

# PRIORITY DEVELOPMENT PROJECT (PDP) STORM WATER QUALITY MANAGEMENT PLAN (SWQMP) FOR

3774 5th Ave.

Insert Permit Application Numbers Drawing Number (If Applicable) & Internal Order Number (If Applicable)

## **ENGINEER OF WORK:**

Frank Larocca PE C75121 Provide Wet Signature and Stamp Above Line

## **PREPARED FOR:**

Kalonymus Development Partners 3774 5th Ave. San Diego, 902103 Insert Telephone Number

#### **PREPARED BY:**



Labib Funk & Associates 319 Main St. El Segundo, CA , 90245 (213)239-3922

> **DATE:** August 11, 2022

Approved by: City of San Diego

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#### ACRONYMS

APN	Assessor's Parcel Number
ASBS	Area of Special Biological Significance
BMP	Best Management Practice
CEQA	California Environmental Quality Act
CGP	Construction General Permit
DCV	Design Capture Volume
DMA	Drainage Management Areas
ESA	Environmentally Sensitive Area
GLU	Geomorphic Landscape Unit
GW	Ground Water
HMP	Hydromodification Management Plan
HSG	Hydrologic Soil Group
HU	Harvest and Use
INF	Infiltration
LID	Low Impact Development
LUP	Linear Underground/Overhead Projects
MS4	Municipal Separate Storm Sewer System
N/A	Not Applicable
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
PDP	Priority Development Project
PE	Professional Engineer
POC	Pollutant of Concern
SC	Source Control
SD	Site Design
SDRWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
SWPPP	Stormwater Pollutant Protection Plan
SWQMP	Storm Water Quality Management Plan
TMDL	Total Maximum Daily Load
WMAA	Watershed Management Area Analysis
WPCP	Water Pollution Control Program
WQIP	Water Quality Improvement Plan



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## **CERTIFICATION PAGE**

Project Name:3774 5th Ave.Permit Application Number:Insert Permit Application Number

I hereby declare that I am the Engineer in Responsible Charge of design of storm water BMPs for this project, and that I have exercised responsible charge over the design of the project as defined in Section 6703 of the Business and Professions Code, and that the design is consistent with the requirements of the Storm Water Standards, which is based on the requirements of SDRWQCB Order No. R9-2013-0001 as amended by R9-2015-0001 and R9-2015-0100 (MS4 Permit).

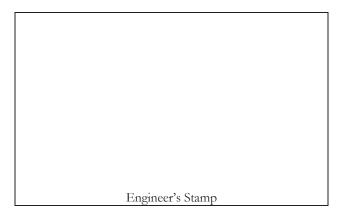
I have read and understand that the City Engineer has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the Storm Water Standards. I certify that this PDP SWQMP has been completed to the best of my ability and accurately reflects the project being proposed and the applicable source control and site design BMPs proposed to minimize the potentially negative impacts of this project's land development activities on water quality. I understand and acknowledge that the plan check review of this PDP SWQMP by the City Engineer is confined to a review and does not relieve me, as the Engineer in Responsible Charge of design of storm water BMPs for this project, of my responsibilities for project design.

Engineer of Work's Signature, PE Number & Expiration Date

Frank LaRocca Print Name

Labib Funk & Associates Company

August 11, 2022 Date





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## SUBMITTAL RECORD

Use this Table to keep a record of submittals of this PDP SWQMP. Each time the PDP SWQMP is re-submitted, provide the date and status of the project. In last column indicate changes that have been made or indicate if response to plancheck comments is included. When applicable, insert response to plancheck comments.

Submittal Number	Date	Project Status	Changes	
1	12/17/21	<ul> <li>Preliminary Design/Planning/CEQA</li> <li>Final Design</li> </ul>	Initial Submittal	
2	Enter a date.	<ul> <li>Preliminary Design/Planning/CEQA</li> <li>Final Design</li> </ul>	Click here to enter text.	
3	Enter a date.	<ul> <li>Preliminary Design/Planning/CEQA</li> <li>Final Design</li> </ul>	Click here to enter text.	
4	Enter a date.	O Preliminary Design/Planning/CEQA ⊙ Final Design	Click here to enter text.	

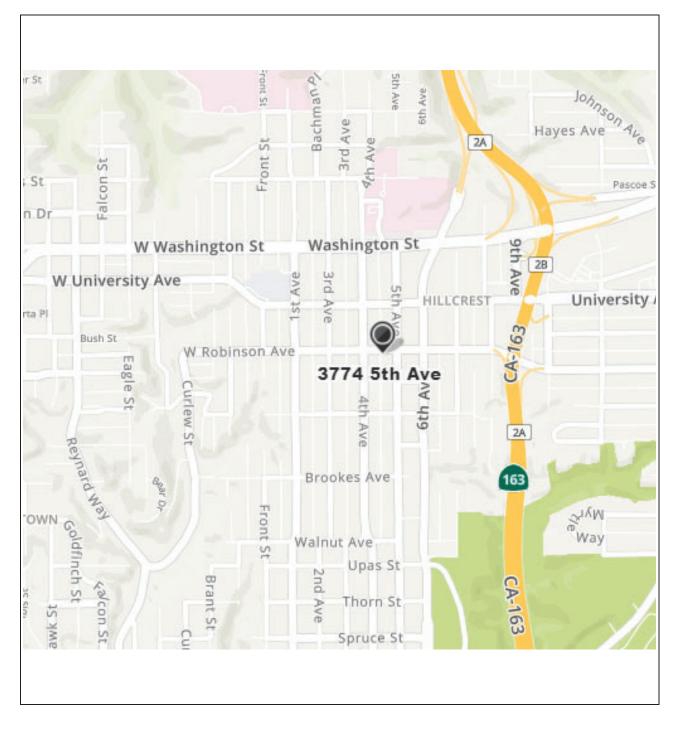


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# PROJECT VICINITY MAP

Project Name:3774 5th Ave.Permit Application Number:Insert Application Number.





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4.

City of San Diego Development Services 1222 First Ave., MD-302 San Diego, CA 92101 (619) 446-5000

# Storm Water Requirements Applicability Checklist

• No; next question

FORM DS-560 February 2016

#### Project Address:

3774 5th Ave, San Diego, CA, 92103

Project Number *(for the City Use Only)*: Click here to enter project number

## SECTION 1. Construction Storm Water BMP Requirements:

All construction sites are required to implement construction BMPs in accordance with the performance standards in the <u>Storm Water Standards Manual</u>. Some sites are additionally required to obtain coverage under the State Construction General Permit (CGP)<sup>1</sup>, which is administrated by the State Water Resources Control Board.

# For all projects complete PART A: If project is required to submit a SWPPP or WPCP, continue to PART B.

### PART A: Determine Construction Phase Storm Water Requirements.

1. Is the project subject to California's statewide General NPDES permit for Storm Water Discharges Associated with construction activities, also known as the State Construction General Permit (CGP)? (Typically projects with land disturbance greater than or equal to 1 acre.)

• Yes; SWPPP required, skip questions 2-4

2. Does the project propose construction or demolition activity, including but not limited to, clearing, grading, grubbing, excavation, or any other activity that results in ground disturbance and contact with storm water runoff?

3. Does the project propose routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility? (projects such as pipeline/utility replacement)

• Yes; WPCP required, skip questions 4 • No; next question

Does the project only include the following Permit types listed below?

