	
Chloroethane	50.00	47.22	94	70-130	60-140	
Chloroform	50.00	46.60	93	70-130	60-140	
Chloromethane	50.00	42.76	86	70-130	60-140	
2-Chlorotoluene	50.00	45.31	91	70-130	60-140	
4-Chlorotoluene	50.00	45.97	92	70-130	60-140	
Dibromochloromethane	50.00	45.25	90	70-130	60-140	
1,2-Dibromo-3-Chloropropane	50.00	48.53	97	70-130	60-140	
1,2-Dibromoethane	50.00	48.50	97	70-130	60-140	
Dibromomethane	50.00	47.29	95	70-130	60-140	
1,2-Dichlorobenzene	50.00	46.80	94	75-120	68-128	
1,3-Dichlorobenzene	50.00	45.48	91	70-130	60-140	
1,4-Dichlorobenzene	50.00	45.26	91	70-130	60-140	
Dichlorodifluoromethane	50.00	46.76	94	70-130	60-140	
1,1-Dichloroethane	50.00	48.02	96	70-130	60-140	
1,2-Dichloroethane	50.00	47.07	94	70-130	60-140	
1,1-Dichloroethene	50.00	44.38	89	74-122	66-130	
c-1,2-Dichloroethene	50.00	45.86	92	70-130	60-140	
t-1,2-Dichloroethene	50.00	45.78	92	70-130	60-140	
1,2-Dichloropropane	50.00	48.35	97	79-115	73-121	
1,3-Dichloropropane	50.00	46.35	93	70-130	60-140	
2,2-Dichloropropane	50.00	45.36	91	70-130	60-140	
1,1-Dichloropropene	50.00	45.20	90	70-130	60-140	
c-1,3-Dichloropropene	50.00	49.98	100	70-130	60-140	
t-1,3-Dichloropropene	50.00	47.20	94	70-130	60-140	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Geosyntec Consultants	Date Received:	09/15/17
16644 West Bernardo Drive, Suite 301	Work Order:	17-09-1241
San Diego, CA 92127-1901	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: PII ESA Carroll Canyon / SC0897		Page 4 of 12

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Ethylbenzene	50.00	45.43	91	76-120	69-127	
2-Hexanone	50.00	46.63	93	70-130	60-140	
Isopropylbenzene	50.00	46.12	92	70-130	60-140	
p-Isopropyltoluene	50.00	46.94	94	70-130	60-140	
Methylene Chloride	50.00	45.45	91	70-130	60-140	
4-Methyl-2-Pentanone	50.00	47.28	95	70-130	60-140	
Naphthalene	50.00	48.42	97	70-130	60-140	
n-Propylbenzene	50.00	45.51	91	70-130	60-140	
Styrene	50.00	46.90	94	70-130	60-140	
1,1,1,2-Tetrachloroethane	50.00	49.75	99	70-130	60-140	
1,1,2,2-Tetrachloroethane	50.00	48.75	98	70-130	60-140	
Tetrachloroethene	50.00	42.82	86	70-130	60-140	
Toluene	50.00	45.50	91	77-120	70-127	
1,2,3-Trichlorobenzene	50.00	46.55	93	70-130	60-140	
1,2,4-Trichlorobenzene	50.00	47.06	94	70-130	60-140	
1,1,1-Trichloroethane	50.00	45.43	91	70-130	60-140	
1,1,2-Trichloroethane	50.00	46.74	93	70-130	60-140	
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.00	44.07	88	70-130	60-140	
Trichloroethene	50.00	45.94	92	70-130	60-140	
1,2,3-Trichloropropane	50.00	47.83	96	70-130	60-140	
1,2,4-Trimethylbenzene	50.00	46.01	92	70-130	60-140	
Trichlorofluoromethane	50.00	46.89	94	70-130	60-140	
1,3,5-Trimethylbenzene	50.00	45.37	91	70-130	60-140	
Vinyl Acetate	50.00	37.44	75	70-130	60-140	
Vinyl Chloride	50.00	47.74	95	68-122	59-131	
p/m-Xylene	100.0	89.90	90	70-130	60-140	
o-Xylene	50.00	46.57	93	70-130	60-140	
Methyl-t-Butyl Ether (MTBE)	50.00	48.87	98	77-120	70-127	

Total number of LCS compounds: 66
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-314-799	**LCS**	**Solid**	**GC/MS Q**	**09/19/17**	**09/19/17 09:09**	**170919L004**
099-14-314-799	**LCSD**	**Solid**	**GC/MS Q**	**09/19/17**	**09/19/17 09:36**	**170919L004**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Acetone	50.00	45.13	90	47.70	95	70-130	60-140	6	0-20	
Benzene	50.00	43.09	86	42.07	84	78-120	71-127	2	0-20	
Bromobenzene	50.00	45.50	91	44.61	89	70-130	60-140	2	0-20	
Bromochloromethane	50.00	45.00	90	45.25	91	70-130	60-140	1	0-20	
Bromodichloromethane	50.00	47.42	95	47.19	94	70-130	60-140	0	0-20	
Bromoform	50.00	39.43	79	41.40	83	70-130	60-140	5	0-20	
Bromomethane	50.00	40.35	81	39.24	78	70-130	60-140	3	0-20	
2-Butanone	50.00	43.86	88	48.55	97	70-130	60-140	10	0-20	
n-Butylbenzene	50.00	45.27	91	42.66	85	77-123	69-131	6	0-25	
sec-Butylbenzene	50.00	44.72	89	42.29	85	70-130	60-140	6	0-20	
tert-Butylbenzene	50.00	44.70	89	43.37	87	70-130	60-140	3	0-20	
Carbon Disulfide	50.00	42.70	85	40.88	82	70-130	60-140	4	0-20	
Carbon Tetrachloride	50.00	45.86	92	43.48	87	49-139	34-154	5	0-20	
Chlorobenzene	50.00	43.89	88	42.88	86	79-120	72-127	2	0-20	
Chloroethane	50.00	48.14	96	49.11	98	70-130	60-140	2	0-20	
Chloroform	50.00	44.86	90	43.36	87	70-130	60-140	3	0-20	
Chloromethane	50.00	42.41	85	42.83	86	70-130	60-140	1	0-20	
2-Chlorotoluene	50.00	44.13	88	42.73	85	70-130	60-140	3	0-20	
4-Chlorotoluene	50.00	44.70	89	42.99	86	70-130	60-140	4	0-20	
Dibromochloromethane	50.00	44.13	88	45.13	90	70-130	60-140	2	0-20	
1,2-Dibromo-3-Chloropropane	50.00	43.70	87	48.70	97	70-130	60-140	11	0-20	
1,2-Dibromoethane	50.00	45.98	92	47.66	95	70-130	60-140	4	0-20	
Dibromomethane	50.00	45.08	90	46.08	92	70-130	60-140	2	0-20	
1,2-Dichlorobenzene	50.00	45.90	92	44.83	90	75-120	68-128	2	0-20	
1,3-Dichlorobenzene	50.00	44.85	90	43.15	86	70-130	60-140	4	0-20	
1,4-Dichlorobenzene	50.00	44.44	89	43.12	86	70-130	60-140	3	0-20	
Dichlorodifluoromethane	50.00	47.33	95	47.87	96	70-130	60-140	1	0-20	
1,1-Dichloroethane	50.00	44.97	90	43.40	87	70-130	60-140	4	0-20	
1,2-Dichloroethane	50.00	44.74	89	45.63	91	70-130	60-140	2	0-20	
1,1-Dichloroethene	50.00	42.53	85	40.41	81	74-122	66-130	5	0-20	
c-1,2-Dichloroethene	50.00	44.37	89	43.01	86	70-130	60-140	3	0-20	
t-1,2-Dichloroethene	50.00	44.06	88	42.02	84	70-130	60-140	5	0-20	
1,2-Dichloropropane	50.00	46.08	92	45.27	91	79-115	73-121	2	0-25	
1,3-Dichloropropane	50.00	44.30	89	45.52	91	70-130	60-140	3	0-20	
2,2-Dichloropropane	50.00	44.36	89	42.37	85	70-130	60-140	5	0-20	
1,1-Dichloropropene	50.00	43.15	86	41.33	83	70-130	60-140	4	0-20	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
c-1,3-Dichloropropene	50.00	47.23	94	46.88	94	70-130	60-140	1	0-20	
t-1,3-Dichloropropene	50.00	44.69	89	45.34	91	70-130	60-140	1	0-20	
Ethylbenzene	50.00	43.94	88	42.23	84	76-120	69-127	4	0-20	
2-Hexanone	50.00	42.03	84	47.57	95	70-130	60-140	12	0-20	
Isopropylbenzene	50.00	44.10	88	42.21	84	70-130	60-140	4	0-20	
p-Isopropyltoluene	50.00	45.28	91	42.88	86	70-130	60-140	5	0-20	
Methylene Chloride	50.00	43.75	88	43.03	86	70-130	60-140	2	0-20	
4-Methyl-2-Pentanone	50.00	41.86	84	45.42	91	70-130	60-140	8	0-20	
Naphthalene	50.00	44.49	89	46.58	93	70-130	60-140	5	0-20	
n-Propylbenzene	50.00	44.10	88	42.26	85	70-130	60-140	4	0-20	
Styrene	50.00	45.01	90	44.07	88	70-130	60-140	2	0-20	
1,1,1,2-Tetrachloroethane	50.00	48.28	97	47.63	95	70-130	60-140	1	0-20	
1,1,2,2-Tetrachloroethane	50.00	45.55	91	48.51	97	70-130	60-140	6	0-20	
Tetrachloroethene	50.00	40.70	81	38.56	77	70-130	60-140	5	0-20	
Toluene	50.00	43.55	87	42.27	85	77-120	70-127	3	0-20	
1,2,3-Trichlorobenzene	50.00	45.42	91	45.23	90	70-130	60-140	0	0-20	
1,2,4-Trichlorobenzene	50.00	46.83	94	45.29	91	70-130	60-140	3	0-20	
1,1,1-Trichloroethane	50.00	43.04	86	41.23	82	70-130	60-140	4	0-20	
1,1,2-Trichloroethane	50.00	44.60	89	46.03	92	70-130	60-140	3	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.00	43.05	86	40.76	82	70-130	60-140	5	0-20	
Trichloroethene	50.00	44.05	88	42.47	85	70-130	60-140	4	0-20	
1,2,3-Trichloropropane	50.00	44.73	89	47.76	96	70-130	60-140	7	0-20	
1,2,4-Trimethylbenzene	50.00	44.97	90	42.83	86	70-130	60-140	5	0-20	
Trichlorofluoromethane	50.00	48.51	97	49.02	98	70-130	60-140	1	0-20	
1,3,5-Trimethylbenzene	50.00	44.17	88	42.47	85	70-130	60-140	4	0-20	
Vinyl Acetate	50.00	31.80	64	33.15	66	70-130	60-140	4	0-20	ME
Vinyl Chloride	50.00	48.52	97	49.00	98	68-122	59-131	1	0-20	
p/m-Xylene	100.0	87.27	87	84.41	84	70-130	60-140	3	0-20	
o-Xylene	50.00	44.80	90	43.50	87	70-130	60-140	3	0-20	
Methyl-t-Butyl Ether (MTBE)	50.00	43.79	88	45.34	91	77-120	70-127	3	0-20	

Total number of LCS compounds: 66
Total number of ME compounds: 1
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-314-801	**LCS**	**Solid**	**GC/MS LL**	**09/21/17**	**09/21/17 11:27**	**170921L014**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Acetone	50.00	50.84	102	70-130	60-140	
Benzene	50.00	51.55	103	78-120	71-127	
Bromobenzene	50.00	53.42	107	70-130	60-140	
Bromochloromethane	50.00	54.64	109	70-130	60-140	
Bromodichloromethane	50.00	55.05	110	70-130	60-140	
Bromoform	50.00	46.86	94	70-130	60-140	
Bromomethane	50.00	54.49	109	70-130	60-140	
2-Butanone	50.00	49.69	99	70-130	60-140	
n-Butylbenzene	50.00	56.80	114	77-123	69-131	
sec-Butylbenzene	50.00	55.93	112	70-130	60-140	
tert-Butylbenzene	50.00	55.86	112	70-130	60-140	
Carbon Disulfide	50.00	56.33	113	70-130	60-140	
Carbon Tetrachloride	50.00	55.03	110	49-139	34-154	
Chlorobenzene	50.00	52.80	106	79-120	72-127	
Chloroethane	50.00	50.06	100	70-130	60-140	
Chloroform	50.00	52.19	104	70-130	60-140	
Chloromethane	50.00	49.75	100	70-130	60-140	
2-Chlorotoluene	50.00	53.95	108	70-130	60-140	
4-Chlorotoluene	50.00	54.35	109	70-130	60-140	
Dibromochloromethane	50.00	50.52	101	70-130	60-140	
1,2-Dibromo-3-Chloropropane	50.00	49.77	100	70-130	60-140	
1,2-Dibromoethane	50.00	52.34	105	70-130	60-140	
Dibromomethane	50.00	52.67	105	70-130	60-140	
1,2-Dichlorobenzene	50.00	53.06	106	75-120	68-128	
1,3-Dichlorobenzene	50.00	54.42	109	70-130	60-140	
1,4-Dichlorobenzene	50.00	54.30	109	70-130	60-140	
Dichlorodifluoromethane	50.00	55.78	112	70-130	60-140	
1,1-Dichloroethane	50.00	53.43	107	70-130	60-140	
1,2-Dichloroethane	50.00	52.40	105	70-130	60-140	
1,1-Dichloroethene	50.00	54.66	109	74-122	66-130	
c-1,2-Dichloroethene	50.00	52.98	106	70-130	60-140	
t-1,2-Dichloroethene	50.00	55.61	111	70-130	60-140	
1,2-Dichloropropane	50.00	52.81	106	79-115	73-121	
1,3-Dichloropropane	50.00	50.52	101	70-130	60-140	
2,2-Dichloropropane	50.00	56.02	112	70-130	60-140	
1,1-Dichloropropene	50.00	54.81	110	70-130	60-140	
c-1,3-Dichloropropene	50.00	53.97	108	70-130	60-140	
t-1,3-Dichloropropene	50.00	56.40	113	70-130	60-140	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Geosyntec Consultants	Date Received:	09/15/17
16644 West Bernardo Drive, Suite 301	Work Order:	17-09-1241
San Diego, CA 92127-1901	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: PII ESA Carroll Canyon / SC0897		Page 8 of 12

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Ethylbenzene	50.00	54.40	109	76-120	69-127	
2-Hexanone	50.00	44.54	89	70-130	60-140	
Isopropylbenzene	50.00	54.86	110	70-130	60-140	
p-Isopropyltoluene	50.00	56.96	114	70-130	60-140	
Methylene Chloride	50.00	51.66	103	70-130	60-140	
4-Methyl-2-Pentanone	50.00	46.87	94	70-130	60-140	
Naphthalene	50.00	50.50	101	70-130	60-140	
n-Propylbenzene	50.00	55.06	110	70-130	60-140	
Styrene	50.00	53.61	107	70-130	60-140	
1,1,1,2-Tetrachloroethane	50.00	55.89	112	70-130	60-140	
1,1,2,2-Tetrachloroethane	50.00	52.10	104	70-130	60-140	
Tetrachloroethene	50.00	52.89	106	70-130	60-140	
Toluene	50.00	52.76	106	77-120	70-127	
1,2,3-Trichlorobenzene	50.00	54.39	109	70-130	60-140	
1,2,4-Trichlorobenzene	50.00	57.45	115	70-130	60-140	
1,1,1-Trichloroethane	50.00	54.75	109	70-130	60-140	
1,1,2-Trichloroethane	50.00	49.27	99	70-130	60-140	
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.00	56.03	112	70-130	60-140	
Trichloroethene	50.00	53.07	106	70-130	60-140	
1,2,3-Trichloropropane	50.00	49.92	100	70-130	60-140	
1,2,4-Trimethylbenzene	50.00	53.95	108	70-130	60-140	
Trichlorofluoromethane	50.00	54.29	109	70-130	60-140	
1,3,5-Trimethylbenzene	50.00	55.72	111	70-130	60-140	
Vinyl Acetate	50.00	48.23	96	70-130	60-140	
Vinyl Chloride	50.00	52.32	105	68-122	59-131	
p/m-Xylene	100.0	106.3	106	70-130	60-140	
o-Xylene	50.00	53.00	106	70-130	60-140	
Methyl-t-Butyl Ether (MTBE)	50.00	50.09	100	77-120	70-127	