- Electrical Permit, Fire Alarm Permit, Fire Sprinkler Permit, Plumbing Permit, Sign Permit, Mechanical Permit, Spa Permit.
- Individual Right of Way Permits that exclusively include one of the following activities and associated curb/ sidewalk repair: water services, sewer lateral, storm drain lateral, or dry utility service.
- Right of Way Permits with a project footprint less than 150 linear feet that exclusively include only ONE of the following activities: curb ramp, sidewalk and driveway apron replacement, curb and gutter replacement, and retaining wall encroachments.

□ Yes; no document required

Check one of the boxes to the right, and continue to PART B:

☐ If you checked "Yes" for question 1, a SWPPP is REQUIRED. Continue to PART B

X If you checked "No" for question 1, and checked "Yes" for question 2 or 3,

a WPCP is REQUIRED. If the project processes less than 5,000 square feet of ground disturbance AND has less than a 5-foot elevation change over the entire project area, a Minor WPCP may be required instead. Continue to PART B.

□ If you checked "No" for all question 1-3, and checked "Yes" for question 4 PART B **does not apply and no document is required. Continue to Section 2.** 

More information on the City's construction BMP requirements as well as CGP requirements can be found at: www.sandiego.gov/stormwater/regulations/swguide/constructing.shtml



#### Page 2 of 4 City of San Diego • Development Services Department • Storm Water Requirements Applicability Checklist

#### PART B: Determine Construction Site Priority.

This prioritization must be completed within this form, noted on the plans, and included in the SWPPP or WPCP. The city reserves the right to adjust the priority of projects both before and after construction. Construction projects are assigned an inspection frequency based on if the project has a "high threat to water quality." The City has aligned the local definition of "high threat to water quality" to the risk. Determination approach of the Stat e Construction General Permit (CGP). The CGP determines risk level based on project specific sediment risk and receiving water risk. Additional inspection is required for projects within the Areas of Special Biological Significance (ASBS) watershed. **NOTE:** The construction priority does **NOT** change construction BMP requirements that apply to projects; rather, it determines the frequency of inspections that will be conducted by city staff.

#### Complete PART B and continued to Section 2

#### 1. 🗋 ASBS

a. Projects located in the ASBS watershed. A map of the ASBS watershed can he found here https://www.waterboards.ca.gov/water\_issues/programs/ocean/asbs\_map.shtml

#### 

a. Projects 1 acre or more determined to be Risk Level 2 or Risk Level 3 per the Construction General Permit and not located in the ASBS watershed.

b. Projects 1 acre or more determined to be LUP Type 2 or LUP Type 3 per the Construction General Permit and not located in the ASBS watershed.

#### 

a. Projects 1 acre or more but not subject to an ASBS or high priority designation.

b. Projects determined to be Risk Level 1 or LUP Type 1 per the Construction General Permit and not located in the ASBS watershed.

#### 4. ✓ Low Priority

a. Projects not subject to ASBS, high or medium priority designation.

#### SECTION 2. Permanent Storm Water BMP Requirements.

Additional information for determining the requirements is found in the Storm Water Standards Manual.

#### PART C: Determine if Not Subject to Permanent Storm Water Requirements.

Projects that are considered maintenance, or otherwise not categorized as "new development projects" or "redevelopment projects" according to the <u>Storm Water Standards Manual</u> are not subject to Permanent Storm Water BMPs.

# If "yes" is checked for any number in Part C, proceed to Part F and check "Not Subject to Permanent Storm Water BMP Requirements".

#### If "no" is checked for all of the numbers in Part C continue to Part D.

1.	Does the project only include interior remodels and/or is the project entirely within an existing enclosed structure and does not have the potential to contact storm water?	OYes ⊙No
2.	Does the project only include the construction of overhead or underground utilities without creating new impervious surfaces?	O Yes ⊙ No
3.	Does the project fall under routine maintenance? Examples include, but are not limited to: roof or exterior structure surface replacement, resurfacing or reconfiguring surface parking lots or existing roadways without expanding the impervious footprint, and routine replacement of damaged pavement (grinding, overlay, and pothole repair).	🔿 Yes 💿 No



City	y of San Diego • Development Services Department • Storm Water Requirements Applicability Cheo	cklist Page 3 of 4	
PA	RT D: PDP Exempt Requirements.		
PD	P Exempt projects are required to implement site design and source control BMPs.		
Ex	'yes" was checked for any questions in Part D, continue to Part F and check the box labelempt." 'no" was checked for all questions in Part D, continue to Part E.	eled "PDP	
1.	Does the project ONLY include new or retrofit sidewalks, bicycle lanes, or trails that:		
	<ul> <li>Are designed and constructed to direct storm water runoff to adjacent vegetated areas, or other non-erodible permeable areas? Or;</li> <li>Are designed and constructed to be hydraulically disconnected from paved streets and roads? Or;</li> <li>Are designed and constructed with permeable pavements or surfaces in accordance with the Green Streets guidance in the City's Storm Water Standards manual?</li> </ul>		
	• Yes; PDP exempt requirements apply • No; next question		
2.	Does the project ONLY include retrofitting or redeveloping existing paved alleys, streets or roa constructed in accordance with the Green Streets guidance in the <u>City's Storm Water Standards</u>		
	• Yes; PDP exempt requirements apply • No; PDP not exempt. PDP require	ments apply.	
bel If De	<b>RT E: Determine if Project is a Priority Development Project (PDP).</b> Projects that match of ow are subject to additional requirements including preparation of a Storm Water Quality Manager "yes" is checked for any number in PART E, continue to PART F and check the bovelopment Project".	ment Plan (SWQMP). <b>x labeled "Priority</b>	
	"no" is checked for every number in PART E, continue to PART F and check the box oject".	k labeled "Standard	
1.	New Development that creates 10,000 square feet or more of impervious surfaces collectively over the project site. This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.	<b>O</b> Yes <b>O</b> No	
2.	Redevelopment project that creates and/or replaces 5,000 square feet or more of impervious surfaces on an existing site of 10,000 square feet or more of impervious surfaces. This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.	• Yes • No	
3.	<b>New development or redevelopment of a restaurant.</b> Facilities that sell prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC 5812), and where the land development creates and/or replace 5,000 square feet or more of impervious surface.	<b>O</b> Yes <b>O</b> No	
4.	<b>New development or redevelopment on a hillside.</b> The project creates and/or replaces 5,000 square feet or more of impervious surface (collectively over the project site) and where the development will grade on any natural slope that is twenty-five percent or greater.	<b>O</b> Yes <b>O</b> No	



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5.	New development or redevelopment of a parking lot that creates and/or replaces 5,000 square feet or more of impervious surface (collectively over the project site).	O Yes O No	
6.	New development or redevelopment of streets, roads, highways, freeways, and driveways. The project creates and/or replaces 5,000 square feet or more of impervious surface (collectively over the project site).	🔿 Yes 💿 No	
7.	New development or redevelopment discharging directly to an Environmentally Sensitive Area. The project creates and/or replaces 2,500 square feet of impervious surface (collectively over project site), and discharges directly to an Environmentally Sensitive Area (ESA). "Discharging- directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands).	🔾 Yes 💿 No	
8.	New development or redevelopment projects of a retail gasoline outlet that creates and/or replaces 5,000 square feet of impervious surface. The development project meets the following criteria: (a) 5,000 square feet or more or (b) has a projected Average Daily Traffic of 100 or more vehicles per day.	OYes ⊙No	
9.	New development or redevelopment projects of an automotive repair shops that creates and/or replaces 5,000 square feet or more of impervious surfaces. Development projects categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.	OYes ⊙No	
10.	<b>Other Pollutant Generating Project.</b> The project is not covered in the categories above, results in the disturbance of one or more acres of land and is expected to generate pollutants post construction, such as fertilizers and pesticides. This does not include projects creating less than 5,000 sf of impervious surface and where added landscaping does not require regular use of pesticides and fertilizers, such as slope stabilization using native plants. Calculation of the square footage of impervious surface need not include linear pathways that are for infrequent vehicle use, such as emergency maintenance access or bicycle pedestrian use, if they are built with pervious surfaces of if they sheet flow to surrounding pervious surfaces.	🔾 Yes 💿 No	
PA	RT F: Select the appropriate category based on the outcomes of PART C through PART	E.	
1.	The project is NOT SUBJECT TO STORM WATER REQUIREMENTS.		
2.	The project is a <b>STANDARD PROJECT</b> . Site design and source control BMP requirements apply. See the Storm Water Standards Manual for guidance.		
3.	The project is <b>PDP EXEMPT</b> . Site design and source control BMP requirements apply. See the Storm Water Standards Manual for guidance.		
4.	The project is a <b>PRIORITY DEVELOPMENT PROJECT</b> . Site design, source control, and structural pollutant control BMP requirements apply. See the <u>Storm Water Standards Manual</u> for guidance on determining if project requires hydromodification management.		
	me of Owner or Agent <i>(Please Print):</i> Title: ck here to enter name. Click here to en	nter title	
Sig	nature: Date: August 11	, 2022	



Applicability of Permanen Storm Water	BMP Requ	irements	Form I-1	
(Storm Water Intake Form for all Development Permit Applications)				
/	lentification			
Project Name: 3774 5th Ave.				
Permit Application Number: Insert Application N	Number.	Date: 8	8/11/22	
Determination	1			
The purpose of this form is to identify permaner project. This form serves as a short <u>summary</u> of separate forms that will serve as the backup for the Answer each step below, starting with Step 1 and 5	applicable re- ne determinat	quirements, i ion of require	n some cases referencing ements.	
Refer to Part 1 of Storm Water Standards section below.	ons and/or se	eparate forms	s referenced in each step	
Step	Answer	Progressio	on	
Step 1: Is the project a "development project"? See Section 1.3 of the BMP Design Manual (Part	⊙ Yes	Go to Ste	p 2.	
1 of Storm Water Standards) for guidance.	<b>O</b> No	Stop. Permanent BMP requirements do not apply. No SWQMP will be required. Provide discussion below.		
Discussion / justification if the project is <u>not</u> a "o interior remodels within an existing building): Click or tap here to enter text. Step 2: Is the project a Standard Project, Priority Development Project (PDP), or exception to PDP definitions?	<b>O</b> Standard	Stop. Standard I	Project requirements	
To answer this item, see Section 1.4 of the BMP Design Manual (Part 1 of Storm Water	Project O	apply. PDP requ PDP SWO	irements apply, including	
Standards) <u>in its entirety</u> for guidance, AND complete Storm Water Requirements	PDP	Go to Ste	-	
Applicability Checklist.	O PDP Exempt		Project requirements wide discussion and list	



Discussion / justification, and additional requirements for exceptions to PDP definitions, if applicable:

Click or tap here to enter text.



Form I-	-1 Page 2	
Step	Answer	Progression
Step 3. Is the project subject to earlier PDP requirements due to a prior lawful approval? See Section 1.10 of the BMP Design Manual (Part 1 of Storm Water Standards) for guidance.	<b>O</b> Yes	Consult the City Engineer to determine requirements. Provide discussion and identify requirements below. Go to Step 4.
	⊙ No	BMP Design Manual PDP requirements apply. Go to Step 4.
Discussion / justification of prior lawful approva lawful approval does not apply): Click or tap here to enter text.	l, and identify	requirements (not required if prior
Step 4. Do hydromodification control requirements apply? See Section 1.6 of the BMP Design Manual (Part 1 of Storm Water Standards) for guidance.	<b>O</b> Yes	PDP structural BMPs required for pollutant control (Chapter 5) and hydromodification control (Chapter 6). Go to Step 5.
	🖸 No	Stop. PDP structural BMPs required for pollutant control (Chapter 5) only. Provide brief discussion of exemption to hydromodification control below.
Discussion / justification if hydromodification co Existing underground storm drains discharging d	1	11,5
Step 5. Does protection of critical coarse sediment yield areas apply? See Section 6.2 of the BMP Design Manual (Part 1 of Storm Water Standards) for guidance.	<b>O</b> Yes	Management measures required for protection of critical coarse sediment yield areas (Chapter 6.2). Stop.
	🖸 No	Management measures not required for protection of critical coarse sediment yield areas. Provide brief discussion below. Stop.



Discussion / justification if protection of critical coarse sediment yield areas does <u>not</u> apply: There are no CCYSAs onsite or upstream and draining through the proposed project site. Therefore, protection of CCSYAs does not apply.



	tion Checklist For PDPs Form I-3B			
Project Sum	mary Information			
Project Name	3774 5th Ave.			
Project Address	3774 5th Ave., San Diego, 92103			
Assessor's Parcel Number(s) (APN(s))	452-056-13-00 & 452-056-14-00			
Permit Application Number	Click here to enter text.			
Project Watershed	Select One: O San Dieguito River O Penasquitos O Mission Bay O San Diego River O San Diego Bay O Tijuana River			
Hydrologic subarea name with Numeric Identifier up to two decimal paces (9XX.XX)	908.21			
Project Area (total area of Assessor's Parcel(s) associated with the project or total area of the right-of-	0.31 Acres ([SQFT] Square Feet)			
Area to be disturbed by the project (Project Footprint)	0.31 Acres (13,601 Square Feet)			
Project Proposed Impervious Area (subset of Project Footprint)	0.27 Acres (11,679 Square Feet)			
Project Proposed Pervious Area (subset of Project Footprint)	.04 Acres (1,922 Square Feet)			
Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Pr This may be less than the Project Area.				
The proposed increase or decrease in impervious area in the proposed condition as compared to the pre-project condition.	Decrease 14.0 %			





Form I-3B Page 2 of 11
Description of Existing Site Condition and Drainage Patterns
Current Status of the Site (select all that apply): ✓ Existing development □ Previously graded but not built out □ Agricultural or other non-impervious use □ Vacant, undeveloped/natural Description / Additional Information: Click or tap here to enter text.
<ul> <li>Existing Land Cover Includes (select all that apply):</li> <li>Vegetative Cover</li> <li>Non-Vegetated Pervious Areas</li> <li>Impervious Areas</li> <li>Description / Additional Information:</li> <li>Click or tap here to enter text.</li> </ul>
Underlying Soil belongs to Hydrologic Soil Group (select all that apply): □ NRCS Type A □ NRCS Type B □ NRCS Type C ✓ NRCS Type D Approximate Depth to Groundwater (GW):
O GW Depth < 5 feet
• 5 feet < GW Depth < 10 feet • 10 feet $\leq$ GW Depth $\leq$ 20 feet
<ul> <li>10 feet &lt; GW Depth &lt; 20 feet</li> <li>GW Depth &gt; 20 feet</li> </ul>
Existing Natural Hydrologic Features (select all that apply):  U Watercourses  Seeps  Springs  Wetlands  None Description / Additional Information: Click or tap here to enter text.



# Form I-3B Page 3 of 11

Description of Existing Site Topography and Drainage:

How is storm water runoff conveyed from the site? At a minimum, this description should answer:

- 1. Whether existing drainage conveyance is natural or urban;
- 2. If runoff from offsite is conveyed through the site? If yes, quantification of all offsite drainage areas, design flows, and locations where offsite flows enter the project site and summarize how such flows are conveyed through the site;
- 3. Provide details regarding existing project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, and natural and constructed channels;
- 4. Identify all discharge locations from the existing project along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide summary of the pre-project drainage areas and design flows to each of the existing runoff discharge locations.