Total number of LCS compounds: 66
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-314-800	**LCS**	**Solid**	**GC/MS OO**	**09/20/17**	**09/20/17 09:42**	**170920L001**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Acetone	50.00	42.25	85	70-130	60-140	
Benzene	50.00	53.20	106	78-120	71-127	
Bromobenzene	50.00	52.31	105	70-130	60-140	
Bromochloromethane	50.00	51.29	103	70-130	60-140	
Bromodichloromethane	50.00	51.95	104	70-130	60-140	
Bromoform	50.00	43.25	87	70-130	60-140	
Bromomethane	50.00	47.33	95	70-130	60-140	
2-Butanone	50.00	44.46	89	70-130	60-140	
n-Butylbenzene	50.00	56.40	113	77-123	69-131	
sec-Butylbenzene	50.00	55.03	110	70-130	60-140	
tert-Butylbenzene	50.00	53.85	108	70-130	60-140	
Carbon Disulfide	50.00	66.50	133	70-130	60-140	ME
Carbon Tetrachloride	50.00	55.11	110	49-139	34-154	
Chlorobenzene	50.00	52.60	105	79-120	72-127	
Chloroethane	50.00	50.63	101	70-130	60-140	
Chloroform	50.00	50.47	101	70-130	60-140	
Chloromethane	50.00	47.75	96	70-130	60-140	
2-Chlorotoluene	50.00	53.62	107	70-130	60-140	
4-Chlorotoluene	50.00	53.52	107	70-130	60-140	
Dibromochloromethane	50.00	45.40	91	70-130	60-140	
1,2-Dibromo-3-Chloropropane	50.00	43.98	88	70-130	60-140	
1,2-Dibromoethane	50.00	53.13	106	70-130	60-140	
Dibromomethane	50.00	50.98	102	70-130	60-140	
1,2-Dichlorobenzene	50.00	51.35	103	75-120	68-128	
1,3-Dichlorobenzene	50.00	51.92	104	70-130	60-140	
1,4-Dichlorobenzene	50.00	50.84	102	70-130	60-140	
Dichlorodifluoromethane	50.00	52.28	105	70-130	60-140	
1,1-Dichloroethane	50.00	52.35	105	70-130	60-140	
1,2-Dichloroethane	50.00	50.72	101	70-130	60-140	
1,1-Dichloroethene	50.00	52.28	105	74-122	66-130	
c-1,2-Dichloroethene	50.00	51.73	103	70-130	60-140	
t-1,2-Dichloroethene	50.00	53.16	106	70-130	60-140	
1,2-Dichloropropane	50.00	52.75	106	79-115	73-121	
1,3-Dichloropropane	50.00	50.36	101	70-130	60-140	
2,2-Dichloropropane	50.00	57.53	115	70-130	60-140	
1,1-Dichloropropene	50.00	53.93	108	70-130	60-140	
c-1,3-Dichloropropene	50.00	48.75	98	70-130	60-140	
t-1,3-Dichloropropene	50.00	47.78	96	70-130	60-140	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Geosyntec Consultants	Date Received:	09/15/17
16644 West Bernardo Drive, Suite 301	Work Order:	17-09-1241
San Diego, CA 92127-1901	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: PII ESA Carroll Canyon / SC0897		Page 10 of 12

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Ethylbenzene	50.00	54.73	109	76-120	69-127	
2-Hexanone	50.00	44.51	89	70-130	60-140	
Isopropylbenzene	50.00	56.65	113	70-130	60-140	
p-Isopropyltoluene	50.00	55.39	111	70-130	60-140	
Methylene Chloride	50.00	50.93	102	70-130	60-140	
4-Methyl-2-Pentanone	50.00	46.47	93	70-130	60-140	
Naphthalene	50.00	49.10	98	70-130	60-140	
n-Propylbenzene	50.00	55.87	112	70-130	60-140	
Styrene	50.00	55.53	111	70-130	60-140	
1,1,1,2-Tetrachloroethane	50.00	56.79	114	70-130	60-140	
1,1,2,2-Tetrachloroethane	50.00	45.69	91	70-130	60-140	
Tetrachloroethene	50.00	56.66	113	70-130	60-140	
Toluene	50.00	54.37	109	77-120	70-127	
1,2,3-Trichlorobenzene	50.00	51.75	104	70-130	60-140	
1,2,4-Trichlorobenzene	50.00	53.76	108	70-130	60-140	
1,1,1-Trichloroethane	50.00	53.75	107	70-130	60-140	
1,1,2-Trichloroethane	50.00	49.15	98	70-130	60-140	
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.00	53.03	106	70-130	60-140	
Trichloroethene	50.00	54.29	109	70-130	60-140	
1,2,3-Trichloropropane	50.00	50.77	102	70-130	60-140	
1,2,4-Trimethylbenzene	50.00	54.89	110	70-130	60-140	
Trichlorofluoromethane	50.00	53.62	107	70-130	60-140	
1,3,5-Trimethylbenzene	50.00	56.84	114	70-130	60-140	
Vinyl Acetate	50.00	44.45	89	70-130	60-140	
Vinyl Chloride	50.00	50.15	100	68-122	59-131	
p/m-Xylene	100.0	112.6	113	70-130	60-140	
o-Xylene	50.00	56.83	114	70-130	60-140	
Methyl-t-Butyl Ether (MTBE)	50.00	47.36	95	77-120	70-127	

Total number of LCS compounds: 66
Total number of ME compounds: 1
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-446-249	**LCS**	**Aqueous**	**GC/MS L**	**09/20/17**	**09/20/17 23:15**	**170920L047**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
1,1,1,2-Tetrachloroethane	10.00	11.21	112	79-123	72-130	
1,1,1-Trichloroethane	10.00	9.303	93	66-130	55-141	
1,1,2,2-Tetrachloroethane	10.00	8.516	85	67-132	56-143	
1,1,2-Trichloro-1,2,2-Trifluoroethane	10.00	9.722	97	52-145	36-160	
1,1,2-Trichloroethane	10.00	9.076	91	77-124	69-132	
1,1-Dichloroethane	10.00	8.933	89	63-144	50-158	
1,1-Dichloroethene	10.00	9.452	95	66-130	55-141	
1,1-Dichloropropene	10.00	9.060	91	68-119	60-128	
1,2,3-Trichlorobenzene	10.00	8.707	87	70-129	60-139	
1,2,3-Trichloropropane	10.00	9.475	95	80-120	73-127	
1,2,4-Trichlorobenzene	10.00	8.676	87	71-128	62-138	
1,2,4-Trimethylbenzene	10.00	9.563	96	70-127	60-136	
1,2-Dibromo-3-Chloropropane	10.00	8.239	82	65-125	55-135	
1,2-Dibromoethane	10.00	9.382	94	74-130	65-139	
1,2-Dichlorobenzene	10.00	9.603	96	78-120	71-127	
1,2-Dichloroethane	10.00	9.608	96	72-130	62-140	
1,2-Dichloropropane	10.00	9.446	94	74-122	66-130	
1,3,5-Trimethylbenzene	10.00	10.56	106	72-124	63-133	
1,3-Dichlorobenzene	10.00	9.507	95	75-120	68-128	
1,3-Dichloropropane	10.00	9.290	93	74-128	65-137	
1,4-Dichlorobenzene	10.00	9.518	95	78-120	71-127	
2,2-Dichloropropane	10.00	7.450	75	68-125	58-134	
2-Butanone	10.00	7.362	74	55-138	41-152	
2-Chlorotoluene	10.00	10.01	100	64-123	54-133	
2-Hexanone	10.00	7.478	75	61-137	48-150	
4-Chlorotoluene	10.00	9.462	95	67-126	57-136	
4-Methyl-2-Pentanone	10.00	7.772	78	60-136	47-149	
Acetone	10.00	9.138	91	51-163	32-182	
Benzene	10.00	9.797	98	77-121	70-128	
Bromobenzene	10.00	10.31	103	78-120	71-127	
Bromochloromethane	10.00	9.255	93	71-135	60-146	
Bromodichloromethane	10.00	10.26	103	72-129	62-138	
Bromoform	10.00	10.31	103	61-140	48-153	
Bromomethane	10.00	8.877	89	63-140	50-153	
Carbon Disulfide	10.00	9.222	92	27-170	3-194	
Carbon Tetrachloride	10.00	9.756	98	64-135	52-147	
Chlorobenzene	10.00	10.01	100	80-120	73-127	
Chloroethane	10.00	9.710	97	67-131	56-142	

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 5030C
Method: EPA 8260B

Project: PII ESA Carroll Canyon / SC0897

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Chloroform	10.00	9.076	91	75-126	66-134	
Chloromethane	10.00	9.410	94	54-143	39-158	
Dibromochloromethane	10.00	9.282	93	76-132	67-141	
Dibromomethane	10.00	9.038	90	75-127	66-136	
Dichlorodifluoromethane	10.00	9.363	94	25-168	1-192	
Ethylbenzene	10.00	10.04	100	78-120	71-127	
Isopropylbenzene	10.00	10.28	103	71-123	62-132	
Methylene Chloride	10.00	9.025	90	71-129	61-139	
Naphthalene	10.00	7.544	75	55-159	38-176	
Styrene	10.00	10.50	105	77-120	70-127	
Tetrachloroethene	10.00	9.906	99	72-119	64-127	
Toluene	10.00	10.02	100	78-120	71-127	
t-1,2-Dichloroethene	10.00	9.271	93	67-129	57-139	
Trichloroethene	10.00	9.321	93	75-116	68-123	
Trichlorofluoromethane	10.00	10.79	108	62-146	48-160	
Vinyl Acetate	10.00	8.450	85	45-164	25-184	
Vinyl Chloride	10.00	9.872	99	60-141	46-154	
c-1,3-Dichloropropene	10.00	9.186	92	76-126	68-134	
c-1,2-Dichloroethene	10.00	9.578	96	76-123	68-131	
n-Butylbenzene	10.00	9.001	90	67-127	57-137	
n-Propylbenzene	10.00	10.33	103	64-125	54-135	
o-Xylene	10.00	10.17	102	74-122	66-130	
p-Isopropyltoluene	10.00	9.524	95	68-122	59-131	
sec-Butylbenzene	10.00	9.486	95	66-122	57-131	
t-1,3-Dichloropropene	10.00	8.270	83	71-127	62-136	
tert-Butylbenzene	10.00	9.528	95	73-120	65-128	
p/m-Xylene	20.00	20.74	104	74-122	66-130	
Methyl-t-Butyl Ether (MTBE)	10.00	8.079	81	57-144	42-158	

Total number of LCS compounds: 66
Total number of ME compounds: 0
Total number of ME compounds allowed: 3
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-09-1241 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	682	GC 45	1
EPA 8015B (M)	EPA 3550B	972	GC 45	1
EPA 8015B (M)	EPA 3550B	972	GC 50	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B	EPA 5030C	867	GC/MS LL	2
EPA 8260B	EPA 5030C	867	GC/MS OO	2
EPA 8260B	EPA 5030C	1055	GC/MS Q	2
EPA 8260B	EPA 5030C	1055	GC/MS OO	2

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Glossary of Terms and Qualifiers

Work Order: 17-09-1241 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Document Number: 11152

Analysis Request and Chain of Custody Record

17-09-1241

Page 1 of 5

Project Name: PIIESA Carroll Canyon	Project Number: SC0897	
Samplers Names: A. Picasso	Project Contact: Chris Lieder clieder@geosyntec.com	
Laboratory Name: Eurofins Calscience	Lab Contact: Stephen Nowak	
Lab Address: 7440 Lincoln Way Garden Grove CA 92841	Lab Phone: (714) 895-5494	
	Carrier/Waybill No.	

White copy: to accompany samples

Yellow copy: field copy

	Sample Name	Date	Time	Sample Type	Required Analyses: VOCs by 8260B	Metals	SVOCs by 8270	TPH (C10-C44) extended range	Bottle Type and Volume/Preservative: 8oz Jar	Comments	Lab Use Only: Condition of Bottles
1	S-1-S	9/14/17	0857	Soil				/		please hold samples: S-1-2; S-1-4; S-2-2; S-2-4 additional pending analysis	
2	S-1-2	"	0858	"				/			
3	S-1-4	"	0900	"				/			
4	S-2-S	"	0908	"				/			
5	S-2-2	"	0909	"				/			
6	S-2-4	"	0910	"				/			
7	S-4-S	"	0939	"	/			/			
8	S-4-4	"	0940	"	/			/			
9	S-4-8	"	0944	"	/			/			
10	S-4-12	"	0947	"	/			/			
11	S-3-S	"	1000	"	/			/			
12	S-3-4	*	1001	*	/			/			

Special Instructions: please hold samples: S-1-2; S-1-4; S-2-2; S-2-4, preliminary S-1-S & S-2-S results; additional pending analysis

Turn-around Time: ☒ Normal ☐ Rush: _____

1. Relinquished by (Signature/Affiliation)	Date 9/15/17 Time 1450	1. Received by (Signature/Affiliation) ~~ECL~~	Date 09/15/17 Time 1452
2. Relinquished by (Signature/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signature/Affiliation) Dannyle ECL	Date 9/15/17 Time 18:40
3. Relinquished by (Signature/Affiliation)	Date Time	3. Received by (Signature/Affiliation)	Date Time

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Document Number: 11147

Analysis Request and Chain of Custody Record

(1241)

Project Name: PIESA carroll canyon	Project Number
Samplers Names	Project Contact
Laboratory Name	Lab Contact: see page 1
Lab Address	Lab Phone
	Carrier/Waybill No.

White copy: to accompany samples

Yellow copy: field copy

	Sample Name	Date	Time	Sample Type	Required Analyses: VOCs by 8260B	Metals	SVOCs by 8270	TPH (C10-C44) extended range	Comments	Lab Use Only: Condition of Bottles
					Bottle Type and Volume/Preservative					
					Number of Containers					
13	S-3-8	9/14/17	1005	Soil	✓			✓	~~Please Hold Sample~~ AP	
14	S-3-12		1007		✓			✓		
15	CCA-1-S		1044		✓			✓		
16	CCA-1-4		1045		✓			✓		
17	CCA-1-8		1050		✓			✓		
18	CCA-1-12		1104		✓			✓		
19	CCA-2-S		1112		✓			✓		
20	CCA-2-4		1115		✓			✓		
21	CCA-2-8		1125		✓			✓		
22	CCA-2-12		1150	*	✓			✓		
23	EB-20170914		1150	Water	✓					
24	CCA-3-S	*	1252	Soil				✓		

Special Instructions:

Turn-around Time: ☒ Normal ☐ Rush: _____

1. Relinquished by (Signiture/Affiliation)	Date 9/15/17 Time 1450	1. Received by (Signiture/Affiliation) EQ	Date 09/15/17 Time 1450
2. Relinquished by (Signiture/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signiture/Affiliation) EQ	Date 9/15/17 Time 18:40
3. Relinquished by (Signiture/Affiliation)	Date Time	3. Received by (Signiture/Affiliation)	Date Time

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Document Number: 11148 (124)

Analysis Request and Chain of Custody Record

Project Name: PIESA Carroll Canyon	Project Number	Page 3 of 5
Samplers Names	Project Contact: See page 1	
Laboratory Name	Lab Contact	White copy: to accompany samples
Lab Address	Lab Phone	Yellow copy: field copy
	Carrier/Waybill No.	

Required Analyses

	Sample Name	Date	Time	Sample Type	VOCs by 8260B	Metals	SVOCs by 8270	TPH (C10–C44 extended range)	Bottle Type and Volume/Preservative	Number of Containers	Comments	Lab Use Only: Condition of Bottles
25	CCA-3-2	9/14/17	1254	Soil				/				
26	CCA-3-1		1255					/				
27	CCA-4-S		1302					/				
28	CCA-4-2		1304					/				
29	CCA-4-4		1306					/				
30	CAT-1-S		1325		/			/				
31	CAT-1-2		1327		/			/				
32	CAT-1-4		1328		/			/				
33	CAT-2-S		1342		/			/				
34	CAT-2-2		1343		/			/				
35	CAT-2-4		1345		/			/				
36	CAT-3-S	"	1407	"	/			/				

Special Instructions: Please hold samples: CAT-1-2; CAT-1-4; CAT-2-2; CAT-2-4, additional pending analysis, preliminary CAT-1-S & CAT-2-S results

Turn-around Time: ☒ Normal ☐ Rush: ____

1. Relinquished by (Signiture/Affiliation)	Date 9/15/17 Time 1450	1. Received by (Signiture/Affiliation) EQ	Date 09/15/17 Time 1450
2. Relinquished by (Signiture/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signiture/Affiliation) Dannyle EQ	Date 9/15/17 Time 18:40
3. Relinquished by (Signiture/Affiliation)	Date Time	3. Received by (Signiture/Affiliation)	Date Time

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Document Number:, 11149 (1241)

Analysis Request and Chain of Custody Record

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White copy: to accompany samples

Yellow copy: field copy

Project Name: PII ESA Carroll Canyon	Project Number:
Samplers Names:	Project Contact:
Laboratory Name:	Lab Contact:
Lab Address: See page 1	Lab Phone:
	Carrier/Waybill No.:

#	Sample Name	Date	Time	Sample Type	VOCs by 8260B	Metals	SVOCs by 8270	TPH (C10–C44) extended range							Comments	Lab Use Only: Condition of Bottles
37	CAT-3-2	9/14/17	1409	Soil	/			/								
38	CAT-3-4		1410		/			/								
39	FT-2-S		1417					/								
40	FT-2-2		1418					/								
41	FT-2-4		1419					/								
42	FT-1-S		1420					/								
43	FT-1-2		1422					/								
44	FT-1-4		1424					/								
45	D-1-S		1527					/								
46	D-1-2		1528					/								
47	D-1-4		1529					/								
48	D-2-S		1539					/								

Special Instructions: please hold samples: CAT-3-2; CAT-3-4; FT-2-2; FT-2-4; FT-1-2; FT-1-4; D-1-2; D-1-4, Pending additional analysis

Turn-around Time: ☒ Normal ☐ Rush:

1. Relinquished by (Signiture/Affiliation)	[signature]	Date 9/15/17 Time 1450	1. Received by (Signiture/Affiliation) [signature] EQ	Date 09/15/17 Time 1450
2. Relinquished by (Signiture/Affiliation)	[signature]	Date 09/15/17 Time 18:40	2. Received by (Signiture/Affiliation) Dannyle Ecc	Date 9/15/17 Time 18:40
3. Relinquished by (Signiture/Affiliation)		Date Time	3. Received by (Signiture/Affiliation)	Date Time

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Document Number: 11150 (1241)

Analysis Request and Chain of Custody Record

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Project Name: PIESA Carroll Canyon	Project Number: 60897	
Samplers Names: A. Picasso	Project Contact: Chris Lieder clieder@geosyntec.com	
Laboratory Name: Eurofins Calscience	Lab Contact: Stephen Nowak	
Lab Address: 7440 Lincoln Way Garden Grove CA 92841	Lab Phone: (714) 895-5494	
	Carrier/Waybill No.	