Description / Additional Information:



Water from the project site conveyance is urban. No runoff from offsite conveyed through the site. The existing site contains two, two story commercial buildings and one one story building with asphalt pavement covering the extents of the lot. Water sheet flows across the site to the City Storm drain. The proposed building extends to the property line, conveyed to a drywell in the basement. Overflow is discharged to 5th Ave before collected in the municipal conveyance system by means of a catch basin located in 5th Ave & Brooks Ave.



Form I-3B Page 4 of 11				
Description of Proposed Site Development and Drainage Patterns				
Project Description / Proposed Land Use and/or Activities: The proposed site includes a new 7 story residential and commercial building above 1 level of				
subterranean parking.				
List/describe proposed impervious features of the project (e.g., buildings, roadways, parking lots, courtyards, athletic courts, other impervious features):				
Roof, building, pavement				
List/describe proposed pervious features of the project (e.g., landscape areas): Landscape planters at various roof decks.				
Does the project include grading and changes to site topography?				
⊙ Yes				
O No Description / Additional Information:				
The site consists of existing building structures which will be demolished. Subsequently the site will be graded which will involve remedial grading, cut & fill.				





# Form I-3B Page 5 of 11

Does the project include changes to site drainage (e.g., installation of new storm water conveyance systems)?

• Yes

 $O\,\mathrm{No}$ 

If yes, provide details regarding the proposed project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural and constructed channels, and the method for conveying offsite flows through or around the proposed project site. Identify all discharge locations from the proposed project site along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide a summary of pre and post-project drainage areas and design flows to each of the runoff discharge locations. Reference the drainage study for detailed calculations.

Description / Additional Information:

The proposed building extends to the property line, storm water is collected from the roof and conveyed to an infiltration drywell in the basement. Overflow is then guided to the municipal City Storm drain system.



## Form I-3B Page 6 of 11

Identify whether any of the following features, activities, and/or pollutant source areas will be present (select all that apply):

- ✓ On-site storm drain inlets
- $\checkmark$  Interior floor drains and elevator shaft sump pumps
- ✓ Interior parking garages
- $\Box$  Need for future indoor & structural pest control
- ✓ Landscape/Outdoor Pesticide Use
- □ Pools, spas, ponds, decorative fountains, and other water features
- $\Box$  Food service
- $\Box$  Refuse areas
- ✓ Industrial processes
- ✓ Outdoor storage of equipment or materials
- ✓ Vehicle and Equipment Cleaning
- ✓ Vehicle/Equipment Repair and Maintenance
- □ Fuel Dispensing Areas
- □ Loading Docks
- ✓ Fire Sprinkler Test Water
- □ Miscellaneous Drain or Wash Water
- ✓ Plazas, sidewalks, and parking lots
- □ Large Trash Generating Facilities
- □ Animal Facilities
- $\Box$  Plant Nurseries and Garden Centers
- □ Automotive-related Uses

## Description / Additional Information:

Click or tap here to enter text.



Form I-3B Page 7 of 11
Identification and Narrative of Receiving Water Narrative describing flow path from discharge location(s), through urban storm conveyance system, to receiving creeks, rivers, and lagoons and ultimate discharge location to Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable)
The site discharge water conveyance through urban runoff to which ultimately flows to San Diego Bay.
Provide a summary of all beneficial uses of receiving waters downstream of the project discharge locations. Click or tap here to enter text.
Identify all ASBS (areas of special biological significance) receiving waters downstream of the project discharge locations. See map
Provide distance from project outfall location to impaired or sensitive receiving waters.
6 miles to La Jolla ASBS.
Sumarize information regarding the proximity of the permanent, post-construction storm water BMPs to the City's Multi-Habitat Planning Area and environmentally sensitive lands There is not known proximity of post construction storm water BMP which will flow through City's Multi-Habitat Planning area and environmentally sensative lands.



Form I-3B Page 8 of 11						
Identification of Receiving Water Pollutants of Concern List any 303(d) impaired water bodies within the path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable), identify the pollutant(s)/stressor(s) causing impairment, and identify any TMDLs and/or Highest Priority Pollutants from the WQIP for the impaired water bodies:						
303(d) Impaired Water BodyPollutant(s)/Stressor(s)TMDLs/ WQIP Highest Priority Pollutant						
San Diego Bay	PCBs	PCBs		Click or tap here to enter text.		
	Click or tap h	Click or tap here to enter text.		Click or tap here to enter text.		
	Click or tap h	ere to enter text.	Click o	r tap here to enter text.		
	Click or tap h	ere to enter text.	Click o	r tap here to enter text.		
	Click or tap h	ere to enter text.	Click o	r tap here to enter text.		
Click or tap here to enter text. Click or tap here to enter text.						
Click or tap here to enter	Click or tap here to enter text. Click or tap here to enter text. Click or tap here to enter text.					
Click or tap here to enter	1	ere to enter text. Project Site Polluta		r tap here to enter text.		
Design Manual (Part 1 o		ls) Appendix B.6):	-	Also a Receiving		
Pollutant	Project Site	Project S		Water Pollutant of Concern		
Sediment	0	0		0		
Nutrients	0	•		0		
Heavy Metals	Heavy Metals O			0		
Organic Compounds O			0			
Trash & Debris	0	⊙		0		
Oxygen Demanding Substances	0	⊙		0		
Oil & Grease	⊙	0		0		
Bacteria & Viruses	⊙	0		0		

PDP SWQMP Template Date: January, 2016 PDP SWQMP Submittal Date: August 11, 2022



Pesticides	0	⊙	0
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## Form I-3B Page 9 of 11

Hydromodification Management Requirements

Do hydromodification management requirements apply (see Section 1.6 of the BMP Design Manual)? • Ves, hydromodification management flow control structural BMPs required.

- No, the project will discharge runoff directly to existing underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean.
- No, the project will discharge runoff directly to conveyance channels whose bed and bank are concrete-lined all the way from the point of discharge to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean.
- No, the project will discharge runoff directly to an area identified as appropriate for an exemption by the WMAA for the watershed in which the project resides.

Description / Additional Information (to be provided if a 'No' answer has been selected above): The site discharge water conveyance through urban runoff to which ultimmately flows to San Diego Bay.

Critical Coarse Sediment Yield Areas\*

\*This Section only required if hydromodification management requirements apply

Based on Section 6.2 and Appendix H does CCSYA exist on the project footprint or in the upstream area draining through the project footprint?

OYes

• No, No critical coarse sediment yield areas to be protected based on WMAA maps

Discussion / Additional Information:

Click or tap here to enter text.



Form I-3B Page 10 of 11
Flow Control for Post-Project Runoff*
*This Section only required if hydromodification management requirements apply
List and describe point(s) of compliance (POCs) for flow control for hydromodification management (see Section 6.3.1). For each POC, provide a POC identification name or number correlating to the project's HMP Exhibit and a receiving channel identification name or number correlating to the project's HMP Exhibit. Click or tap here to enter text.
Has a geomorphic assessment been performed for the receiving channel(s)? • No, the low flow threshold is 0.1Q2 (default low flow threshold)
• Yes, the result is the low flow threshold is 0.1Q2 • Yes, the result is the low flow threshold is 0.3Q2 • Yes, the result is the low flow threshold is 0.5Q2
If a geomorphic assessment has been performed, provide title, date, and preparer: Click or tap here to enter text.
Discussion / Additional Information: (optional)
Click or tap here to enter text.



# Form I-3B Page 11 of 11

Other Site Requirements and Constraints

When applicable, list other site requirements or constraints that will influence storm water management design, such as zoning requirements including setbacks and open space, or local codes governing minimum street width, sidewalk construction, allowable pavement types, and drainage requirements.