White copy: to accompany samples

Yellow copy: field copy

Sample Name	Date	Time	Sample Type	Required Analyses: VOCs by ____	Metals	SVOCs by 8270	TPH (C10-C44)	Comments	Lab Use Only: Condition of Bottles
				Bottle Type and Volume/Preservative:			8oz Jar		
				Number of Containers:					
49 D-2-2	9/14/17	1540	soil				/		
50 D-2-1	9/14/17	1541	soil				/		

Special Instructions: please hold samples: D-2-2 & D-2-1, pending analysis

Turn-around Time: ☒ Normal ☐ Rush: _____

1. Relinquished by (Signature/Affiliation)	Date 9/14/17 Time 1450	1. Received by (Signature/Affiliation)	Date 09/15/17 Time 1450
2. Relinquished by (Signature/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signature/Affiliation)	Date 9/15/17 Time 18:40
3. Relinquished by (Signature/Affiliation)	Date Time	3. Received by (Signature/Affiliation)	Date Time

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WORK ORDER NUMBER: 17-09-1241

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: GEOSYNTEC

DATE: 09/15/2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 3.0 °C (w/ CF): 3.2 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 671
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 1053

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☑	☐	☐
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	☐	☐	☑
Container(s) for certain analysis free of headspace	☑	☐	☐
☑ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☑ VOA**h** (-23) ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB ☐ 125PB**znna** (pH__9)

☐ 250AGB ☐ 250CGB ☑ 250CGB**s** (pH__2) ☐ 250PB ☐ 250PB**n** (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s** (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** (pH__2) ☐ 1AGB**s** (O&G) ☐ 1PB ☐ 1PB**na** (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☑ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (___) ☐ EnCores® (___) ☐ TerraCores® (___) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, Labeled/Checked by: 1053

s = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH Reviewed by: 671

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WORK ORDER NUMBER: 17-09- 1244

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: GeoSyntec

DATE: 09/15/2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 3.1 °C (w/ CF): 3.3 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 671

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 1053

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	☐	☐	☑
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB ☐ 125PB**znna** (pH__9)

☐ 250AGB ☐ 250CGB ☐ 250CGB**s** (pH__2) ☐ 250PB ☐ 250PB**n** (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s** (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** (pH__2) ☐ 1AGB**s** (O&G) ☐ 1PB ☐ 1PB**na** (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☑ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (___) ☐ EnCores® (___) ☐ TerraCores® (___) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, Labeled/Checked by: 1053

s = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH Reviewed by: 671

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Document Number: 11148 (1241)

Analysis Request and Chain of Custody Record

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Project Name	Project Number	Required Analyses
PIESA Carroll Canyon		VOCs by 8260B; Metals; SVOCs by 8270; tpH(C10–C44) extended range
Samplers Names	Project Contact	
Laboratory Name	Lab Contact	
Lab Address See page 1	Lab Phone	
	Carrier/Waybill No.	

White copy: to accompany samples

Yellow copy: field copy

	Sample Name	Date	Time	Sample Type	Bottle Type and Volume/Preservative / Number of Containers	Comments	Lab Use Only: Condition of Bottles
25	CCA-3-2	9/14/17	1254	Soil		Please hold:	
26	CCA-3-4	"	1255	"		CCA-3-2;	
27	CCA-4-S		1302			CCA-3-4;	
28	CCA-4-2		1304			CCA-4-2;	
29	CCA-4-4		1306			CCA-4-4	
30	CAT-1-S		1325			pending additional analysis	
31	CAT-1-2		1327				
32	CAT-1-4		1328				
33	CAT-2-S		1342				
34	CAT-2-2		1343				
35	CAT-2-4		1345				
36	CAT-3-S	"	1407	"			

Special Instructions: please hold samples: CAT-1-2; CAT-1-4; CAT-2-2; CAT-2-4, additional pending analysis, preliminary CAT-1-S & CAT-2-S results

Turn-around Time: ☒ Normal ☐ Rush:

1. Relinquished by (Signature/Affiliation)	Date 9/15/17 Time 1450	1. Received by (Signature/Affiliation) EQ	Date 09/15/17 Time 1450
2. Relinquished by (Signature/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signature/Affiliation) Bonnyle GCA	Date 9/15/17 Time 18:40
3. Relinquished by (Signature/Affiliation)	Date Time	3. Received by (Signature/Affiliation)	Date Time

Geosyntec consultants 10875 Rancho Bernardo Road, Suite 200, San Diego, CA 92127 (858) 674-6559 Fax: (858) 674-6586

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Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

WORK ORDER NUMBER: 17-09-1241

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Geosyntec Consultants

Client Project Name: PII ESA Carroll Canyon / SC0897

Attention: Chris Lieder
16644 West Bernardo Drive
Suite 301
San Diego, CA 92127-1901

Approved for release on 09/26/2017 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

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Client Project Name: PII ESA Carroll Canyon / SC0897
Work Order Number: 17-09-1241

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Work Order Narrative

Work Order: 17-09-1241 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/15/17. They were assigned to Work Order 17-09-1241.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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Sample Summary

Client:	Geosyntec Consultants	Work Order:	17-09-1241
	16644 West Bernardo Drive, Suite 301	Project Name:	PII ESA Carroll Canyon / SC0897
	San Diego, CA 92127-1901	PO Number:	
		Date/Time Received:	09/15/17 18:40
		Number of Containers:	50
Attn:	Chris Lieder		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
S-1-2	17-09-1241-2	09/14/17 08:58	1	Solid
S-2-2	17-09-1241-5	09/14/17 09:09	1	Solid
CCA-3-2	17-09-1241-25	09/14/17 12:54	1	Solid
CCA-4-2	17-09-1241-28	09/14/17 13:04	1	Solid
CAT-3-2	17-09-1241-37	09/14/17 14:09	1	Solid
FT-2-2	17-09-1241-40	09/14/17 14:18	1	Solid
D-1-2	17-09-1241-46	09/14/17 15:28	1	Solid
D-2-2	17-09-1241-49	09/14/17 15:40	1	Solid

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Detections Summary

Client:	Geosyntec Consultants	Work Order:	17-09-1241
	16644 West Bernardo Drive, Suite 301	Project Name:	PII ESA Carroll Canyon / SC0897
	San Diego, CA 92127-1901	Received:	09/15/17
Attn:	Chris Lieder		Page 1 of 1

Client SampleID / Analyte	Result	Qualifiers	RL	Units	Method	Extraction
S-1-2 (17-09-1241-2)						
C13-C14	5.5		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	74		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	330		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	34		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	13		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	5.0		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	470		4.9	mg/kg	EPA 8015B (M)	EPA 3550B
CCA-4-2 (17-09-1241-28)						
C11-C12	90		25	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C14	240		25	mg/kg	EPA 8015B (M)	EPA 3550B
C15-C16	340		25	mg/kg	EPA 8015B (M)	EPA 3550B
C17-C18	320		25	mg/kg	EPA 8015B (M)	EPA 3550B
C19-C20	210		25	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	310		25	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	580		25	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	1400		25	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	1100		25	mg/kg	EPA 8015B (M)	EPA 3550B
C33-C36	140		25	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	4700		25	mg/kg	EPA 8015B (M)	EPA 3550B
CAT-3-2 (17-09-1241-37)						
C25-C28	6.9		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	17		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
D-2-2 (17-09-1241-49)						
C19-C20	22		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	38		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	13		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C28	7.9		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C29-C32	5.0		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C6-C44 Total	94		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-1-2	**17-09-1241-2-A**	**09/14/17 08:58**	**Solid**	**GC 47**	**09/25/17**	**09/26/17 02:05**	**170925B07B**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	5.5	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	74	4.9	1.00	
C21-C22	330	4.9	1.00	
C23-C24	34	4.9	1.00	
C25-C28	13	4.9	1.00	
C29-C32	5.0	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	470	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-2-2	**17-09-1241-5-A**	**09/14/17 09:09**	**Solid**	**GC 47**	**09/25/17**	**09/26/17 05:41**	**170925B07B**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	113	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-3-2	**17-09-1241-25-A**	**09/14/17 12:54**	**Solid**	**GC 47**	**09/25/17**	**09/26/17 02:27**	**170925B07B**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	109	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-4-2	**17-09-1241-28-A**	**09/14/17 13:04**	**Solid**	**GC 47**	**09/25/17**	**09/26/17 15:29**	**170925B07B**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	25	5.00	
C7	ND	25	5.00	
C8	ND	25	5.00	
C9-C10	ND	25	5.00	
C11-C12	90	25	5.00	
C13-C14	240	25	5.00	
C15-C16	340	25	5.00	
C17-C18	320	25	5.00	
C19-C20	210	25	5.00	
C21-C22	310	25	5.00	
C23-C24	580	25	5.00	
C25-C28	1400	25	5.00	
C29-C32	1100	25	5.00	
C33-C36	140	25	5.00	
C37-C40	ND	25	5.00	
C41-C44	ND	25	5.00	
C6-C44 Total	4700	25	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CAT-3-2	**17-09-1241-37-A**	**09/14/17 14:09**	**Solid**	**GC 47**	**09/25/17**	**09/26/17 02:48**	**170925B07B**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	6.9	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	17	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	109	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FT-2-2	**17-09-1241-40-A**	**09/14/17 14:18**	**Solid**	**GC 47**	**09/25/17**	**09/26/17 03:10**	**170925B07B**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	106	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-1-2	**17-09-1241-46-A**	**09/14/17 15:28**	**Solid**	**GC 47**	**09/25/17**	**09/26/17 03:32**	**170925B07B**

Parameter	Result	RL	DF	Qualifiers
C6	ND	4.9	1.00	
C7	ND	4.9	1.00	
C8	ND	4.9	1.00	
C9-C10	ND	4.9	1.00	
C11-C12	ND	4.9	1.00	
C13-C14	ND	4.9	1.00	
C15-C16	ND	4.9	1.00	
C17-C18	ND	4.9	1.00	
C19-C20	ND	4.9	1.00	
C21-C22	ND	4.9	1.00	
C23-C24	ND	4.9	1.00	
C25-C28	ND	4.9	1.00	
C29-C32	ND	4.9	1.00	
C33-C36	ND	4.9	1.00	
C37-C40	ND	4.9	1.00	
C41-C44	ND	4.9	1.00	
C6-C44 Total	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
D-2-2	**17-09-1241-49-A**	**09/14/17 15:40**	**Solid**	**GC 47**	**09/25/17**	**09/26/17 06:02**	**170925B07B**

Comment(s): - The total concentration includes individual carbon range concentrations (estimated), if any, below the RL reported as ND.

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	22	5.0	1.00	
C21-C22	38	5.0	1.00	
C23-C24	13	5.0	1.00	
C25-C28	7.9	5.0	1.00	
C29-C32	5.0	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	94	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	108	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-2818**	**N/A**	**Solid**	**GC 45**	**09/25/17**	**09/26/17 12:36**	**170925B07B**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

Geosyntec Consultants		Date Received:	09/15/17
16644 West Bernardo Drive, Suite 301		Work Order:	17-09-1241
San Diego, CA 92127-1901		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: PII ESA Carroll Canyon / SC0897			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-09-1822-50	**Sample**	**Solid**	**GC 45**	**09/25/17**	**09/26/17 14:06**	**170925S07**
17-09-1822-50	**Matrix Spike**	**Solid**	**GC 45**	**09/25/17**	**09/26/17 14:27**	**170925S07**
17-09-1822-50	**Matrix Spike Duplicate**	**Solid**	**GC 45**	**09/25/17**	**09/26/17 14:50**	**170925S07**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	3494	400.0	4983	372	5012	380	64-130	1	0-15	3

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Geosyntec Consultants		Date Received:	09/15/17
16644 West Bernardo Drive, Suite 301		Work Order:	17-09-1241
San Diego, CA 92127-1901		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: PII ESA Carroll Canyon / SC0897			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-2818	**LCS**	**Solid**	**GC 45**	**09/25/17**	**09/26/17 12:57**	**170925B07B**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	449.1	112	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-09-1241 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	682	GC 47	1
EPA 8015B (M)	EPA 3550B	972	GC 47	1

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Glossary of Terms and Qualifiers

Work Order: 17-09-1241 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Anayeli Picasso <APicasso@Geosyntec.com>
Sent: Monday, September 25, 2017 10:58 AM
To: Stephen Nowak
Cc: Christopher Lieder
Subject: RE: PII ESA Carroll Canyon / SC0897 / ECI 17-09-1241

Hello Stephen,

Could you please analyze the following samples for TPH extended range (C10-C44):

- S-1-2
- S-2-2
- CCA-3-2
- CCA-4-2
- CAT-3-2
- FT-2-2
- D-1-2
- D-2-2

Please run on 24-hour turnaround time. Thank you.

Regards,
Anayeli

From: Stephen Nowak [mailto:StephenNowak@eurofinsUS.com]
Sent: Monday, September 25, 2017 9:52 AM
To: Christopher Lieder <CLieder@Geosyntec.com>; Anayeli Picasso <APicasso@Geosyntec.com>
Cc: Donna Jenkins <DJenkins@Geosyntec.com>
Subject: PII ESA Carroll Canyon / SC0897 / ECI 17-09-1241

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

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Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494

Email: StephenNowak@EurofinsUS.com
Website: www.eurofinsUS.com/Calscience

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Document Number:, 11152

Analysis Request and Chain of Custody Record

17-09-1241

Page 1 of 5

Project Name: PLIESA Carroll Canyon	Project Number: SC0897
Samplers Names: A. Picasso	Project Contact: Chris Lieder clieder@geosyntec.com
Laboratory Name: Eurofins Calscience	Lab Contact: Stephen Nowak
Lab Address: 7440 Lincoln Way Garden Grove CA 92841	Lab Phone: (714) 895-5494
	Carrier/Waybill No.

White copy: to accompany samples

Yellow copy: field copy

#	Sample Name	Date	Time	Sample Type	VOCs by 8260B	Metals	SVOCs by 8270	TPH (C10-C44) extended range							Comments	Lab Use Only: Condition of Bottles
	Bottle Type and Volume/Preservative				8oz Jar			8oz Jar								
1	S-1-S	9/14/17	0857	Soil				/							please Hold samples:	
2	S-1-2		0858					/							S-1-2; S-1-4;	
3	S-1-4		0900					/							S-2-2; S-2-4	
4	S-2-S		0908					/							additional pending	
5	S-2-2		0909					/							analysis	
6	S-2-4		0910					/								
7	S-4-S		0939		/			/								
8	S-4-4		0940		/			/								
9	S-4-8		0944		/			/								
10	S-4-12		0947		/			/								
11	S-3-S		1000		/			/								
12	S-3-4		1001		/			/								

Special Instructions: please Hold samples: S-1-2; S-1-4; S-2-2; S-2-4, preliminary S-1-S & S-2-S results, additional pending analysis

Turn-around Time: ☒ Normal ☐ Rush: ______

Relinquished by (Signiture/Affiliation)	Date / Time	Received by (Signiture/Affiliation)	Date / Time
1. Relinquished by: [signature]	Date 9/15/17 Time 1450	1. Received by: [signature] ECI	Date 09/15/17 Time 1452
2. Relinquished by: [signature]	Date 09/15/17 Time 18:40	2. Received by: Dannyle ECI	Date 9/15/17 Time 18:40
3. Relinquished by:	Date Time	3. Received by:	Date Time

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Document Number: 11147

Analysis Request and Chain of Custody Record

1241

Project Name: PIESA carroll canyon	Project Number
Samplers Names	Project Contact
Laboratory Name	Lab Contact: see page 1
Lab Address	Lab Phone
	Carrier/Waybill No.

White copy: to accompany samples

Yellow copy: field copy

	Sample Name	Date	Time	Sample Type	Required Analyses: VOCs by 8260B	Metals	SVOCs by 8270	TPH (C10-C44) extended range	Comments	Lab Use Only: Condition of Bottles
					Bottle Type and Volume/Preservative					
					Number of Containers					
13	S-3-8	9/14/17	1005	Soil	✓			✓	~~Please Hold Sample~~ AP	
14	S-3-12		1007		✓			✓		
15	CCA-1-S		1044		✓			✓		
16	CCA-1-4		1045		✓			✓		
17	CCA-1-8		1050		✓			✓		
18	CCA-1-12		1104		✓			✓		
19	CCA-2-S		1112		✓			✓		
20	CCA-2-4		1115		✓			✓		
21	CCA-2-8		1125		✓			✓		
22	CCA-2-12		1150	*	✓			✓		
23	EB-20170914		1150	Water	✓					
24	CCA-3-S	*	1252	Soil				✓		

Special Instructions:

Turn-around Time: ☒ Normal ☐ Rush: _____

1. Relinquished by (Signiture/Affiliation)	Date 9/15/17 Time 1450	1. Received by (Signiture/Affiliation) EQ	Date 09/15/17 Time 1450
2. Relinquished by (Signiture/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signiture/Affiliation) EQ	Date 9/15/17 Time 18:40
3. Relinquished by (Signiture/Affiliation)	Date Time	3. Received by (Signiture/Affiliation)	Date Time

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Document Number: 11148 (124)

Analysis Request and Chain of Custody Record

Project Name: PIESA Carroll Canyon	Project Number	Page 3 of 5
Samplers Names	Project Contact: See page 1	
Laboratory Name	Lab Contact	White copy: to accompany samples
Lab Address	Lab Phone	Yellow copy: field copy
	Carrier/Waybill No.	

Required Analyses

VOCs by 8260B	Metals	SVOCs by 8270	TPH (C10–C44 extended range)						

Bottle Type and Volume/Preservative

Number of Containers

	Sample Name	Date	Time	Sample Type	Comments	Lab Use Only: Condition of Bottles
25	CCA-3-2	9/14/17	1254	Soil		
26	CCA-3-1		1255			
27	CCA-4-S		1302			
28	CCA-4-2		1304			
29	CCA-4-4		1306			
30	CAT-1-S		1325			
31	CAT-1-2		1327			
32	CAT-1-4		1328			
33	CAT-2-S		1342			
34	CAT-2-2		1343			
35	CAT-2-4		1345			
36	CAT-3-S	"	1407	"		

Special Instructions: Please hold samples: CAT-1-2; CAT-1-4; CAT-2-2; CAT-2-4, additional pending analysis, preliminary CAT-1-S & CAT-2-S results

Turn-around Time: ☒ Normal ☐ Rush:

1. Relinquished by (Signiture/Affiliation)	Date 9/15/17 Time 1450	1. Received by (Signiture/Affiliation) EQ	Date 09/15/17 Time 1450
2. Relinquished by (Signiture/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signiture/Affiliation) Danyle EQ	Date 9/15/17 Time 18:40
3. Relinquished by (Signiture/Affiliation)	Date Time	3. Received by (Signiture/Affiliation)	Date Time

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Document Number: 11149 (1241)

Analysis Request and Chain of Custody Record

Page 4 of 5

White copy: to accompany samples

Yellow copy: field copy

Project Name: PII ESA Carrol Canyon	Project Number:
Samplers Names:	Project Contact:
Laboratory Name:	Lab Contact:
Lab Address: See page 1	Lab Phone:
	Carrier/Waybill No.:

#	Sample Name	Date	Time	Sample Type	VOCs by 8260B	Metals	SVOCs by 8270	TPH (C10–C44) extended range							Comments	Condition of Bottles (Lab Use Only)
37	CAT-3-2	9/14/17	1409	Soil	/			/								
38	CAT-3-4		1410		/			/								
39	FT-2-S		1417					/								
40	FT-2-2		1418					/								
41	FT-2-4		1419					/								
42	FT-1-S		1420					/								
43	FT-1-2		1422					/								
44	FT-1-4		1424					/								
45	D-1-S		1527					/								
46	D-1-2		1528					/								
47	D-1-4		1529					/								
48	D-2-S		1539					/								

Special Instructions: please hold samples: CAT-3-2; CAT-3-4; FT-2-2; FT-2-4; FT-1-2; FT-1-4; D-1-2; D-1-4, Pending additional analysis

Turn-around Time: ☒ Normal ☐ Rush:

1. Relinquished by (Signiture/Affiliation): [signature]	Date 9/15/17 Time 1450	1. Received by (Signiture/Affiliation): [signature] EO	Date 09/15/17 Time 1450
2. Relinquished by (Signiture/Affiliation): [signature]	Date 09/15/17 Time 18:40	2. Received by (Signiture/Affiliation): Dannyle Erl	Date 9/15/17 Time 18:40
3. Relinquished by (Signiture/Affiliation):	Date Time	3. Received by (Signiture/Affiliation):	Date Time

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Document Number: 11150 (1241)

Analysis Request and Chain of Custody Record

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Project Name: PIESA Carroll Canyon	Project Number: 60897	
Samplers Names: A. Picasso	Project Contact: Chris Lieder clieder@geosyntec.com	
Laboratory Name: Eurofins Calscience	Lab Contact: Stephen Nowak	
Lab Address: 7440 Lincoln Way Garden Grove CA 92841	Lab Phone: (714) 895-5494	
	Carrier/Waybill No.	

White copy: to accompany samples

Yellow copy: field copy

Sample Name	Date	Time	Sample Type	Required Analyses: VOCs by ____	Metals	SVOCs by 8270	TPH (C10-C44)	Comments	Lab Use Only: Condition of Bottles
				Bottle Type and Volume/Preservative:			8oz Jar		
				Number of Containers:					
49 D-2-2	9/14/17	1540	soil				/		
50 D-2-1	9/14/17	1541	soil				/		

Special Instructions: please hold samples: D-2-2 & D-2-1, pending analysis

Turn-around Time: ☒ Normal ☐ Rush: _____

1. Relinquished by (Signature/Affiliation)	Date 9/14/17 Time 1450	1. Received by (Signature/Affiliation)	Date 09/15/17 Time 1450
2. Relinquished by (Signature/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signature/Affiliation)	Date 9/15/17 Time 18:40
3. Relinquished by (Signature/Affiliation)	Date Time	3. Received by (Signature/Affiliation)	Date Time

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WORK ORDER NUMBER: 17-09-1241

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: GEOSYNTEC

DATE: 09/15/2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 3.0 °C (w/ CF): 3.2 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 671

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 1053

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☑	☐	☐
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	☐	☐	☑
Container(s) for certain analysis free of headspace	☑	☐	☐
☑ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☑ VOA**h** (-23) ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB ☐ 125PB**znna** (pH__9)

☐ 250AGB ☐ 250CGB ☑ 250CGB**s** (pH__2) ☐ 250PB ☐ 250PB**n** (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s** (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** (pH__2) ☐ 1AGB**s** (O&G) ☐ 1PB ☐ 1PB**na** (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☑ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (___) ☐ EnCores® (___) ☐ TerraCores® (___) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, Labeled/Checked by: 1053

s = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH Reviewed by: 671

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WORK ORDER NUMBER: 17-09-1244

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: GeoSyntec

DATE: 09/15/2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 3.1 °C (w/ CF): 3.3 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 671

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 1053

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	☐	☐	☑
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB ☐ 125PB**znna** (pH__9)

☐ 250AGB ☐ 250CGB ☐ 250CGB**s** (pH__2) ☐ 250PB ☐ 250PB**n** (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s** (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** (pH__2) ☐ 1AGB**s** (O&G) ☐ 1PB ☐ 1PB**na** (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☑ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (___) ☐ EnCores® (___) ☐ TerraCores® (___) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, Labeled/Checked by: 1053

s = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH Reviewed by: 671

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Document Number: 11148 (1241)

Analysis Request and Chain of Custody Record

Project Name	Project Number
PIESA Carroll Canyon	
Samplers Names	Project Contact
Laboratory Name	Lab Contact
Lab Address See page 1	Lab Phone
	Carrier/Waybill No.

White copy: to accompany samples

Yellow copy: field copy

Sample Name	Date	Time	Sample Type	Bottle Type and Volume/Preservative / Number of Containers: VOCs by 8260B	Metals	SVOCs by 8270	tpH(C10–C44) extended range								Comments	Lab Use Only: Condition of Bottles
25 CCA-3-2	9/14/17	1254	Soil				/								Please hold:	
26 CCA-3-4	"	1255	"				/								CCA-3-2;	
27 CCA-4-S		1302					/								CCA-3-4;	
28 CCA-4-2		1304					/								CCA-4-2;	
29 CCA-4-4		1306					/								CCA-4-4	
30 CAT-1-S		1325		/			/								pending additional analysis	
31 CAT-1-2		1327		/			/									
32 CAT-1-4		1328		/			/									
33 CAT-2-S		1342		/			/									
34 CAT-2-2		1343		/			/									
35 CAT-2-4		1345		/			/									
36 CAT-3-S	"	1407	"	/			/									

Special Instructions: please hold samples: CAT-1-2; CAT-1-4; CAT-2-2; CAT-2-4, additional pending analysis, preliminary CAT-1-S & CAT-2-S results

Turn-around Time: ☒ Normal ☐ Rush:

1. Relinquished by (Signature/Affiliation)	Date 9/15/17 Time 1450	1. Received by (Signature/Affiliation)	Date 09/15/17 Time 1450
2. Relinquished by (Signature/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signature/Affiliation) GC2	Date 9/15/17 Time 18:40
3. Relinquished by (Signature/Affiliation)	Date Time	3. Received by (Signature/Affiliation)	Date Time

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Supplemental Report 2

Additional requested analyses are reported as a stand-alone report.

WORK ORDER NUMBER: 17-09-1241

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Geosyntec Consultants

Client Project Name: PII ESA Carroll Canyon / SC0897

Attention: Chris Lieder
16644 West Bernardo Drive
Suite 301
San Diego, CA 92127-1901

Approved for release on 09/27/2017 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: PII ESA Carroll Canyon / SC0897
Work Order Number: 17-09-1241

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Work Order Narrative

Work Order: 17-09-1241 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 09/15/17. They were assigned to Work Order 17-09-1241.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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Sample Summary

Client:	Geosyntec Consultants	Work Order:	17-09-1241
	16644 West Bernardo Drive, Suite 301	Project Name:	PII ESA Carroll Canyon / SC0897
	San Diego, CA 92127-1901	PO Number:	
		Date/Time Received:	09/15/17 18:40
		Number of Containers:	50
Attn:	Chris Lieder		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
S-1-4	17-09-1241-3	09/14/17 09:00	1	Solid
CCA-4-4	17-09-1241-29	09/14/17 13:06	1	Solid

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
S-1-4	**17-09-1241-3-A**	**09/14/17 09:00**	**Solid**	**GC 47**	**09/26/17**	**09/26/17 21:20**	**170926B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	101	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CCA-4-4	**17-09-1241-29-A**	**09/14/17 13:06**	**Solid**	**GC 47**	**09/26/17**	**09/26/17 21:41**	**170926B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.1	1.00	
C7	ND	5.1	1.00	
C8	ND	5.1	1.00	
C9-C10	ND	5.1	1.00	
C11-C12	ND	5.1	1.00	
C13-C14	ND	5.1	1.00	
C15-C16	ND	5.1	1.00	
C17-C18	ND	5.1	1.00	
C19-C20	ND	5.1	1.00	
C21-C22	ND	5.1	1.00	
C23-C24	ND	5.1	1.00	
C25-C28	ND	5.1	1.00	
C29-C32	ND	5.1	1.00	
C33-C36	ND	5.1	1.00	
C37-C40	ND	5.1	1.00	
C41-C44	ND	5.1	1.00	
C6-C44 Total	ND	5.1	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	102	61-145	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Geosyntec Consultants
16644 West Bernardo Drive, Suite 301
San Diego, CA 92127-1901

Date Received: 09/15/17
Work Order: 17-09-1241
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

Project: PII ESA Carroll Canyon / SC0897

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-490-2819**	**N/A**	**Solid**	**GC 47**	**09/26/17**	**09/26/17 12:54**	**170926B01**

Parameter	Result	RL	DF	Qualifiers
C6	ND	5.0	1.00	
C7	ND	5.0	1.00	
C8	ND	5.0	1.00	
C9-C10	ND	5.0	1.00	
C11-C12	ND	5.0	1.00	
C13-C14	ND	5.0	1.00	
C15-C16	ND	5.0	1.00	
C17-C18	ND	5.0	1.00	
C19-C20	ND	5.0	1.00	
C21-C22	ND	5.0	1.00	
C23-C24	ND	5.0	1.00	
C25-C28	ND	5.0	1.00	
C29-C32	ND	5.0	1.00	
C33-C36	ND	5.0	1.00	
C37-C40	ND	5.0	1.00	
C41-C44	ND	5.0	1.00	
C6-C44 Total	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	114	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - LCS

Geosyntec Consultants		Date Received:	09/15/17
16644 West Bernardo Drive, Suite 301		Work Order:	17-09-1241
San Diego, CA 92127-1901		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: PII ESA Carroll Canyon / SC0897			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-490-2819	**LCS**	**Solid**	**GC 47**	**09/26/17**	**09/26/17 13:16**	**170926B01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	426.6	107	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-09-1241 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3550B	682	GC 47	1

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Glossary of Terms and Qualifiers

Work Order: 17-09-1241 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stephen Nowak

From: Anayeli Picasso <APicasso@Geosyntec.com>
Sent: Tuesday, September 26, 2017 5:14 PM
To: Stephen Nowak; Christopher Lieder
Cc: Donna Jenkins
Subject: RE: PII ESA Carroll Canyon / SC0897 / ECI 17-09-1241

Steve,

Could you please analyze the following samples for TPH extended range (C10-C44):

- S-1-4
- CCA-4-4

Please run on 24-hour turnaround time. Thanks again!

Regards,
Anayeli

From: Stephen Nowak [mailto:StephenNowak@eurofinsUS.com]
Sent: Tuesday, September 26, 2017 4:55 PM
To: Christopher Lieder <CLieder@Geosyntec.com>; Anayeli Picasso <APicasso@Geosyntec.com>
Cc: Donna Jenkins <DJenkins@Geosyntec.com>
Subject: PII ESA Carroll Canyon / SC0897 / ECI 17-09-1241

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

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Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494

Email: StephenNowak@EurofinsUS.com
Website: www.eurofinsUS.com/Calscience

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Stephen Nowak

From: Anayeli Picasso <APicasso@Geosyntec.com>
Sent: Monday, September 25, 2017 10:58 AM
To: Stephen Nowak
Cc: Christopher Lieder
Subject: RE: PII ESA Carroll Canyon / SC0897 / ECI 17-09-1241

Hello Stephen,

Could you please analyze the following samples for TPH extended range (C10-C44):

- S-1-2
- S-2-2
- CCA-3-2
- CCA-4-2
- CAT-3-2
- FT-2-2
- D-1-2
- D-2-2

Please run on 24-hour turnaround time. Thank you.

Regards,
Anayeli

From: Stephen Nowak [mailto:StephenNowak@eurofinsUS.com]
Sent: Monday, September 25, 2017 9:52 AM
To: Christopher Lieder <CLieder@Geosyntec.com>; Anayeli Picasso <APicasso@Geosyntec.com>
Cc: Donna Jenkins <DJenkins@Geosyntec.com>
Subject: PII ESA Carroll Canyon / SC0897 / ECI 17-09-1241

Report, EDD, and Invoice are attached.

Stephen Nowak
Project Manager

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Eurofins Calscience, Inc.
7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494

Email: StephenNowak@EurofinsUS.com
Website: www.eurofinsUS.com/Calscience

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Document Number: 11152

Analysis Request and Chain of Custody Record

17-09-1241

Page 1 of 5

Project Name: PIESA Carroll Canyon	Project Number: SC0897	
Samplers Names: A. Picasso	Project Contact: Chris Lieder clieder@geosyntec.com	
Laboratory Name: Eurofins Calscience	Lab Contact: Stephen Nowak	
Lab Address: 7440 Lincoln Way Garden Grove CA 92841	Lab Phone: (714) 895-5494	
	Carrier/Waybill No.	

White copy: to accompany samples

Yellow copy: field copy

	Sample Name	Date	Time	Sample Type	Required Analyses: VOCs by 8260B	Metals	SVOCs by 8270	TPH (C10-C44) extended range	Bottle Type and Volume/Preservative: 8oz Jar	Comments	Lab Use Only: Condition of Bottles
1	S-1-S	9/14/17	0857	Soil				/		please hold samples: S-1-2; S-1-4; S-2-2; S-2-4 additional pending analysis	
2	S-1-2	"	0858	"				/			
3	S-1-4	"	0900	"				/			
4	S-2-S	"	0908	"				/			
5	S-2-2	"	0909	"				/			
6	S-2-4	"	0910	"				/			
7	S-4-S	"	0939	"	/			/			
8	S-4-4	"	0940	"	/			/			
9	S-4-8	"	0944	"	/			/			
10	S-4-12	"	0947	"	/			/			
11	S-3-S	"	1000	"	/			/			
12	S-3-4	*	1001	*	/			/			

Special Instructions: please hold samples: S-1-2; S-1-4; S-2-2; S-2-4, preliminary S-1-S & S-2-S results; additional pending analysis

Turn-around Time: ☒ Normal ☐ Rush: _____

1. Relinquished by (Signature/Affiliation)	Date 9/15/17 Time 1450	1. Received by (Signature/Affiliation) ~~ECL~~	Date 09/15/17 Time 1452
2. Relinquished by (Signature/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signature/Affiliation) Dannyle ECL	Date 9/15/17 Time 18:40
3. Relinquished by (Signature/Affiliation)	Date Time	3. Received by (Signature/Affiliation)	Date Time

Geosyntec consultants 10875 Rancho Bernardo Road, Suite 200, San Diego, CA 92127 (858) 674-6559 Fax: (858) 674-6586

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Document Number: 11147

Analysis Request and Chain of Custody Record

1241

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Project Name: PIESA carroll canyon	Project Number	
Samplers Names	Project Contact	
Laboratory Name	Lab Contact: see page 1	
Lab Address	Lab Phone	
	Carrier/Waybill No.	

Required Analyses

VOCs by 8260B; Metals; SVOCs by 8270; TPH (C10-C44) extended range

White copy: to accompany samples

Yellow copy: field copy

	Sample Name	Date	Time	Sample Type	Bottle Type and Volume/Preservative / Number of Containers	Comments	Lab Use Only: Condition of Bottles
13	S-3-8	9/14/17	1005	Soil		~~Please Hold Sample~~ AP	
14	S-3-12		1007				
15	CCA-1-S		1044				
16	CCA-1-4		1045				
17	CCA-1-8		1050				
18	CCA-1-12		1104				
19	CCA-2-S		1112				
20	CCA-2-4		1115				
21	CCA-2-8		1125				
22	CCA-2-12		1150	*			
23	EB-20170914		1150	Water			
24	CCA-3-S	*	1252	Soil			

Special Instructions:

Turn-around Time: ☒ Normal ☐ Rush: _____

1. Relinquished by (Signiture/Affiliation)	Date 9/15/17 Time 1450	1. Received by (Signiture/Affiliation) EQ
2. Relinquished by (Signiture/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signiture/Affiliation) EQ
3. Relinquished by (Signiture/Affiliation)	Date Time	3. Received by (Signiture/Affiliation) Date 9/15/17 Time 18:40

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Document Number: 11148 (124)

Analysis Request and Chain of Custody Record

Page 3 of 5

Project Name: PIESA Carroll Canyon	Project Number
Samplers Names	Project Contact: See page 1
Laboratory Name	Lab Contact
Lab Address	Lab Phone
	Carrier/Waybill No.

White copy: to accompany samples

Yellow copy: field copy

	Sample Name	Date	Time	Sample Type	Required Analyses: VOCs by 8260B	Metals	SVOCs by 8270	TPH (C10–C44 extended range)	Comments	Lab Use Only: Condition of Bottles
					Bottle Type and Volume/Preservative / Number of Containers					
25	CCA-3-2	9/14/17	1254	Soil				/		
26	CCA-3-1		1255					/		
27	CCA-4-S		1302					/		
28	CCA-4-2		1304					/		
29	CCA-4-4		1306					/		
30	CAT-1-S		1325		/			/		
31	CAT-1-2		1327		/			/		
32	CAT-1-4		1328		/			/		
33	CAT-2-S		1342		/			/		
34	CAT-2-2		1343		/			/		
35	CAT-2-4		1345		/			/		
36	CAT-3-S	"	1407	"	/			/		

Special Instructions: Please hold samples: CAT-1-2; CAT-1-4; CAT-2-2; CAT-2-4, additional pending analysis, preliminary CAT-1-S & CAT-2-S results

Turn-around Time: ☒ Normal ☐ Rush:

1. Relinquished by (Signiture/Affiliation)	Date 9/15/17 Time 1450	1. Received by (Signiture/Affiliation) EQ Date 09/15/17 Time 1450
2. Relinquished by (Signiture/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signiture/Affiliation) Dannyle EQ Date 9/15/17 Time 18:40
3. Relinquished by (Signiture/Affiliation)	Date Time	3. Received by (Signiture/Affiliation) Date Time

Geosyntec consultants
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Document Number: 11149 (1241)

Analysis Request and Chain of Custody Record

Page 4 of 5

Project Name: PIESA Canal Canyon	Project Number
Samplers Names	Project Contact: A
Laboratory Name	Lab Contact: See page
Lab Address: See page	Lab Phone
	Carrier/Waybill No.