None such site requirement or constrain will influence the drainage requirements..

Optional Additional Information or Continuation of Previous Sections As Needed

This space provided for additional information or continuation of information from previous sections as needed.

Click or tap here to enter text.







Source Control BMP Checklist for All Development Projects Source Control BMPs	]	Form I-	-4
All development projects must implement source control BMPs SC-1 t and feasible. See Chapter 4 and Appendix E of the BMP Design Manu Standards) for information to implement source control BMPs shown i	ial (Part 1 o	of the St	
<ul> <li>Answer each category below pursuant to the following.</li> <li>"Yes" means the project will implement the source control BI and/or Appendix E of the BMP Design Manual. Discussion / j</li> <li>"No" means the BMP is applicable to the project but it is not feas / justification must be provided.</li> </ul>	ustification	n is not re	equired.
<ul> <li>"N/A" means the BMP is not applicable at the project site becau the feature that is addressed by the BMP (e.g., the project has areas). Discussion / justification may be provided.</li> </ul>	1 /	or materi	als storage
Source Control Requirement		Applied	?
SC-1 Prevention of Illicit Discharges into the MS4	• Yes	O No	ON/A
SC-2 Storm Drain Stenciling or Signage Discussion / justification if SC-2 not implemented: The project site will not have on-site drainage inlet of catch basin.	OYes	O No	⊙ N/A
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	• Yes	0 No	O <sub>N/A</sub>
Discussion / justification if SC-3 not implemented: SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal Discussion / justification if SC-4 not implemented:	• Yes	0 No	O N/A
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	OYes	0 No	⊙ N/A



Discussion / justification if SC-5 not implemented:



Form I-4 Page 2 of 2			
Source Control Requirement		Applied	l?
SC-6 Additional BMPs Based on Potential Sources of Runoff Pollut	tants (must an	swer for e	each source
listed below)			
On-site storm drain inlets	• Yes	ONo	ON/A
Interior floor drains and elevator shaft sump pumps	• Yes	ONo	ON/A
Interior parking garages	• Yes	ONo	ON/A
Need for future indoor & structural pest control	OYes	•No	O <sub>N/A</sub>
Landscape/Outdoor Pesticide Use	• Yes	ONo	O <sub>N/A</sub>
Pools, spas, ponds, decorative fountains, and other water features	<b>O</b> Yes	⊙ No	ON/A
Food service	OYes	⊙ No	ON/A
Refuse areas	<b>O</b> Yes	⊙ No	ON/A
Industrial processes	OYes	⊙ No	ON/A
Outdoor storage of equipment or materials	• Yes	ONo	O <sub>N/A</sub>
Vehicle/Equipment Repair and Maintenance	• Yes	ONo	ON/A
Fuel Dispensing Areas	• Yes	ONo	O <sub>N/A</sub>
Loading Docks	<b>O</b> Yes	ONo	⊙N/A
Fire Sprinkler Test Water	• Yes	ONo	ON/A
Miscellaneous Drain or Wash Water	• Yes	ONo	O <sub>N/A</sub>
Plazas, sidewalks, and parking lots	• Yes	ONo	ON/A
SC-6A: Large Trash Generating Facilities	OYes	ONo	⊙N/A
SC-6B: Animal Facilities	<b>O</b> Yes	ONo	⊙N/A
SC-6C: Plant Nurseries and Garden Centers	<b>O</b> Yes	ONo	⊙N/A
SC-6D: Automotive-related Uses	OYes	ONo	⊙N/A

Discussion / justification if SC-6 not implemented. Clearly identify which sources of runoff pollutants are discussed. Justification must be provided for <u>all</u> "No" answers shown above. Click or tap here to enter text.



Site Design BMP Checklist for All Development Projects Site Design BMPs		Form I-5	5
All development projects must implement site design BMPs SD-1 throu feasible. See Chapter 4 and Appendix E of the BMP Design Manual (Par for information to implement site design BMPs shown in this checklist.	t 1 of Stor		
<ul> <li>Answer each category below pursuant to the following.</li> <li>"Yes" means the project will implement the site design BMP as a Appendix E of the BMP Design Manual. Discussion / justificat</li> <li>"No" means the BMP is applicable to the project but it is not feas / justification must be provided.</li> <li>"N/A" means the BMP is not applicable at the project site becau the feature that is addressed by the BMP (e.g., the project site h conserve). Discussion / justification may be provided.</li> </ul>	ion is not sible to imp se the proj	required. plement. D ect does no	Discussion ot include
A site map with implemented site design BMPs must be included at the	end of th		
Site Design Requirement	-	Applied?	_
SD-1 Maintain Natural Draiange Pathways and Hydrologic Features	<b>O</b> Yes	ONo	⊙N/A
Existing site drainage sheet flows to 5th Ave 1- Are existing natural drainage pathways and hydrologic features 1 mapped on the site map?	OYes	ONO	⊙ N/A
	• Yes	ONo	O <sub>N/A</sub>
1- Are street trees implemented? If yes, are they shown on the site map?			'
<ul> <li>2 site map?</li> <li>1- Implemented street trees meet the design criteria in SD-1 Fact</li> </ul>	OYes	ONO	⊙ N/A
2 site map?	O Yes O Yes	O <sub>No</sub> ⊙ <sub>No</sub>	



Discussion / justification if SD-2 not implemented: Existing project does not contain pervious area



Form I-5 Page 2 of 4			
Site Design Requirement		Applied?	
SD-3 Minimize Impervious Area	• Yes	ONo	O <sub>N/A</sub>
Discussion / justification if SD-3 not implemented: The existing site has 99% of impervious area. The proposed develop area by 14%.	ment will d	lecrease in	npervious
SD-4 Minimize Soil Compaction	OYes	⊙ No	O <sub>N</sub> /A
Discussion / justification if SD-4 not implemented: Click or tap here to enter text.			
SD-5 Impervious Area Dispersion	OYes	ONo	⊙N/A
Discussion / justification if SD-5 not implemented: Click or tap here to enter text.			
5- Is the pervious area receiving runon from impervious area 1 identified on the site map?	OYes	⊙ No	
<ul> <li>5- Does the pervious area satisfy the design criteria in SD-5 Fact</li> <li>2 Sheet in Appendix E (e.g. maximum slope, minimum length, etc.)</li> </ul>	OYes	⊙ <sub>No</sub>	



5-	Is impervious area dispersion credit volume calculated using	OVer	• No	
3	Appendix B.2.1.1 and SD-5 Fact Sheet in Appendix E?	• 105	• 10	



Form I-5 Page 3 of 4			
Site Design Requirement	Applied?		
SD-6 Runoff Collection	OYes	ONo	⊙N/A
Discussion / justification if SD-6 not implemented: The majority impervious area of the site is roof only. The rain wate spouts to podium planter box. No other runoff will be on the prope	0	0	
6a-1 Are green roofs implemented in accordance with design criteria in SD-6A Fact Sheet? If yes, are they shown on the site map?	OYes	⊙ No	O <sub>N/A</sub>
6a-2 Is green roof credit volume calculated using Appendix B.2.1.2 and SD-6A Fact Sheet in Appendix E?	OYes	⊙ No	O <sub>N/A</sub>
6b- Are permeable pavements implemented in accordance with 1 design criteria in SD-6B Fact Sheet? If yes, are they shown on the site map?	<b>O</b> Yes	ONO	⊙ N/A
6b- Is permeable pavement credit volume calculated using 2 Appendix B.2.1.3 and SD-6B Fact Sheet in Appendix E?	<b>O</b> Yes	ONo	⊙N/A
SD-7 Landscaping with Native or Drought Tolerant Species	• Yes	ONO	O <sub>N/A</sub>
Discussion / justification if SD-7 not implemented: Click or tap here to enter text.			
SD-8 Harvesting and Using Precipitation	OYes	⊙ No	O <sub>N/A</sub>
Discussion / justification if SD-8 not implemented: Click or tap here to enter text.			