White copy: to accompany samples

Yellow copy: field copy

	Sample Name	Date	Time	Sample Type	Required Analyses: VOCs by 8260	Metals	SVOCs by 8270	TPH (C10-C44) extended range	Comments	Lab Use Only: Condition of Bottles
	Bottle Type and Volume/Preservative									
	Number of Containers									
37	CAT-3-2	9/14/17	1409	Soil						
38	CAT-3-4	"	1410	"						
39	FT-2-S	"	1417	"						
40	FT-2-2	"	1418	"						
41	FT-2-4	"	1419	"						
42	FT-1-S	"	1420	"						
43	FT-1-2	"	1422	"						
44	FT-1-4	"	1424	"						
45	D-1-S	"	1527	"						
46	D-1-2	"	1528	"						
47	D-1-4	"	1529	"						
48	D-2-S	"	1539	"						

Special Instructions: please hold samples: CAT-3-2; CAT-3-4; FT-2-2; FT-2-4; FT-1-2; FT-1-4; D-1-2; D-1-4, pending additional analysis

Turn-around Time: ☒ Normal ☐ Rush:

1. Relinquished by (Signature/Affiliation)	Date 9/15/17 Time 1450	1. Received by (Signature/Affiliation)	Date 09/15/17 Time 1450 EQ
2. Relinquished by (Signature/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signature/Affiliation) Pennoyle EQ	Date 9/15/17 Time 18:40
3. Relinquished by (Signature/Affiliation)	Date Time	3. Received by (Signature/Affiliation)	Date Time

Geosyntec consultants
10875 Rancho Bernardo Road, Suite 200, San Diego, CA 92127 (858) 674-6559 Fax: (858) 674-6586

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Document Number: 11150 (1241)

Analysis Request and Chain of Custody Record

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Project Name: PIESA Carroll Canyon	Project Number: 600897	
Samplers Names: A. Picasso	Project Contact: Chris Lieder clieder@geosyntec.com	
Laboratory Name: Eurofins Calscience	Lab Contact: Stephen Nowak	
Lab Address: 7440 Lincoln Way Garden Grove CA 92841	Lab Phone: (714) 895-5494	
	Carrier/Waybill No.	

White copy: to accompany samples

Yellow copy: field copy

Sample Name	Date	Time	Sample Type	Required Analyses: VOCs by ____	Metals	SVOCs by 8270	TPH (C10-C44)	Bottle Type and Volume/Preservative: 8oz Jar	Number of Containers	Comments	Lab Use Only: Condition of Bottles
49 D-2-2	9/14/17	1540	soil					/			
50 D-2-4	9/14/17	1541	soil					/			

Special Instructions: pleasehold samples: D-2-2 & D-2-4, pending analysis

Turn-around Time: ☒ Normal ☐ Rush: _____

1. Relinquished by (Signiture/Affiliation)	Date 9/14/17 Time 1450	1. Received by (Signiture/Affiliation)	Date 09/15/17 Time 1450
2. Relinquished by (Signiture/Affiliation)	Date 09/15/17 Time 18:40	2. Received by (Signiture/Affiliation)	Date 9/15/17 Time 18:40
3. Relinquished by (Signiture/Affiliation)	Date Time	3. Received by (Signiture/Affiliation)	Date Time

Geosyntec consultants
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WORK ORDER NUMBER: 17-09-1241

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: GEOSYNTEC

DATE: 09/15/2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 3.0 °C (w/ CF): 3.2 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 671

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 1053

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☑	☐	☐
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	☐	☐	☑
Container(s) for certain analysis free of headspace	☑	☐	☐
☑ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☑ VOA**h** (-23) ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB ☐ 125PB**znna** (pH__9)

☐ 250AGB ☐ 250CGB ☑ 250CGB**s** (pH__2) ☐ 250PB ☐ 250PB**n** (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s** (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** (pH__2) ☐ 1AGB**s** (O&G) ☐ 1PB ☐ 1PB**na** (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☑ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (___) ☐ EnCores® (___) ☐ TerraCores® (___) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, Labeled/Checked by: 1053

s = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH Reviewed by: 671

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eurofins | Calscience

WORK ORDER NUMBER: 17-09-1244

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: GeoSyntec

DATE: 09/15/2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: +0.2°C); Temperature (w/o CF): 3.1 °C (w/ CF): 3.3 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 671

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 671

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 1053

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	☐	☐	☑
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB ☐ 125PB**znna** (pH__9)

☐ 250AGB ☐ 250CGB ☐ 250CGB**s** (pH__2) ☐ 250PB ☐ 250PB**n** (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s** (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** (pH__2) ☐ 1AGB**s** (O&G) ☐ 1PB ☐ 1PB**na** (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☑ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (___) ☐ EnCores® (___) ☐ TerraCores® (___) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, Labeled/Checked by: 1053

s = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH Reviewed by: 671

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Document Number: 11148 (124)

Analysis Request and Chain of Custody Record

Page 3 of 5

White copy: to accompany samples

Yellow copy: field copy

Project Name: PIIESA Carroll Canyon	Project Number:
Samplers Names:	Project Contact:
Laboratory Name:	Lab Contact:
Lab Address: See page	Lab Phone:
	Carrier/Waybill No.:

Required Analyses / Bottle Type and Volume/Preservative / Number of Containers

#	Sample Name	Date	Time	Sample Type	VOCs by 8260B	Metals	SVOCs by 8270	TPH (C10–C44) extended range	Comments	Lab Use Only: Condition of Bottles
25	CCA-3-2	9/14/17	1254	Soil				/	Please hold:	
26	CCA-3-4	↓	1255	↓				/	CCA-3-2;	
27	CCA-4-S		1302					/	CCA-3-4;	
28	CCA-4-2		1304					/	CCA-4-2;	
29	CCA-4-4		1306					/	CCA-4-4	
30	CAT-1-S		1325		/			/	pending	
31	CAT-1-2		1327		/			/	additional	
32	CAT-1-4		1328		/			/	analysis	
33	CAT-2-S		1342		/			/		
34	CAT-2-2		1343		/			/		
35	CAT-2-4		1345		/			/		
36	CAT-3-S	↓	1407	↓	/			/		

Special Instructions: please hold samples: CAT-1-2; CAT-1-4; CAT-2-2; CAT-2-4, additional [?] pending analysis, preliminary CAT-1-S & CAT-2-S results

Turn-around Time: ☒ Normal ☐ Rush:

1. Relinquished by (Signiture/Affiliation): [signature]	Date 9/15/17 Time 1450	1. Received by (Signiture/Affiliation): [signature] EQ [?]	Date 09/15/17 Time 1450
2. Relinquished by (Signiture/Affiliation): [signature]	Date 09/15/17 Time 18:40	2. Received by (Signiture/Affiliation): [illegible] EC2	Date 9/15/17 Time 18:40
3. Relinquished by (Signiture/Affiliation):	Date Time	3. Received by (Signiture/Affiliation):	Date Time

Geosyntec consultants 10875 Rancho Bernardo Road, Suite 200, San Diego, CA 92127 (858) 674-6559 Fax: (858) 674-6586

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HALEY ALDRICH

www.haleyaldrich.com

TECHNICAL MEMORANDUM
PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT
SDG&E FENTON SUBSTATION
9225 CAMINO SANTA FE
SAN DIEGO, CALIFORNIA

by Haley & Aldrich, Inc.
San Diego, California

for San Diego Gas & Electric
San Diego, California

File No. 132516-004
October 2018

HALEY & ALDRICH, INC.
5333 Mission Center Road
Suite 300
San Diego, CA 92108
619.280.9210

TECHNICAL MEMORANDUM

5 October 2018
File No. 132516-004

TO: Ms. Barbara Montgomery
San Diego Gas & Electric
8316 Century Park Court, CP-52G
San Diego, California 92123

FROM: Haley & Aldrich, Inc.
Robert K. Scott, P.G., C.Hg.

SUBJECT: Phase II Environmental Site Assessment Report
SDG&E Fenton Substation
9225 Camino Santa Fe
San Diego, California

This Technical Memorandum was prepared to summarize the results of a Phase II Environmental Site Assessment conducted by Haley & Aldrich, Inc., (Haley & Aldrich) for the San Diego Gas & Electric (SDG&E) Fenton Substation at the Superior Ready Mix quarry located at 9255 Camino Santa Fe in San Diego, California ([Site]; Figures 1 and 2). SDG&E leases the property on which the substation is situated. It is our understanding that SDG&E will demolish the substation and the property will be redeveloped by others. The energized substation is surrounded by a chain-link fence and occupies approximately 8,000 square feet (80 feet by 100 feet). Our services were performed in accordance with our proposal to SDG&E dated 28 August 2018.

Scope of Work: Haley & Aldrich conducted the following services:

- Prepared a Site-specific Health and Safety Plan (HASP);
- Advanced ten borings with a direct-push rig or hand auger;
- Conducted soil sampling in each boring;
- Submitted the samples to a laboratory for analyses; and
- Summarized the results in this technical memorandum.

Project Mobilization: Haley & Aldrich retained the services of subcontractors and mobilized the equipment necessary to complete the field program. ULS Services Corporation was retained to clear the proposed boring locations of subsurface utilities and obstructions. Because the borings were to be drilled in an energized substation, SDG&E provided a standby representative for the utility survey. The

standby representative had as-built drawings that showed the location of underground utilities and the grounding grid beneath the substation. The proposed boring locations that appeared in our proposal were adjusted based on the as-builts and the subsurface utility survey.

The HASP prepared and implemented during the field program by Haley & Aldrich field staff met the requirements of OSHA, CalOSHA and SDG&E. Because the substation is energized, field staff wore flame resistant clothing as required by SDG&E's "New Personal Protective Equipment (PPE) Requirement in Energized Substations," dated 31 May 2018.

Field Investigation: On 4 September 2018, InterPhase Environmental, Inc., a licensed drilling contractor from Los Angeles, California, advanced the soil borings using a direct-push rig. Those borings within the concrete berms adjacent to the electrical equipment were advanced using a hand auger. The approximate boring locations are shown on Figure 2. Each boring was advanced to a depth of 5 feet below ground surface (bgs), unless refusal was encountered. Samples were collected at 1, 3 and 5 feet bgs. If refusal was encountered, a sample was collected at that depth rather than at 5 feet. The sample collected at the third sample depth (typically 5 feet) was archived at the laboratory. The borings were logged in accordance with the Unified Soil Classification System. Boring logs are provided in Appendix A.

Soil samples were collected in laboratory-supplied glass jars. The samples were transported for analysis in an insulated cooler with ice (maintained at 4 ^{o}C) under standard chain of custody procedures to American Environmental Testing Laboratory, Inc. in Signal Hill, California. Following sampling the borings were backfilled with bentonite that was hydrated during placement. Investigation-derived waste was placed in a Department of Transportation-approved 55-gallon drum and stored on-Site pending analytical results for disposal. Drum disposal is the responsibility of SDG&E.

Soil Sample Analytical Results: Soil samples from the borings at 1 and 2 feet bgs were analyzed for the following:

- Total petroleum hydrocarbons (TPH) carbon chain, extended range by modified EPA Method 8015;
- Polychlorinated biphenyls (PCBs) by EPA Method 8082; and
- Lead by EPA Method 6010B.

Analytical results for the soil samples collected from the soil borings are summarized in Table I. Laboratory analytical reports and chain of custody forms are provided in Appendix B. No TPH or PCBs were detected in the samples analyzed. Lead was present in each of the soil samples at concentrations ranging from 5.96 to 19.8 milligrams per kilogram. The lead concentrations detected in the soil samples fall within the range that represents native soil conditions (background).

Conclusions: Based on the field observations and the soil analytical results, it does not appear that Site operations have affected soil beneath the Site. Therefore, no further action is necessary at this time.

Proposed Action: No soil was identified during this investigation that contained detectable TPH and PCB concentrations or lead concentrations above background. If indications of soil contamination are observed during demolition, it is recommended that potentially impacted soil be properly managed. Please contact the undersigned if you have any questions regarding this technical memorandum or require additional information.

Sincerely yours,
Haley & Aldrich, Inc.

Robert K. Scott

Robert K. Scott, P.G., C.Hg.

Enclosures:

- Table I –Summary of Soil Analytical Results
- Figure 1 – Project Locus
- Figure 2 –Boring Location Map
- Appendix A – Boring Logs
- Appendix B – Laboratory Analytical Report and Chain of Custody Forms

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TABLE

TABLE I
SUMMARY OF SOIL ANALYTICAL RESULTS
FENTON SUBSTATION
SAN DIEGO, CALIFORNIA

Sample ID	Units	B01-01.0	B01-02.0	B02-01.0	B02-02.0	B03-01.0	B03-02.0	B04-01.0	B04-02.0	B05-01.0	B05-02.0	B06-01.0	B06-02.0	B07-01.0	B07-02.0	B08-01.0	B08-02.0	B09-01.0	B09-02.0	B10-01.0	B10-02.0
Sample Date		9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018	9/4/2018
Sample Depth (feet bgs)		1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3
Laboratory Job Number		93928	93928	93928	93928	93928	93928	93928	93928	93928	93928	93928	93928	93928	93928	93928	93928	93928	93928	93928	93928
Total Petroleum Hydrocarbons																					
TPH as Diesel (C13-C22)	mg/kg	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
TPH as Heavy Hydrocarbons (C23-C40)	mg/kg	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
TPH Total as Diesel and Heavy Hydrocarbons (C13-C40)	mg/kg	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
Polychlorinated Biphenyls																					
Aroclor-1016 (PCB-1016)	µg/kg	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0
Aroclor-1221 (PCB-1221)	µg/kg	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0
Aroclor-1232 (PCB-1232)	µg/kg	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0
Aroclor-1242 (PCB-1242)	µg/kg	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0
Aroclor-1248 (PCB-1248)	µg/kg	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0
Aroclor-1254 (PCB-1254)	µg/kg	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0
Aroclor-1260 (PCB-1260)	µg/kg	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0
Aroclor-1262 (PCB-1262)	µg/kg	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0
Aroclor-1268 (PCB-1268)	µg/kg	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0	ND<25.0
Metals																					
Lead	mg/kg	**13.9**	**15.0**	**9.45**	**13.6**	**13.4**	**9.87**	**5.96**	**9.82**	**7.75**	**10.5**	**9.21**	**9.54**	**6.02**	**12.5**	**8.66**	**10.9**	**19.8**	**7.87**	**10.9**	**10.9**

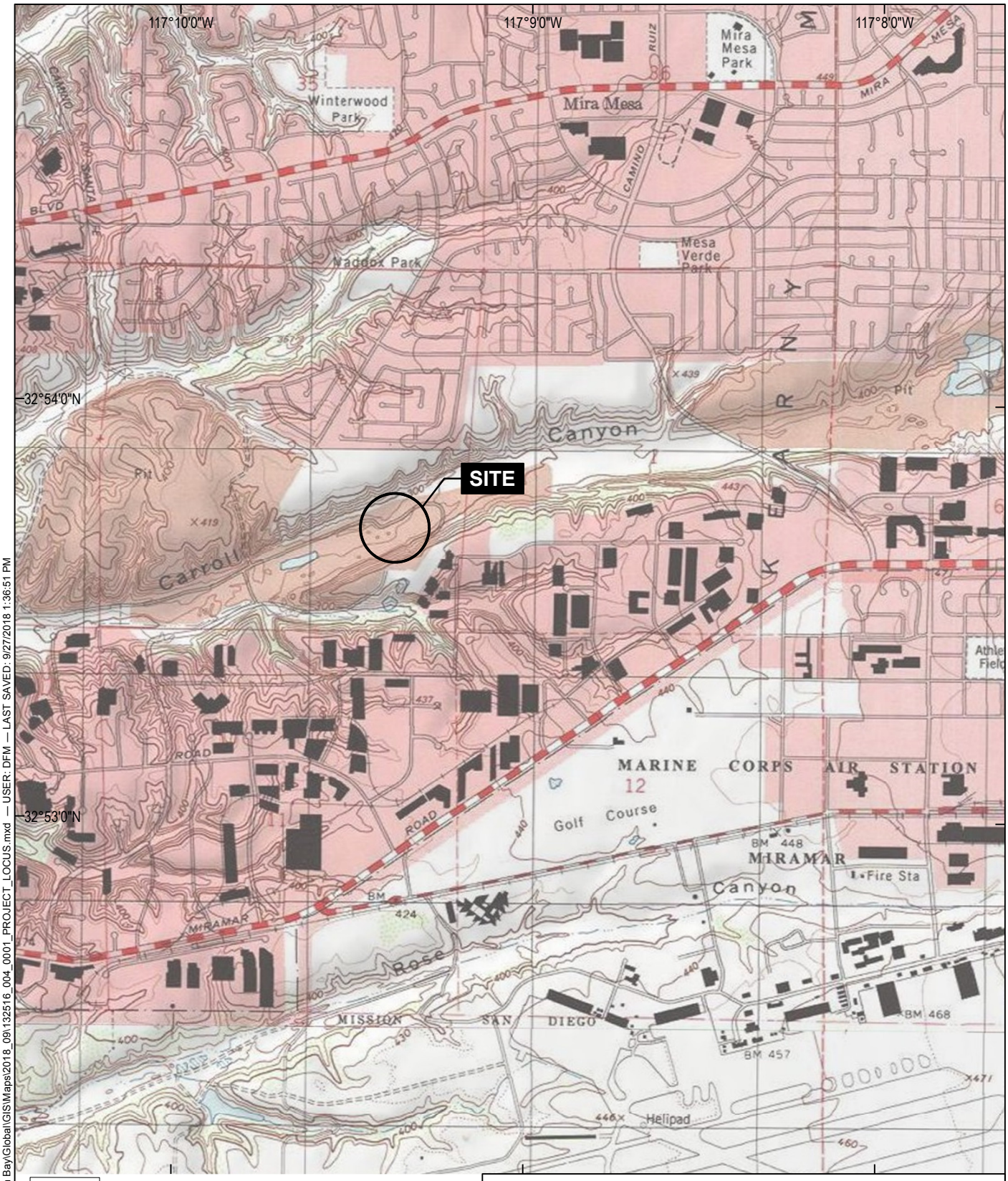
Notes:

"ND<X" indicates constituent(s) not detected at or above method detection limit.

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

FIGURES



MAP SOURCE: ESRI
SITE COORDINATES: 32°53'41.9"N, 117°9'22.7"W

HALEY ALDRICH

SAN DIEGO GAS AND ELECTRIC (SDG&E)
FENTON SUBSTATION
SAN DIEGO, CALIFORNIA

PROJECT LOCUS

APPROXIMATE SCALE: 1 IN = 2000 FT
OCTOBER 2018

FIGURE 1

GIS FILE PATH: G:\132516_SDG&E South Bay\Global\GIS\Maps\2018_09\132516_004_0001_PROJECT_LOCUS.mxd — USER: DFM — LAST SAVED: 9/27/2018 1:36:51 PM

LEGEND

BORING

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. LOCATION OF BORING ADVANCED ON 4 SEPTEMBER 2018.
3. AERIAL IMAGERY SOURCE: PICTOMETRY, MARCH 2017

N

0 20 40

SCALE IN FEET

HALEY ALDRICH

SAN DIEGO GAS AND ELECTRIC (SDG&E)
FENTON SUBSTATION
SAN DIEGO, CALIFORNIA

BORING LOCATIONS MAP

SEPTEMBER 2018

FIGURE 2

GIS FILE PATH: G:\132516_SDG&E South Bay\Global\GIS\Maps\2018_09\132516_004_0002_SITE_MAP_PROPOSED_BORINGS.mxd — USER: dfm — LAST SAVED: 9/27/2018 11:56:11 AM

APPENDIX A

Boring Logs

HALEY ALDRICH

TEST BORING REPORT

Boring No. B01

Project	Fenton Substation, Phase II Environmental Site Assessment, San Diego, California
Client	San Diego Gas & Electric
Contractor	Interphase Environmental, Inc.

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	Steel	-	-	Rig Make & Model: 6600 Truck-Mounted Geoprobe (TMGP)
Inside Diameter (in.)	2.5	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing Method:
				Hoist/Hammer: -
				PID Make & Model: MiniRAE 3000

File No. 132516-004
Sheet No. 1 of 1
Start 4 September 2018
Finish 4 September 2018
Driller G. Mendoza
H&A Rep. R. Leeper
Elevation ft (est.)
Datum N/A
Location See Site Locus
Latitude
Longitude

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Reading (ppm)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							- FILL -										
				1.1		0.5											
		B01-01.0	0.5 1.0				Tan poorly-graded SAND with silt and coarse gravel, dry	10	15	15	35	15	10				
						2.0											
							Light to dark brown poorly-graded GRAVEL with silt and sand, some oxidized blotches	30	30	10	15	5	10				
		B01-02.0	2.5 3.0	0.9													
						4.5											
		B01-03.0	4.5 5.0	0.9			Gray to tan poorly-graded GRAVEL, coarse gravel, appears crushed or broken possibly due to coring	70	15		10		5				
5						5.0	- BOTTOM OF EXPLORATION AT 5 FT -										

Notes:
- Backfilled with bentonite chips hydrated during placement.
- Core compressed to 48 in.

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
- O - Open End Rod
- T - Thin Wall Tube
- U - Undisturbed Sample
- S - Split Spoon Sample

Well Diagram
- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary
- Overburden (ft) N/A
- Rock Cored (ft) N/A
- Samples N/A

Boring No. B01

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on USCS method of visual-manual identification as practiced by Haley & Aldrich, Inc.

TEST BORING REPORT

Boring No. B02

Project	Fenton Substation, Phase II Environmental Site Assessment, San Diego, California
Client	San Diego Gas & Electric
Contractor	Interphase Environmental, Inc.

File No. 132516-004
Sheet No. 1 of 1
Start 4 September 2018
Finish 4 September 2018
Driller G. Mendoza
H&A Rep. R. Leeper
Elevation ft (est.)
Datum N/A
Location See Site Locus
Latitude
Longitude

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	Steel	-	-	Rig Make & Model: Hand Auger/Limited Access Geoprobe (LAG)
Inside Diameter (in.)	2.5	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing Method:
				Hoist/Hammer: -
				PID Make & Model: MiniRAE 3000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Reading (ppm)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							- FILL -										
				0.8		0.5											
		B02-01.0	0.5 1.0				Tan poorly-graded SAND with silt and coarse gravel, dry	10	10		45	25	10				
						2.0											
							Light to dark brown poorly-graded GRAVEL with silt and sand	30	30	10	15	5	10				
		B02-02.0	2.5 3.0	1.3													
						4.0											
							Gray to tan poorly-graded GRAVEL, coarse gravel	70	15		10		5				
		B02-03.0	4.5 5.0	1.1													
5						5.0	- BOTTOM OF EXPLORATION AT 5 FT -										

Notes:
- Backfilled with bentonite chips hydrated during placement.
- Core compressed to 48 in.
- B02-01.0 taken by hand auger.
- B02-02.0 and B02-03.0 taken by hydraulic corer.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
- O - Open End Rod
- T - Thin Wall Tube
- U - Undisturbed Sample
- S - Split Spoon Sample

Well Diagram
- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary
Overburden (ft) N/A
Rock Cored (ft) N/A
Samples N/A

Boring No. B02

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on USCS method of visual-manual identification as practiced by Haley & Aldrich, Inc.

TEST BORING REPORT

Boring No. B03

Project	Fenton Substation, Phase II Environmental Site Assessment, San Diego, California
Client	San Diego Gas & Electric
Contractor	Interphase Environmental, Inc.

File No. 132516-004
Sheet No. 1 of 1
Start 4 September 2018
Finish 4 September 2018
Driller G. Mendoza
H&A Rep. R. Leeper
Elevation ft (est.)
Datum N/A
Location See Site Locus
Latitude
Longitude

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	Steel	-	-	Rig Make & Model: Limited Access Geoprobe (LAG)
Inside Diameter (in.)	2.5	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing Method:
				Hoist/Hammer: -
				PID Make & Model: MiniRAE 3000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Reading (ppm)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							- FILL -										
				1.0		0.5											
		B03-01.0	0.5 1.0				Tan poorly-graded GRAVEL with silt and sand, dry	25	35	10	10	10	10				
		B03-02.0	2.5 3.0	1.1													
						3.5											
							Brown poorly-graded silty GRAVEL with sand, dry	35	25	20	10	10					
		B03-03.0	4.5 5.0	1.1		5.0											
5							- BOTTOM OF EXPLORATION AT 5 FT -										

Notes:
- Backfilled with bentonite chips hydrated during placement.
- Core compressed to 48 in.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Split Spoon Sample

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) N/A
Rock Cored (ft) N/A
Samples N/A

Boring No. B03

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on USCS method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

TEST BORING REPORT

Boring No. B04

Project	Fenton Substation, Phase II Environmental Site Assessment, San Diego, California
Client	San Diego Gas & Electric
Contractor	Interphase Environmental, Inc.

File No. 132516-004
Sheet No. 1 of 1
Start 4 September 2018
Finish 4 September 2018
Driller G. Mendoza
H&A Rep. R. Leeper
Elevation ft (est.)
Datum N/A
Location See Site Locus
Latitude
Longitude

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	Steel	-	-	Rig Make & Model: Hand Auger/Limited Access Geoprobe (LAG)
Inside Diameter (in.)	2.5	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing Method:
				Hoist/Hammer: -
				PID Make & Model: MiniRAE 3000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Reading (ppm)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							- FILL -										
				0.9		0.5											
		B04-01.0	0.5 1.0				Tan poorly-graded GRAVEL with silt and sand, coarse gravel, dry	30	35	15	10	10					
						1.5											
							Brown poorly-graded GRAVEL with silt and sand, coarse gravel, oxide staining present, dry	30	30	10	15	5					
		B04-02.0	2.5 3.0	0.6													
						4.0											
							Brown poorly-graded SAND with silt and gravel, dry	25	10	35	20	10					
		B04-03.0	4.5 5.0	1.1													
5						5.0	- BOTTOM OF EXPLORATION AT 5 FT -										

Notes:
- Backfilled with bentonite chips hydrated during placement.
- B04-01.0 taken by hand auger.
- B04-02.0 and B04-03.0 taken by hydraulic corer.

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
- O - Open End Rod
- T - Thin Wall Tube
- U - Undisturbed Sample
- S - Split Spoon Sample

Well Diagram
- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary
- Overburden (ft) N/A
- Rock Cored (ft) N/A
- Samples N/A

Boring No. B04

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on USCS method of visual-manual identification as practiced by Haley & Aldrich, Inc.

TEST BORING REPORT

Boring No. B05

Project	Fenton Substation, Phase II Environmental Site Assessment, San Diego, California
Client	San Diego Gas & Electric
Contractor	Interphase Environmental, Inc.

File No. 132516-004
Sheet No. 1 of 1
Start 4 September 2018
Finish 4 September 2018
Driller G. Mendoza
H&A Rep. R. Leeper
Elevation ft (est.)
Datum N/A
Location See Site Locus
Latitude
Longitude

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	Steel	-	-	Rig Make & Model: 6600 Truck-Mounted Geoprobe (TMGP)
Inside Diameter (in.)	2.5	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing Method:
				Hoist/Hammer: -
				PID Make & Model: MiniRAE 3000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Reading (ppm)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							- FILL -										
				0.9		0.5											
		B05-01.0	0.5 1.0				Tan poorly-graded GRAVEL with silt and sand, dry	25	35	10	10	10	10				
				1.2													
		B05-02.0	2.5 3.0			3.0											
							Tan to brown poorly graded silty GRAVEL with sand, dry	35	25	20	10	10					
		B05-03.0	4.5 5.0	1.4		5.0											
5							- BOTTOM OF EXPLORATION AT 5 FT -										

Notes:
- Backfilled with bentonite chips hydrated during placement.
- Core compressed to 48 in.

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
- O - Open End Rod
- T - Thin Wall Tube
- U - Undisturbed Sample
- S - Split Spoon Sample

Well Diagram
- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary
- Overburden (ft) N/A
- Rock Cored (ft) N/A
- Samples N/A

Boring No. B05

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on USCS method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

TEST BORING REPORT

Boring No. B06

Project	Fenton Substation, Phase II Environmental Site Assessment, San Diego, California
Client	San Diego Gas & Electric
Contractor	Interphase Environmental, Inc.

File No. 132516-004
Sheet No. 1 of 1
Start 4 September 2018
Finish 4 September 2018
Driller G. Mendoza
H&A Rep. R. Leeper
Elevation ft (est.)
Datum N/A
Location See Site Locus
Latitude
Longitude

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	Steel	-	-	Rig Make & Model: 6600 Truck-Mounted Geoprobe (TMGP)
Inside Diameter (in.)	2.5	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing Method:
				Hoist/Hammer: -
				PID Make & Model: MiniRAE 3000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Reading (ppm)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							- FILL -										
				1.6		0.5											
		B06-01.0	0.5 1.0				Tan to brown poorly-graded GRAVEL with silt and sand, coarse gravel, dry	35	30	10	15	10					
						2.0											
							Reddish brown poorly-graded GRAVEL with silt and sand, coarse gravel, some oxidized blotches, dry	35	30	10	15	10					
		B06-02.0	2.5 3.0	1.2													
						3.5											
							Tan to brown poorly-graded SAND with silt and gravel, some oxidized blotches, slightly moist	25	10	40	15	10					
		B06-03.0	4.5 5.0	1.1													
5						5.0	- BOTTOM OF EXPLORATION AT 5 FT -										

Notes:
- Backfilled with bentonite chips hydrated during placement.
- Core compressed to 48 in.

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
- O - Open End Rod
- T - Thin Wall Tube
- U - Undisturbed Sample
- S - Split Spoon Sample

Well Diagram
- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary
- Overburden (ft) N/A
- Rock Cored (ft) N/A
- Samples N/A

Boring No. B06

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on USCS method of visual-manual identification as practiced by Haley & Aldrich, Inc.

H&A-TEST BORING-EDD-W PID HA-LIB09-EDD-REV8.GLB HA-TB+CORE+WELL-09 W FENCE - EDD-REV8.GDT G:\132516_SDG&E SOUTH BAY\GLOBAL\GINT\2018_1001_HAI_SDG+E.GPJ 5 Oct 18

HALEY ALDRICH

TEST BORING REPORT

Boring No. B07

Project	Fenton Substation, Phase II Environmental Site Assessment, San Diego, California
Client	San Diego Gas & Electric
Contractor	Interphase Environmental, Inc.

File No. 132516-004
Sheet No. 1 of 1
Start 4 September 2018
Finish 4 September 2018
Driller G. Mendoza
H&A Rep. R. Leeper
Elevation ft (est.)
Datum N/A
Location See Site Locus
Latitude
Longitude

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	Steel	-	-	Rig Make & Model: Limited Access Geoprobe (LAG)
Inside Diameter (in.)	2.5	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing Method:
				Hoist/Hammer: -
				PID Make & Model: MiniRAE 3000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Reading (ppm)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							- FILL -										
				0.3		0.5											
		B07-01.0	0.5 1.0				Tan poorly-graded SAND with silt and gravel, some oxidized mottling, dry with slight moisture	15	10	15	30	20	10				
						1.5											
							Dark brown to gray poorly-graded GRAVEL with silt and sand, coarse gravel, dry	25	35	10	10	10	10				
		B07-02.0	2.5 3.0	1.0		3.0											
							Light brown to tan poorly-graded SAND with silt and gravel, some iron staining										
		B07-03.0	3.5 4.0	1.5													
5						5.0	- BOTTOM OF EXPLORATION AT 5 FT -										

Notes:
- Backfilled with bentonite chips hydrated during placement.
- Refusal at 4 ft.
- Sample depths true.

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
- O - Open End Rod
- T - Thin Wall Tube
- U - Undisturbed Sample
- S - Split Spoon Sample

Well Diagram
- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary
- Overburden (ft) N/A
- Rock Cored (ft) N/A
- Samples N/A

Boring No. B07

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on USCS method of visual-manual identification as practiced by Haley & Aldrich, Inc.

HALEY ALDRICH

TEST BORING REPORT

Boring No. B08

Project	Fenton Substation, Phase II Environmental Site Assessment, San Diego, California
Client	San Diego Gas & Electric
Contractor	Interphase Environmental, Inc.

File No. 132516-004
Sheet No. 1 of 1
Start 4 September 2018
Finish 4 September 2018
Driller G. Mendoza
H&A Rep. R. Leeper
Elevation ft (est.)
Datum N/A
Location See Site Locus
Latitude
Longitude

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	Steel	-	-	Rig Make & Model: Limited Access Geoprobe (LAG)
Inside Diameter (in.)	2.5	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing Method:
				Hoist/Hammer: -
				PID Make & Model: MiniRAE 3000

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Reading (ppm)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							- FILL -										
				1.4		0.5											
		B08-01.0	0.5 1.0				Tan poorly-graded SAND with silt and gravel, coarse gravel, dry	5	20	10	40	15	10				
						1.8											
							Brown poorly-graded GRAVEL with silty sand, coarse gravel	25	40	10	15	10					
		B08-02.0	2.5 3.0	1.0													
						3.5											
							Tan to reddish brown poorly-graded SAND with silt and gravel, sparse oxidized mottling, slightly moist										
		B08-03.0	4.5 5.0	1.6													
5						5.0	- BOTTOM OF EXPLORATION AT 5 FT -										

Notes:
- Backfilled with bentonite chips hydrated during placement.
- Core compressed to 48 in.

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
- O - Open End Rod
- T - Thin Wall Tube
- U - Undisturbed Sample
- S - Split Spoon Sample

Well Diagram
- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary
- Overburden (ft) N/A
- Rock Cored (ft) N/A
- Samples N/A

Boring No. B08

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on USCS method of visual-manual identification as practiced by Haley & Aldrich, Inc.

H&A-TEST BORING-EDD-W PID HA-LIB09-EDD-REV8.GLB HA-TB+CORE+WELL-09 W FENCE - EDD-REV8.GDT G:\132516_SDG&E SOUTH BAY\GLOBAL\GINT\2018_1001_HAI_SDG+E.GPJ 5 Oct 18

HALEY ALDRICH

TEST BORING REPORT

Boring No. B09

Project	Fenton Substation, Phase II Environmental Site Assessment, San Diego, California
Client	San Diego Gas & Electric
Contractor	Interphase Environmental, Inc.

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	Steel	-	-	Rig Make & Model: Limited Access Geoprobe (LAG)
Inside Diameter (in.)	2.5	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing Method:
				Hoist/Hammer: -
				PID Make & Model: MiniRAE 3000

File No. 132516-004
Sheet No. 1 of 1
Start 4 September 2018
Finish 4 September 2018
Driller G. Mendoza
H&A Rep. R. Leeper
Elevation ft (est.)
Datum N/A
Location See Site Locus
Latitude
Longitude

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Reading (ppm)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							- FILL -										
				0.6		0.5											
		B09-01.0	0.5 1.0				Tan to brown poorly-graded GRAVEL with silt and sand, coarse gravel, dry	20	45	10	15	10					
						1.5											
							Brown poorly-graded GRAVEL with silt and sand, coarse gravel, slightly moist	20	45	10	15	10					
		B09-02.0	2.5 3.0	1.3		3.0											
		B09-03.0	3.0 3.5				Brown poorly-graded SAND with silt and gravel, slightly moist	20	15	35	20	10					
5						5.0											
							- BOTTOM OF EXPLORATION AT 5 FT -										

Notes:
- Backfilled with bentonite chips hydrated during placement.
- Refusal at 3.5 ft.