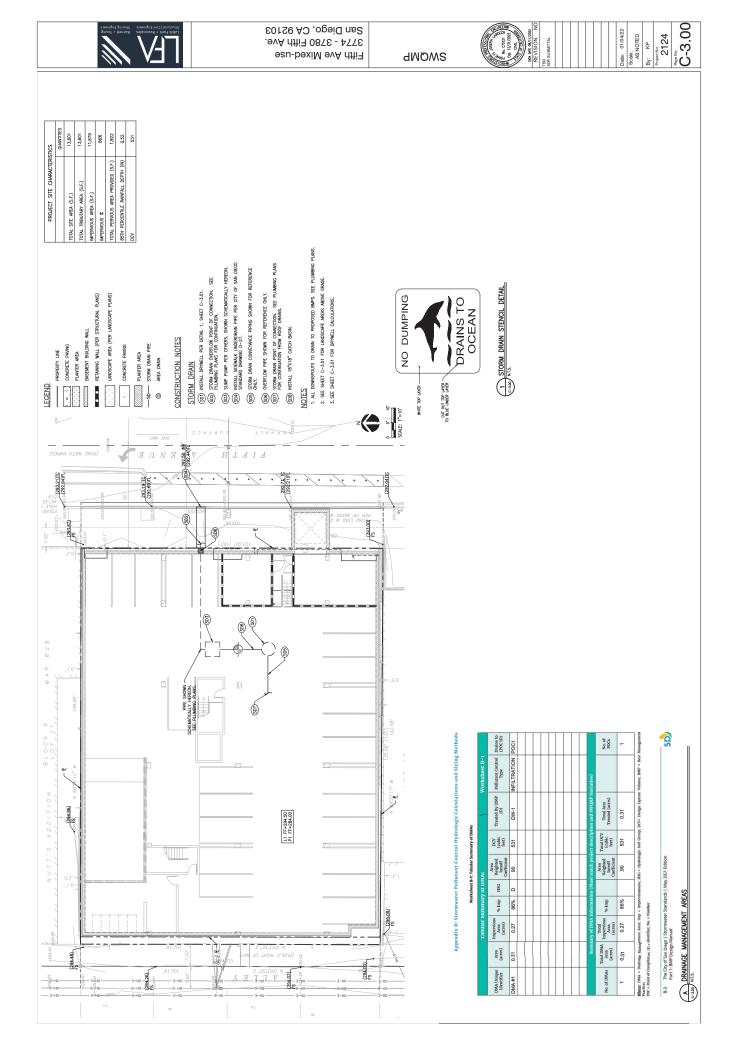


8- 1	Are rain barrels implemented in accordance with design criteria in SD-8 Fact Sheet? If yes, are they shown on the site map?	<b>O</b> Yes		⊙ N/A
8- 2	Is rain barrel credit volume calculated using Appendix B.2.2.2 and SD-8 Fact Sheet in Appendix E?	OYes	0 <sub>No</sub>	⊙ N/A



Form I-5 Page 4 of 4	
Insert Site Map with all site design BMPs identified:	
Insert Site Map Here.	





### Summary of PDP Structural BMPs Form I-6 PDP Structural BMPs

All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the BMP Design Manual, Part 1 of Storm Water Standards). Selection of PDP structural BMPs for storm water pollutant control must be based on the selection process described in Chapter 5. PDPs subject to hydromodification management requirements must also implement structural BMPs for flow control for hydromodification management (see Chapter 6 of the BMP Design Manual). Both storm water pollutant control and flow control for hydromodification management can be achieved within the same structural BMP(s).

PDP structural BMPs must be verified by the City at the completion of construction. This includes requiring the project owner or project owner's representative to certify construction of the structural BMPs (complete Form DS-563). PDP structural BMPs must be maintained into perpetuity (see Chapter 7 of the BMP Design Manual).

Use this form to provide narrative description of the general strategy for structural BMP implementation at the project site in the box below. Then complete the PDP structural BMP summary information sheet (page 3 of this form) for each structural BMP within the project (copy the BMP summary information page as many times as needed to provide summary information for each individual structural BMP).



Describe the general strategy for structural BMP implementation at the site. This information must describe how the steps for selecting and designing storm water pollutant control BMPs presented in Section 5.1 of the BMP Design Manual were followed, and the results (type of BMPs selected). For projects requiring hydromodification flow control BMPs, indicate whether pollutant control and flow control BMPs are integrated or separate.

Infiltration has been selected for the site based on on-site percolation testing.

(Continue on page 2 as necessary.)



Form	I_6	Page	2	ofX
1 OIIII	1-0	I age		$OI \Sigma$

(Page reserved for continuation of description of general strategy for structural BMP implementation at the site)

(Continued from page 1)

Storm water will be collected from the roof and conveyed to a drywell in the basement for groundwater recharge. Large storm events will be conveyed to the overflow pump and discharged to 5th Ave. Stormwater will eventually be collected in a catch basin at 5th Ave and Brooks Ave before eventually being discharged to San Diego Bay.



Form I-6 Page 3 of X (Copy as many as needed)				
Structural BMP Summary Information				
Structural BMP ID No. 1				
Construction Plan Sheet No. C3.00 & C3.01				
Type of structural BMP:				
O Retention by harvest and use (HU-1)				
• Retention by infiltration basin (INF-1)				
O Retention by bioretention (INF-2)				
O Retention by permeable pavement (INF-3)				
O Partial retention by biofiltration with partial retentio	n (PR-1)			
O Biofiltration (BF-1)				
• Flow-thru treatment control with prior lawful appr (BMP type/description in discussion section below	oval to meet earlier PDP requirements (provide			
Flow-thru treatment control included as pre-treatm				
O Flow-thru treatment control with alternative compl	iance (provide BMP type/description in discussion			
O Detention pond or vault for hydromodification ma	inagement			
• Other (describe in discussion section below)				
Purpose:				
• Pollutant control only				
O Hydromodification control only				
O Combined pollutant control and hydromodification	n control			
O Pre-treatment/forebay for another structural BMP				
• Other (describe in discussion section below)				
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification form DS-563	Frank LaRocca, PE 213-379-9700			
Who will be the final owner of this BMP?	Property Owner			
Who will maintain this BMP into perpetuity?	Property Owner			
What is the funding mechanism for maintenance?	Property Mainetenance Expenses			



Form I-6 Page 4 of X (Copy as many as needed)		
Structural BMP ID No. Click or tap here to enter text.		
Construction Plan Sheet No. Click or tap here to enter text.		
Discussion (as needed):		
Click or tap here to enter text.		





City of San Diego Development Services 1222 First Ave., MD-302 San Diego, CA 92101 (619) 446-5000

# Permenant BMP Construction

Self Certification Form

FORM DS-563 January 2016

Date Prepared: 05-11-2022	Project No.: Click here to enter text.
Project Applicant:	Phone:

Project Address: 3774 5th Ave.

Project Engineer: Frank LaRocca

Phone: 213-239-9700

The purpose of this form is to verify that the site improvements for the project, identified above, have been constructed in conformance with the approved Storm Water Quality Management Plan (SWQMP) documents and drawings.

This form must be completed by the engineer and submitted prior to final inspection of the construction permit. Completion and submittal of this form is required for all new development and redevelopment projects in order to comply with the City's Storm Water ordinances and NDPES Permit Order No. R9-2013-0001 as amended by R9-2015-0001 and R9-2015-0100. Final inspection for occupancy and/or release of grading or public improvement bonds may be delayed if this form is not submitted and approved by the City of San Diego.

### **CERTIFICATION:**

As the professional in responsible charge for the design of the above project, I certify that I have inspected all constructed Low Impact Development (LID) site design, source control and structural BMP's required per the approved SWQMP and Construction Permit No. Click here to enter text.; and that said BMP's have been constructed in compliance with the approved plans and all applicable specifications, permits, ordinances and Order No. R9-2013-0001 as amended by R9-2015-0001 and R9-2015-0100 of the San Diego Regional Water Quality Control Board.

I understand that this BMP certification statement does not constitute an operation and maintenance verification.

Signature:	
Date of Signature: _ Insert Date	
Printed Name: _Frank LaRocca_	
Title: _PE_	
Phone No213-239-9700_	Engineer's Stamp







# ATTACHMENT 1 BACKUP FOR PDP POLLUTANT CONTROL BMPS

This is the cover sheet for Attachment 1.

PDP SWQMP Template Date: January, 2016 PDP SWQMP Submittal Date: August 11, 2022





Indicate which Items are Included:

Attachment	Contents	Checklist
Sequence		Checklist
Attachment 1a	DMA Exhibit (Required) See DMA Exhibit Checklist.	✓ Included
Attachment 1b	Tabular Summary of DMAs Showing DMA ID matching DMA Exhibit, DMA Area, and DMA Type (Required)* *Provide table in this Attachment OR on DMA Exhibit in Attachment 1a	<ul> <li>Included on DMA Exhibit in Attachment 1a</li> <li>Included as Attachment 1b, separate from DMA Exhibit</li> </ul>
Attachment 1c	Form I-7, Harvest and Use Feasibility Screening Checklist (Required unless the entire project will use infiltration BMPs) Refer to Appendix B.3-1 of the BMP Design Manual to complete Form I- 7.	<ul> <li>O Included</li> <li>o Not included because the entire project will use infiltration BMPs</li> </ul>
Attachment 1d	Form I-8, Categorization of Infiltration Feasibility Condition (Required unless the project will use harvest and use BMPs)IncludedRefer to Appendices C and D of the BMP Design Manual to complete Form I-8.Not included because the will use harvest and use BMP	
Attachment 1e	Pollutant Control BMP Design Worksheets / Calculations (Required) Refer to Appendices B and E of the BMP Design Manual for structural pollutant control BMP design guidelines and site design credit calculations	✓ Included

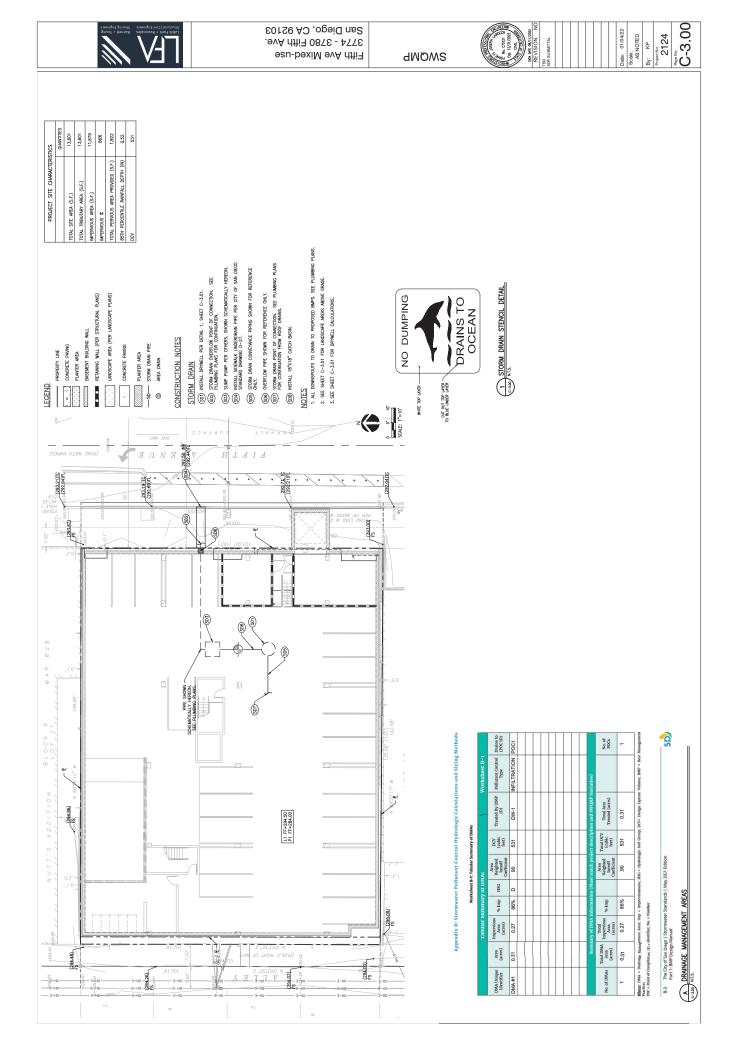


#### Use this checklist to ensure the required information has been included on the DMA Exhibit:

The DMA Exhibit must identify:

- □ Underlying hydrologic soil group
- $\hfill\square$  Approximate depth to groundwater
- □ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- $\hfill\square$  Critical coarse sediment yield areas to be protected
- $\hfill\square$  Existing topography and impervious areas
- □ Existing and proposed site drainage network and connections to drainage offsite
- $\Box$  Proposed grading
- □ Proposed impervious features
- □ Proposed design features and surface treatments used to minimize imperviousness
- □ Drainage management area (DMA) boundaries, DMA ID numbers, and DMA areas (square footage or acreage), and DMA type (i.e., drains to BMP, self-retaining, or self-mitigating)
- □ Potential pollutant source areas and corresponding required source controls (see Chapter 4, Appendix E.1, and Form I-3B)
- □ Structural BMPs (identify location, type of BMP, and size/detail)





# ATTACHMENT 2 BACKUP FOR PDP HYDROMODIFICATION CONTROL MEASURES

This is the cover sheet for Attachment 2.

 $\checkmark$  Mark this box if this attachment is empty because the project is exempt from PDP hydromodification management requirements.





Indicate which Items are Included:

Attachment		
Sequence	Contents	Checklist
Attachment 2a	Hydromodification Management Exhibit (Required)	□ Included See Hydromodification Management Exhibit Checklist.
Attachment 2b	Management of Critical Coarse Sediment Yield Areas (WMAA Exhibit is required, additional analyses are optional) See Section 6.2 of the BMP Design Manual.	<ul> <li>Exhibit showing project drainage boundaries marked on WMAA Critical Coarse Sediment Yield Area Map (Required)</li> <li>Optional analyses for Critical Coarse Sediment Yield Area Determination</li> <li>6.2.1 Verification of Geomorphic Landscape Units Onsite</li> <li>6.2.2 Downstream Systems Sensitivity to Coarse Sediment</li> <li>6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite</li> </ul>
Attachment 2c	Geomorphic Assessment of Receiving Channels (Optional) See Section 6.3.4 of the BMP Design	<ul> <li>Not Performed</li> <li>Included</li> <li>Submitted as separate stand-alone</li> </ul>
	Manual.	document
Attachment 2d	Flow Control Facility Design and Structural BMP Drawdown Calculations (Required) Overflow Design Summary for each structural BMP See Chapter 6 and Appendix G of the	<ul> <li>O Included</li> <li>Submitted as separate stand-alone document</li> </ul>
	BMP Design Manual	
Attachment 2e	Vector Control Plan (Required when structural BMPs will not drain in 96 hours)	<ul> <li>Included</li> <li>Not required because BMPs will drain in less than 96 hours</li> </ul>



### Use this checklist to ensure the required information has been included on the Hydromodification Management Exhibit:

The Hydromodification Management Exhibit must identify:

- □ Underlying hydrologic soil group
- $\Box$  Approximate depth to groundwater
- □ Existing natural hydrologic features (watercourses, seeps, springs, wetlands)
- $\Box$  Critical coarse sediment yield areas to be protected
- □ Existing topography
- $\Box$  Existing and proposed site drainage network and connections to drainage offsite
- $\Box$  Proposed grading
- $\Box$  Proposed impervious features
- $\Box$  Proposed design features and surface treatments used to minimize imperviousness
- □ Point(s) of Compliance (POC) for Hydromodification Management
- □ Existing and proposed drainage boundary and drainage area to each POC (when necessary, create separate exhibits for pre-development and post-project conditions)
- □ Structural BMPs for hydromodification management (identify location, type of BMP, and size/detail)



# ATTACHMENT 3 STRUCTURAL BMP MAINTENANCE INFORMATION

This is the cover sheet for Attachment 3.

PDP SWQMP Template Date: January, 2016 PDP SWQMP Submittal Date: August 11, 2022





Appendix B: Stormwater Pollutant Control Hydrologic Calculations and Sizing Methods

		Tabular Su		mmary of DMAs	IAS			Worksheet B-1	
DMA Unique Identifier	Area (acres)	Impervious Area (acres)	% Imp	HSG	Area Weighted Runoff Coefficient	DCV (cubic feet)	Treated By (BMP ID)	Pollutant Control Type	Drains to (POC ID)
	Sumn	ary of DMA	Informati	on (Mus	st match proj	iect descrip	Summary of DMA Information (Must match project description and SWQMP Narrative)	arrative)	
No. of DMAs	Total DMA Area (acres)	Total Impervious Area (acres)	% Imp		Area Weighted Runoff Coefficient	Total DCV (cubic feet)	Total Area Treated (acres)		No. of POCs
Where: DMA = D	rainage Manag	ement Area. Im	n – Imnerv	· ssensioi	HSC - Hudrolog	min Soil Groun	· DCV- Design Capture	Wheve: DMA - Drainage Management Area: Imn - Imnerriousness: HSG - Hudrologic Soil Groun: DCV- Design Canture Volume: BMD - Best Management	Management

Worksheet B-1: Tabular Summary of DMAs

Where: DMA = Drainage Management Area; Imp = Imperviousness; HSG = Hydrologic Soil Group; DCV= Design Capture Volume; BMP = Best Management Practice; POC = Point of Compliance; ID = identifier; No. = Number



Categori	Categorization of Infiltration Feasibility Condition based on Geotechnical Conditions <sup>1</sup> Worksheet C.4-1: Form I-8A <sup>2</sup>				
	Part 1 - Full Infiltration Feasibility Screen	ing Criteria			
DMA(s) Be	eing Analyzed:	Project Phase:			
DMA #1		PERMIT			
Criteria 1:	Infiltration Rate Screening				
	Is the mapped hydrologic soil group according to the NR Web Mapper Type A or B and corroborated by available s				
	• Yes; the DMA may feasibly support full infiltration. Answer "Yes" to Criteria 1 Result or continue to Step 1B if the applicant elects to perform infiltration testing.				
1A	○ No; the mapped soil types are A or B but is not corrot (continue to Step 1B).	orated by available site soil data			
	• No; the mapped soil types are C, D, or "urban/unclassified" and is corroborated by available site soil data. Answer "No" to Criteria 1 Result.				
	ONo; the mapped soil types are C, D, or "urban/unclass available site soil data (continue to Step 1B).	sified" but is not corroborated by			
	Is the reliable infiltration rate calculated using planning ②Yes; Continue to Step 1C.	phase methods from Table D.3-1?			
1B	O No; Skip to Step 1D.				
	Is the reliable infiltration rate calculated using planning phase methods from Table D.3-1 greater than 0.5 inches per hour?				
1C	• Yes; the DMA may feasibly support full infiltration. Answer "Yes" to Criteria 1 Result.				
	♥ No; full infiltration is not required. Answer "No" to Criteria 1 Result.				
	<b>Infiltration Testing Method.</b> Is the selected infiltration testing method suitable during the design phase (see Appendix D.3)? Note: Alternative testing standards may be allowed with				
1D	appropriate rationales and documentation. • Yes; continue to Step 1E.				
	O No; select an appropriate infiltration testing method.				



<sup>&</sup>lt;sup>1</sup> Note that it is not required to investigate each and every criterion in the worksheet, a single "no" answer in Part 1, Part 2, Part 3, or Part 4 determines a full, partial, or no infiltration condition.

<sup>&</sup>lt;sup>2</sup> This form must be completed each time there is a change to the site layout that would affect the infiltration feasibility condition. Previously completed forms shall be retained to document the evolution of the site storm water design.

<sup>&</sup>lt;sup>3</sup> Available data includes site-specific sampling or observation of soil types or texture classes, such as obtained from borings or test pits necessary to support other design elements.

Categor	Categorization of Infiltration Feasibility Condition based on Geotechnical Conditions Worksheet C.4-1: Form I-8A <sup>2</sup>				
1E	1ENumber of Percolation/Infiltration Tests. Does the infiltration testing method performed satisfy the minimum number of tests specified in Table D.3-2?① Yes; continue to Step 1F. ① No; conduct appropriate number of tests.				
IF	<ul> <li>Factor of Safety. Is the suitable Factor of Safety selected guidance in D.5; Tables D.5-1 and D.5-2; and Worksheet</li> <li>⊙ Yes; continue to Step 1G.</li> <li>○ No; select appropriate factor of safety.</li> </ul>				
1G	<ul> <li>Full Infiltration Feasibility. Is the average measured infi Safety greater than 0.5 inches per hour?</li> <li>Yes; answer "Yes" to Criteria 1 Result.</li> <li>No; answer "No" to Criteria 1 Result.</li> </ul>	iltration rate divided by the Factor of			
Criteria 1 Result	Is the estimated reliable infiltration rate greater than 0.5 where runoff can reasonably be routed to a BMP? • Yes; the DMA may feasibly support full infiltration. Co • No; full infiltration is not required. Skip to Part 1 Resu	ontinue to Criteria 2.			
estimates included in	e infiltration testing methods, testing locations, replicates of reliable infiltration rates according to procedures outlin n project geotechnical report. hed soils report for infiltration calcs. Rate is 1.14 in/	ed in D.5. Documentation should be			



Categorization of Infiltration Feasibility Condition based
on Geotechnical Conditions

Criteria 2	Criteria 2: Geologic/Geotechnical Screening			
2A	If all questions in Step 2A are answered "Yes," continue to Step 2B. For any "No" answer in Step 2A answer "No" to Criteria 2, and su Feasibility Condition Letter" that meets the requirements in A geologic/geotechnical analyses listed in Appendix C.2.1 do not apply to of the following setbacks cannot be avoided and therefore result in no infiltration condition. The setbacks must be the closest horizontal the surface edge (at the overflow elevation) of the BMP.	Appendix C the DMA be the DMA b	C.1.1. The cause one eing in a	
2A-1	Can the proposed full infiltration BMP(s) avoid areas with existing fill materials greater than 5 feet thick below the infiltrating surface?	⊙