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
O - Open End Rod
T - Thin Wall Tube
U - Undisturbed Sample
S - Split Spoon Sample

Well Diagram
Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary
Overburden (ft) N/A
Rock Cored (ft) N/A
Samples N/A

Boring No. B09

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on USCS method of visual-manual identification as practiced by Haley & Aldrich, Inc.

H&A-TEST BORING-EDD-W PID HA-LIB09-EDD-REV8.GLB HA-TB+CORE+WELL-09 W FENCE - EDD-REV8.GDT G:\132516_SDG&E SOUTH BAY\GLOBAL\GINT\2018_1001_HAI_SDG+E.GPJ 5 Oct 18

HALEY ALDRICH

TEST BORING REPORT

Boring No. B10

Project	Fenton Substation, Phase II Environmental Site Assessment, San Diego, California
Client	San Diego Gas & Electric
Contractor	Interphase Environmental, Inc.

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	Steel	-	-	Rig Make & Model: Limited Access Geoprobe (LAG)
Inside Diameter (in.)	2.5	-	-	Bit Type: -
Hammer Weight (lb)	-	-	-	Drill Mud: None
Hammer Fall (in.)	-	-	-	Casing Method:
				Hoist/Hammer: -
				PID Make & Model: MiniRAE 3000

File No. 132516-004
Sheet No. 1 of 1
Start 4 September 2018
Finish 4 September 2018
Driller G. Mendoza
H&A Rep. R. Leeper
Elevation ft (est.)
Datum N/A
Location See Site Locus
Latitude
Longitude

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Reading (ppm)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION (Density/consistency, color, GROUP NAME, max. particle size†, structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							- FILL -										
				1.3		0.5											
		B10-01.0	0.5 1.0				Tan poorly-graded GRAVEL with silt and sand, coarse gravel, dry	15	50	5	20	10					
						1.5											
							Brown poorly-graded GRAVEL with silt and sand, coarse gravel, some oxidized mottling, slightly moist	20	35	20	15	10					
		B10-02.0	2.5 3.0	1.5													
						3.2											
							Brown to tan poorly-graded SAND with silt and gravel, slightly moist	15	15	40	20	10					
		B10-03.0	4.5 5.0	1.0													
5						5.0	- BOTTOM OF EXPLORATION AT 5 FT -										

Notes:
- Backfilled with bentonite chips hydrated during placement.
- Core compressed to 48 ft.

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth (ft) to: Bottom of Casing	Bottom of Hole	Water

Sample ID
- O - Open End Rod
- T - Thin Wall Tube
- U - Undisturbed Sample
- S - Split Spoon Sample

Well Diagram
- Riser Pipe
- Screen
- Filter Sand
- Cuttings
- Grout
- Concrete
- Bentonite Seal

Summary
- Overburden (ft) N/A
- Rock Cored (ft) N/A
- Samples N/A

Boring No. B10

Field Tests: **Dilatancy**: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

†**Note: Maximum particle size is determined by direct observation within the limitations of sampler size.**

NOTE: Soil descriptions based on USCS method of visual-manual identification as practiced by Haley & Aldrich, Inc.

H&A-TEST BORING-EDD-W PID HA-LIB09-EDD-REV8.GLB HA-TB+CORE+WELL-09 W FENCE - EDD-REV8.GDT G:\132516_SDG&E SOUTH BAY\GLOBAL\GINT\2018_1001_HAI_SDG+E.GPJ 5 Oct 18

APPENDIX B

Laboratory Analytical Report and Chain of Custody Forms

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

San Diego Gas & Electric
8315 Century Park Court, CP21E
San Diego, CA 92123-

Telephone: (858)637-3719
Attention: Barbara Montgomery

Number of Pages	**28**
Date Received	**09/06/2018**
Date Reported	**09/13/2018**

Job Number	Order Date	Client
93928	09/06/2018	SDG&E

Project ID: 132516-004
Project Name: SDG&E Fenton Substation
Site: 9255 Camino Santa Fe
San Diego, CA 92121

Enclosed please find results of analyses of 20 soil samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

American Environmental Testing Laboratory Inc.
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CHAIN OF CUSTODY RECORD

№ 98401

AETL JOB No. 93928

COMPANY: HALEY & ALDRICH, INC.
PROJECT MANAGER: BOB SCOTT
COMPANY ADDRESS: 5333 MISSION CENTER RD. #300 SAN DIEGO, CA 92115
PHONE: 619 285 7141
FAX:
PROJECT NAME: SDG&E FENTON SUBSTATION
PROJECT #: 132516-004
SITE NAME AND ADDRESS: 9255 CAMINO SANTA FE, SAN DIEGO CA
PO #:

	SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.	TPH 8015 m	LEAD 6010B	PCB 8082	HOLD	TEST INSTRUCTIONS & COMMENTS
1	B04-01.0	93928.01	9/4/18	1045	SOIL	1		X	X	X		
2	B02-01.0	93928.02	9/4/18	1055		1		X	X	X		
3	B01-01.0	93928.03	9/4/18	1145		1		X	X	X		
4	B01-02.0	93928.04	9/4/18	1145		1		X	X	X		
5	B01-03.0	93928.05	9/4/18	1145		1					X	
6	B03-01.0	93928.06	9/4/18	1155		1		X	X	X		
7	B03-02.0	93928.07	9/4/18	1155		1		X	X	X		
8	B03-03.0	93928.08	9/4/18	1155		1					X	
9	B05-01.0	93928.09	9/4/18	1215		1		X	X	X		
10	B05-02.0	93928.10	9/4/18	1215		1		X	X	X		
11	B05-03.0	93928.11	9/4/18	1215		1					X	
12	B06-01.0	93928.12	9/4/18	1230		1		X	X	X		
13	B06-02.0	93928.13	9/4/18	1230		1		X	X	X		
14	B06-03.0	93928.14	9/4/18	1230		1					X	
15	B04-02.0	93928.15	9/4/18	1250		1		X	X	X		

ANALYSIS REQUESTED

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY

TOTAL NUMBER OF CONTAINERS	15	PROPERLY COOLED Y / N / NA	
CUSTODY SEALS Y / N / NA		SAMPLES INTACT Y / N / NA	
RECEIVED IN GOOD COND. Y / N		SAMPLES ACCEPTED Y / N	

TURN AROUND TIME

- [X] NORMAL
- [ ] RUSH
  - [ ] SAME DAY
  - [ ] NEXT DAY
  - [ ] 2 DAYS
  - [ ] 3 DAYS

DATA DELIVERABLE REQUIRED

- [ ] HARD COPY
- [ ] PDF
- [ ] GEOTRACKER (GLOBAL ID) _____
- [ ] OTHER (PLEASE SPECIFY) _____

RELINQUISHED BY SAMPLER: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature:	Signature:	Signature:
Printed Name: ROBERT LEEPER	Printed Name:	Printed Name:
Date: 09/06/18 Time: 0830	Date: Time:	Date: Time:
RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY LABORATORY: 3.** AETL
Signature:	Signature:	Signature:
Printed Name:	Printed Name:	Printed Name:
Date: Time:	Date: Time:	Date: 09/06/18 Time: 0830

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

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CHAIN OF CUSTODY RECORD

109717

AETL JOB No. 93928

Page 2 of 2

COMPANY: HALEY + ALDRICH, INC.
PROJECT MANAGER: BOB SCOTT
COMPANY ADDRESS: 5333 MISSION CENTER RD #300 SAN DIEGO, CA 92115
PHONE: 619 285 7141
FAX:
PROJECT NAME: SDGE FENTON SUBSTATION
PROJECT #: 132516-004
SITE NAME AND ADDRESS: 9255 CAMINO SANTA FE, SAN DIEGO CA

	SAMPLE ID	LAB ID	DATE	TIME	MATRIX	CONTAINER NUMBER/SIZE	PRES.	TPH 8015m	LEAD 6010B	PCB 8082	HOLD
1	B04-03.0	93928.16	9/4/18	1250	SOIL	1					X
2	B02-02.0	93928.17	9/4/18	1315		1		X	X	X	
3	B02-03.0	93928.18	9/4/18	1315		1					X
4	B07-01.0	93928.19	9/4/18	1345		1		X	X	X	
5	B07-02.0	93928.20	9/4/18	1345		1		X	X	X	
6	B07-03.0	93928.21	9/4/18	1345		1					X
7	B08-01.0	93928.22	9/4/18	1405		1		X	X	X	
8	B08-02.0	93928.23	9/4/18	1405		1		X	X	X	
9	B08-03.0	93928.24	9/4/18	1405		1					X
10	B10-01.0	93928.25	9/4/18	1415		1		X	X	X	
11	B10-02.0	93928.26	9/4/18	1415		1		X	X	X	
12	B10-03.0	93928.27	9/4/18	1415		1					X
13	B09-01.0	93928.28	9/4/18	1430		1		X	X	X	
14	B09-02.0	93928.29	9/4/18	1430		1		X	X	X	
15	B09-03.0	93928.30	9/4/18	1430		1					X

ANALYSIS REQUESTED

TEST INSTRUCTIONS & COMMENTS

SAMPLE RECEIPT - TO BE FILLED BY LABORATORY

TOTAL NUMBER OF CONTAINERS	15	PROPERLY COOLED (Y / N / NA)	
CUSTODY SEALS Y / N / NA		SAMPLES INTACT (Y / N / NA)	
RECEIVED IN GOOD COND (Y / N)		SAMPLES ACCEPTED (Y / N)	

TURN AROUND TIME

☒ NORMAL ☐ RUSH
☐ SAME DAY
☐ NEXT DAY
☐ 2 DAYS
☐ 3 DAYS

DATA DELIVERABLE REQUIRED

☐ HARD COPY
☐ PDF
☐ GEOTRACKER (GLOBAL ID) _____
☐ OTHER (PLEASE SPECIFY) _____

	RELINQUISHED BY SAMPLER: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature:			
Printed Name:	ROBERT LEEPER		
Date:	09/06/18 Time: 0730	Date: Time:	Date: Time:
	RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY LABORATORY: AETL 3.
Signature:			
Printed Name:			Debra Sandle
Date:	Time:	Date: Time:	Date: 9/06/18 Time: 0830

DISTRIBUTION: WHITE - Laboratory, CANARY - Laboratory, PINK - Project/Account Manager, YELLOW - Sampler/Originator

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COOLER RECEIPT FORM

Client Name: Haley + Aldrich / SDG&E
Project Name: SDG&E Fenton Substation
AETL Job Number: 93928
Date Received: 09/06/18 Received by: Jean claude
Carrier: ☐ AETL Courier ☒ Client ☐ GSO ☐ FedEx ☐ UPS
☐ Others:

Samples were received in: ☒ Cooler (1) ☐ Other (Specify):
Inside temperature of shipping container No 1: 2-7°C, No 2: _____, No 3: _____
Type of sample containers: ☐ VOA, ☐ Glass bottles, ☒ Wide mouth jars, ☐ HDPE bottles, ☐ Metal sleeves, ☐ Others (Specify):
How are samples preserved: ☐ None, ☒ Ice, ☐ Blue Ice, ☐ Dry Ice
☒ None, _ HNO_3, _ NaOH, _ ZnOAc, _ HCl, _ $Na_2S_2O_3$, _ MeOH
_ Other (Specify):

	Yes	No, explain below	Name, if client was notified.
1. Are the COCs Correct?	✓		
2. Are the Sample labels legible?	✓		
3. Do samples match the COC?	✓		
4. Are the required analyses clear?	✓		
5. Is there enough samples for required analysis?	✓		
6. Are samples sealed with evidence tape?	NA		
7. Are sample containers in good condition?	✓		
8. Are samples preserved?	✓		
9. Are samples preserved properly for the intended analysis?	✓		
10. Are the VOAs free of headspace?	NA		
11. Are the jars free of headspace?	✓		

Explain all "No" answers for above questions:

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Ordered By

San Diego Gas & Electric
8315 Century Park Court, CP21E
San Diego, CA 92123-

Telephone: (858)637-3719
Attention: Barbara Montgomery

Project ID: 132516-004
Date Received 09/06/2018
Date Reported 09/13/2018

Job Number	Order Date	Client
93928	09/06/2018	SDG&E

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 30 samples with the following specification on 09/06/2018.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
93928.01	B04-01.0	09/04/2018	Soil	1
93928.02	B02-01.0	09/04/2018	Soil	1
93928.03	B01-01.0	09/04/2018	Soil	1
93928.04	B01-02.0	09/04/2018	Soil	1
93928.06	B03-01.0	09/04/2018	Soil	1
93928.07	B03-02.0	09/04/2018	Soil	1
93928.09	B05-01.0	09/04/2018	Soil	1
93928.10	B05-02.0	09/04/2018	Soil	1
93928.12	B06-01.0	09/04/2018	Soil	1
93928.13	B06-02.0	09/04/2018	Soil	1
93928.15	B04-02.0	09/04/2018	Soil	1
93928.17	B02-02.0	09/04/2018	Soil	1
93928.19	B07-01.0	09/04/2018	Soil	1
93928.20	B07-02.0	09/04/2018	Soil	1
93928.22	B08-01.0	09/04/2018	Soil	1
93928.23	B08-02.0	09/04/2018	Soil	1
93928.25	B10-01.0	09/04/2018	Soil	1
93928.26	B10-02.0	09/04/2018	Soil	1
93928.28	B09-01.0	09/04/2018	Soil	1
93928.29	B09-02.0	09/04/2018	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(6010B.LEAD)	09/13/2018	2	Normal	mg/Kg
(8082)	09/13/2018	2	Normal	ug/Kg
(M8015D) ^ C13-C40	09/13/2018	2	Normal	mg/Kg
(M8015G)	09/13/2018	2	Normal	mg/Kg

Continued

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San Diego, CA 92123-

Telephone: (858)637-3719
Attention: Barbara Montgomery

Project ID: 132516-004
Date Received 09/06/2018
Date Reported 09/13/2018

Job Number	Order Date	Client
93928	09/06/2018	SDG&E

CERTIFICATE OF ANALYSIS

CASE NARRATIVE

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
93928.05	B01-03.0	09/04/2018	Soil	1
93928.08	B03-03.0	09/04/2018	Soil	1
93928.11	B05-03.0	09/04/2018	Soil	1
93928.14	B06-03.0	09/04/2018	Soil	1
93928.16	B04-03.0	09/04/2018	Soil	1
93928.18	B02-03.0	09/04/2018	Soil	1
93928.21	B07-03.0	09/04/2018	Soil	1
93928.24	B08-03.0	09/04/2018	Soil	1
93928.27	B10-03.0	09/04/2018	Soil	1
93928.30	B09-03.0	09/04/2018	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
ARCHIVE	09/13/2018	2	Normal	--

The samples were analyzed as specified on the enclosed chain of custody.
No analytical non-conformances were encountered.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

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ANALYTICAL RESULTS

Ordered By

San Diego Gas & Electric
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San Diego, CA 92123-

Telephone: (858)637-3719
Attn: Barbara Montgomery

Site

9255 Camino Santa Fe
San Diego, CA 92121

Page: **2**

Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 090618OB1

Our Lab I.D.			Method Blank	**93928.01**	**93928.02**	**93928.03**	**93928.04**
Client Sample I.D.				B04-01.0	B02-01.0	B01-01.0	B01-02.0
Date Sampled				09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/06/2018	09/06/2018	09/06/2018	09/06/2018	09/06/2018
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			09/06/2018	09/06/2018	09/06/2018	09/06/2018	09/06/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Gasoline and Light HC. (C4-C12)	0.100	1.000	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	**93928.01**	**93928.02**	**93928.03**	**93928.04**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Bromofluorobenzene	75-125		120	105	111	115	108

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ANALYTICAL RESULTS

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Site

9255 Camino Santa Fe
San Diego, CA 92121

Page: **3**

Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 090618OB1

Our Lab I.D.			**93928.06**	**93928.07**	**93928.09**	**93928.10**	**93928.12**
Client Sample I.D.			B03-01.0	B03-02.0	B05-01.0	B05-02.0	B06-01.0
Date Sampled			09/04/2018	09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/06/2018	09/06/2018	09/06/2018	09/06/2018	09/06/2018
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			09/06/2018	09/06/2018	09/06/2018	09/06/2018	09/06/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Gasoline and Light HC. (C4-C12)	0.100	1.000	ND	ND	ND	ND	ND
Our Lab I.D.			**93928.06**	**93928.07**	**93928.09**	**93928.10**	**93928.12**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Bromofluorobenzene	75-125		115	114	108	113	113

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ANALYTICAL RESULTS

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Site

9255 Camino Santa Fe
San Diego, CA 92121

Page: **4**

Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 090618OB1

Our Lab I.D.			**93928.13**	**93928.15**	**93928.17**		
Client Sample I.D.			B06-02.0	B04-02.0	B02-02.0		
Date Sampled			09/04/2018	09/04/2018	09/04/2018		
Date Prepared			09/06/2018	09/06/2018	09/06/2018		
Preparation Method			5030	5030	5030		
Date Analyzed			09/06/2018	09/06/2018	09/06/2018		
Matrix			Soil	Soil	Soil		
Units			mg/Kg	mg/Kg	mg/Kg		
Dilution Factor			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
TPH as Gasoline and Light HC. (C4-C12)	0.100	1.000	ND	ND	ND		
Our Lab I.D.			**93928.13**	**93928.15**	**93928.17**		
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**		
Bromofluorobenzene	75-125		112	114	113		

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ANALYTICAL RESULTS

Ordered By

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San Diego, CA 92123-

Telephone: (858)637-3719
Attn: Barbara Montgomery

Site

9255 Camino Santa Fe
San Diego, CA 92121

Page: **5**

Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 090618OB2

Our Lab I.D.			Method Blank	**93928.19**	**93928.20**	**93928.22**	**93928.23**
Client Sample I.D.				B07-01.0	B07-02.0	B08-01.0	B08-02.0
Date Sampled				09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/06/2018	09/06/2018	09/06/2018	09/06/2018	09/06/2018
Preparation Method			5030	5030	5030	5030	5030
Date Analyzed			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Gasoline and Light HC. (C4-C12)	0.100	1.000	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	**93928.19**	**93928.20**	**93928.22**	**93928.23**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Bromofluorobenzene	75-125		95.6	108	112	108	103

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 090618OB2

Our Lab I.D.			93928.25	93928.26	93928.28	93928.29	
Client Sample I.D.			B10-01.0	B10-02.0	B09-01.0	B09-02.0	
Date Sampled			09/04/2018	09/04/2018	09/04/2018	09/04/2018	
Date Prepared			09/06/2018	09/06/2018	09/06/2018	09/06/2018	
Preparation Method			5030	5030	5030	5030	
Date Analyzed			09/07/2018	09/07/2018	09/07/2018	09/07/2018	
Matrix			Soil	Soil	Soil	Soil	
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Dilution Factor			1	1	1	1	
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	
TPH as Gasoline and Light HC. (C4-C12)	0.100	1.000	ND	ND	ND	ND	
Our Lab I.D.			**93928.25**	**93928.26**	**93928.28**	**93928.29**	
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
Bromofluorobenzene	75-125		114	103	106	111	

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 090718DB2

Our Lab I.D.			Method Blank	**93928.01**	**93928.02**	**93928.03**	**93928.04**
Client Sample I.D.				B04-01.0	B02-01.0	B01-01.0	B01-02.0
Date Sampled				09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Diesel (C13-C22)	1.0	5.0	ND	ND	ND	ND	ND
TPH as Heavy Hydrocarbons (C23-C40)	1.0	5.0	ND	ND	ND	ND	ND
TPH Total as Diesel and Heavy HC.C13-C40	1.0	5.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	**93928.01**	**93928.02**	**93928.03**	**93928.04**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Chlorobenzene	75-125		95.2	98.9	99.6	100	99.7

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 090718DB2

Our Lab I.D.			**93928.06**	**93928.07**	**93928.09**	**93928.10**	**93928.12**
Client Sample I.D.			B03-01.0	B03-02.0	B05-01.0	B05-02.0	B06-01.0
Date Sampled			09/04/2018	09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Diesel (C13-C22)	1.0	5.0	ND	ND	ND	ND	ND
TPH as Heavy Hydrocarbons (C23-C40)	1.0	5.0	ND	ND	ND	ND	ND
TPH Total as Diesel and Heavy HC.C13-C40	1.0	5.0	ND	ND	ND	ND	ND
Our Lab I.D.			**93928.06**	**93928.07**	**93928.09**	**93928.10**	**93928.12**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Chlorobenzene	75-125		99.9	99.7	100	97.1	98.6

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 090718DB2

Our Lab I.D.			**93928.13**	**93928.15**	**93928.17**	**93928.19**	**93928.20**
Client Sample I.D.			B06-02.0	B04-02.0	B02-02.0	B07-01.0	B07-02.0
Date Sampled			09/04/2018	09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			09/07/2018	09/07/2018	09/07/2018	09/08/2018	09/08/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Diesel (C13-C22)	1.0	5.0	ND	ND	ND	ND	ND
TPH as Heavy Hydrocarbons (C23-C40)	1.0	5.0	ND	ND	ND	ND	ND
TPH Total as Diesel and Heavy HC.C13-C40	1.0	5.0	ND	ND	ND	ND	ND
Our Lab I.D.			**93928.13**	**93928.15**	**93928.17**	**93928.19**	**93928.20**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Chlorobenzene	75-125		96.7	101	100	104	97.8

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 090718DB2

Our Lab I.D.			**93928.22**	**93928.23**	**93928.25**	**93928.26**	**93928.28**
Client Sample I.D.			B08-01.0	B08-02.0	B10-01.0	B10-02.0	B09-01.0
Date Sampled			09/04/2018	09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			09/08/2018	09/08/2018	09/08/2018	09/08/2018	09/08/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH as Diesel (C13-C22)	1.0	5.0	ND	ND	ND	ND	ND
TPH as Heavy Hydrocarbons (C23-C40)	1.0	5.0	ND	ND	ND	ND	ND
TPH Total as Diesel and Heavy HC.C13-C40	1.0	5.0	ND	ND	ND	ND	ND
Our Lab I.D.			**93928.22**	**93928.23**	**93928.25**	**93928.26**	**93928.28**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Chlorobenzene	75-125		98.4	101	99.4	96.6	101

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 090718DB2

Our Lab I.D.			**93928.29**				
Client Sample I.D.			B09-02.0				
Date Sampled			09/04/2018				
Date Prepared			09/07/2018				
Preparation Method			3550B				
Date Analyzed			09/08/2018				
Matrix			Soil				
Units			mg/Kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
TPH as Diesel (C13-C22)	1.0	5.0	ND				
TPH as Heavy Hydrocarbons (C23-C40)	1.0	5.0	ND				
TPH Total as Diesel and Heavy HC.C13-C40	1.0	5.0	ND				
Our Lab I.D.			**93928.29**				
Surrogates	**%Rec.Limit**		**% Rec.**				
Chlorobenzene	75-125		96.8				

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 090718ZB2

Our Lab I.D.			Method Blank	**93928.01**	**93928.02**	**93928.03**	**93928.04**
Client Sample I.D.				B04-01.0	B02-01.0	B01-01.0	B01-02.0
Date Sampled				09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	25.0	50.0	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	**93928.01**	**93928.02**	**93928.03**	**93928.04**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		111	132	109	106	118
Tetrachloro-m-xylene	30-150		128	136	119	133	137

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 090718ZB2

Our Lab I.D.			**93928.06**	**93928.07**	**93928.09**	**93928.10**	**93928.12**
Client Sample I.D.			B03-01.0	B03-02.0	B05-01.0	B05-02.0	B06-01.0
Date Sampled			09/04/2018	09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	25.0	50.0	ND	ND	ND	ND	ND
Our Lab I.D.			**93928.06**	**93928.07**	**93928.09**	**93928.10**	**93928.12**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		118	108	119	115	119
Tetrachloro-m-xylene	30-150		88.4	121	131	132	120

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 090718ZB2

Our Lab I.D.			**93928.13**	**93928.15**	**93928.17**	**93928.19**	**93928.20**
Client Sample I.D.			B06-02.0	B04-02.0	B02-02.0	B07-01.0	B07-02.0
Date Sampled			09/04/2018	09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	25.0	50.0	ND	ND	ND	ND	ND
Our Lab I.D.			**93928.13**	**93928.15**	**93928.17**	**93928.19**	**93928.20**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		114	108	105	121	118
Tetrachloro-m-xylene	30-150		118	138	126	128	120

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 090718ZB2

Our Lab I.D.			**93928.22**	**93928.23**	**93928.25**	**93928.26**	**93928.28**
Client Sample I.D.			B08-01.0	B08-02.0	B10-01.0	B10-02.0	B09-01.0
Date Sampled			09/04/2018	09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			09/07/2018	09/07/2018	09/07/2018	09/07/2018	09/07/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1262 (PCB-1262)	25.0	50.0	ND	ND	ND	ND	ND
Aroclor-1268 (PCB-1268)	25.0	50.0	ND	ND	ND	ND	ND
Our Lab I.D.			**93928.22**	**93928.23**	**93928.25**	**93928.26**	**93928.28**
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Decachlorobiphenyl	30-150		105	111	126	108	109
Tetrachloro-m-xylene	30-150		124	118	118	105	105

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 090718ZB2

Our Lab I.D.			**93928.29**				
Client Sample I.D.			B09-02.0				
Date Sampled			09/04/2018				
Date Prepared			09/07/2018				
Preparation Method			3550B				
Date Analyzed			09/07/2018				
Matrix			Soil				
Units			ug/Kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
Aroclor-1016 (PCB-1016)	25.0	50.0	ND				
Aroclor-1221 (PCB-1221)	25.0	50.0	ND				
Aroclor-1232 (PCB-1232)	25.0	50.0	ND				
Aroclor-1242 (PCB-1242)	25.0	50.0	ND				
Aroclor-1248 (PCB-1248)	25.0	50.0	ND				
Aroclor-1254 (PCB-1254)	25.0	50.0	ND				
Aroclor-1260 (PCB-1260)	25.0	50.0	ND				
Aroclor-1262 (PCB-1262)	25.0	50.0	ND				
Aroclor-1268 (PCB-1268)	25.0	50.0	ND				
Our Lab I.D.			**93928.29**				
Surrogates	**%Rec.Limit**		**% Rec.**				
Decachlorobiphenyl	30-150		108				
Tetrachloro-m-xylene	30-150		113				

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (6010B.LEAD), Lead, ICP

QC Batch No: 0911182C3

Our Lab I.D.			Method Blank	93928.01	93928.02	93928.03	93928.04
Client Sample I.D.				B04-01.0	B02-01.0	B01-01.0	B01-02.0
Date Sampled				09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/11/2018	09/11/2018	09/11/2018	09/11/2018	09/11/2018
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			09/12/2018	09/12/2018	09/12/2018	09/12/2018	09/12/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Lead	2.5	5.0	ND	5.96	9.45	13.9	15.0

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (6010B.LEAD), Lead, ICP

QC Batch No: 0911182C3

Our Lab I.D.			93928.06	93928.07	93928.09	93928.10	93928.12
Client Sample I.D.			B03-01.0	B03-02.0	B05-01.0	B05-02.0	B06-01.0
Date Sampled			09/04/2018	09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/11/2018	09/11/2018	09/11/2018	09/11/2018	09/11/2018
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			09/12/2018	09/12/2018	09/12/2018	09/12/2018	09/12/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Lead	2.5	5.0	13.4	9.87	7.75	10.5	9.21

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (6010B.LEAD), Lead, ICP

QC Batch No: 0911182C3

Our Lab I.D.			**93928.13**				
Client Sample I.D.			B06-02.0				
Date Sampled			09/04/2018				
Date Prepared			09/11/2018				
Preparation Method			3050B				
Date Analyzed			09/12/2018				
Matrix			Soil				
Units			mg/Kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
Lead	2.5	5.0	9.54				

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (6010B.LEAD), Lead, ICP

QC Batch No: 0911182C4

Our Lab I.D.			Method Blank	93928.15	93928.17	93928.19	93928.20
Client Sample I.D.				B04-02.0	B02-02.0	B07-01.0	B07-02.0
Date Sampled				09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/11/2018	09/11/2018	09/11/2018	09/11/2018	09/11/2018
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			09/12/2018	09/12/2018	09/12/2018	09/12/2018	09/12/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Lead	2.5	5.0	ND	9.82	13.6	6.02	12.5

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (6010B.LEAD), Lead, ICP

QC Batch No: 0911182C4

Our Lab I.D.			93928.22	93928.23	93928.25	93928.26	93928.28
Client Sample I.D.			B08-01.0	B08-02.0	B10-01.0	B10-02.0	B09-01.0
Date Sampled			09/04/2018	09/04/2018	09/04/2018	09/04/2018	09/04/2018
Date Prepared			09/11/2018	09/11/2018	09/11/2018	09/11/2018	09/11/2018
Preparation Method			3050B	3050B	3050B	3050B	3050B
Date Analyzed			09/12/2018	09/12/2018	09/12/2018	09/12/2018	09/12/2018
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Lead	2.5	5.0	8.66	10.9	10.9	10.9	19.8

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (6010B.LEAD), Lead, ICP

QC Batch No: 0911182C4

Our Lab I.D.			**93928.29**				
Client Sample I.D.			B09-02.0				
Date Sampled			09/04/2018				
Date Prepared			09/11/2018				
Preparation Method			3050B				
Date Analyzed			09/12/2018				
Matrix			Soil				
Units			mg/Kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
Lead	2.5	5.0	7.87				

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (6010B.LEAD), Lead, ICP

QC Batch No: 0911182C3; Dup or Spiked Sample: 93928.01; LCS: Clean Sand; QC Prepared: 09/11/2018; QC Analyzed: 09/12/2018; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Lead	5.96	50.0	52.8	93.7	50.0	53.7	95.5	1.9	75-125	<15

QC Batch No: 0911182C3; Dup or Spiked Sample: 93928.01; LCS: Clean Sand; QC Prepared: 09/11/2018; QC Analyzed: 09/12/2018; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Lead	50.0	50.0	100	50.0	50.5	101	<1	75-125	<15	

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (6010B.LEAD), Lead, ICP

QC Batch No: 0911182C4; Dup or Spiked Sample: 93928.15; LCS: Clean Sand; QC Prepared: 09/11/2018; QC Analyzed: 09/12/2018; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Lead	9.82	50.0	58.0	96.4	50.0	58.1	96.6	<1	75-125	<15

QC Batch No: 0911182C4; Dup or Spiked Sample: 93928.15; LCS: Clean Sand; QC Prepared: 09/11/2018; QC Analyzed: 09/12/2018; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Lead	50.0	50.5	101	50.0	49.4	98.8	2.2	75-125	<15	

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (8082), Polychlorinated Biphenyls (PCBs) by GC

QC Batch No: 090718ZB2; Dup or Spiked Sample: 93928.03; LCS: Clean Sand; QC Prepared: 09/07/2018; QC Analyzed: 09/07/2018; Units: ug/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Aroclor-1016 (PCB-1016)	0.00	500	324	64.8	500	366	73.2	12.2	50-150	<40
Aroclor-1260 (PCB-1260)	0.00	500	446	89.2	500	472	94.4	5.7	50-150	<40
Surrogates										
Decachlorobiphenyl	0.00	25.0	25.5	102	25.0	27.0	108	5.7	30-150	<40
Tetrachloro-m-xylene	0.00	25.0	29.3	117	25.0	31.0	124	5.8	30-150	<40

QC Batch No: 090718ZB2; Dup or Spiked Sample: 93928.03; LCS: Clean Sand; QC Prepared: 09/07/2018; QC Analyzed: 09/07/2018; Units: ug/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Aroclor-1016 (PCB-1016)	500	328	65.6	500	365	73.0	10.7	50-150	<40	
Aroclor-1260 (PCB-1260)	500	421	84.2	500	477	95.4	12.5	50-150	<40	
Surrogates										
Decachlorobiphenyl	25.0	22.9	91.6	25.0	27.0	108	16.4	30-150	<40	
Tetrachloro-m-xylene	25.0	30.0	120	25.0	32.3	129	7.2	30-150	<40	

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015D), TPH as Diesel and Heavy Hydrocarbons Using GC/FID

QC Batch No: 090718DB2; Dup or Spiked Sample: 93928.02; LCS: Clean Sand; QC Prepared: 09/07/2018; QC Analyzed: 09/07/2018; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
TPH as Diesel (C13-C22)	0.00	500	555	111	500	545	109	1.8	75-125	<20
Surrogates										
Chlorobenzene	0.00	100	95.5	95.5	100	98.5	98.5	3.1	75-125	<20

QC Batch No: 090718DB2; Dup or Spiked Sample: 93928.02; LCS: Clean Sand; QC Prepared: 09/07/2018; QC Analyzed: 09/07/2018; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
TPH as Diesel (C13-C22)	500	535	107	500	525	105	1.9	75-125	<20	
Surrogates										
Chlorobenzene	100	95.1	95.1	100	97.0	97.0	2.0	75-125	<20	

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 090618OB1; Dup or Spiked Sample: 93928.03AGA; LCS: Clean Sand; QC Prepared: 09/06/2018;MS Analyzed: 09/07/2018; LCS Analyzed: 09/06/2018; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
TPH as Gasoline and Light HC. (C4-C12)	0.0130	1.00	0.991	97.8	1.00	0.852	83.9	15.3	75-125	<20
Surrogates										
Bromofluorobenzene	0.00	0.0500	0.0620	124	0.0500	0.0550	110	12.0	75-125	<20

QC Batch No: 090618OB1; Dup or Spiked Sample: 93928.03AGA; LCS: Clean Sand; QC Prepared: 09/06/2018;MS Analyzed: 09/07/2018; LCS Analyzed: 09/06/2018; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
TPH as Gasoline and Light HC. (C4-C12)	1.00	0.946	94.6	1.00	0.903	90.3	4.7	75-125	<20	
Surrogates										
Bromofluorobenzene	0.0500	0.0500	100	0.0500	0.0540	108	7.7	75-125	<20	

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Project ID: 132516-004
Project Name: SDG&E Fenton Substation

AETL Job Number	Submitted	Client
93928	09/06/2018	SDG&E

Method: (M8015G), TPH as Gasoline and Light Hydrocarbons Using GC/FID

QC Batch No: 090618OB2; Dup or Spiked Sample: 93928.22AGA; LCS: Clean Sand; QC Prepared: 09/06/2018; QC Analyzed: 09/07/2018; Units: mg/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
TPH as Gasoline and Light HC. (C4-C12)	0.0100	1.00	0.774	76.4	1.00	0.763	75.3	1.5	75-125	<20
Surrogates										
Bromofluorobenzene	0.00	0.0500	0.0585	117	0.0500	0.0515	103	12.7	75-125	<20

QC Batch No: 090618OB2; Dup or Spiked Sample: 93928.22AGA; LCS: Clean Sand; QC Prepared: 09/06/2018; QC Analyzed: 09/07/2018; Units: mg/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
TPH as Gasoline and Light HC. (C4-C12)	1.00	0.898	89.8	1.00	0.969	96.9	7.6	75-125	<20	
Surrogates										
Bromofluorobenzene	0.0500	0.0570	114	0.0500	0.0520	104	9.2	75-125	<20	

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Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6:	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above MDL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference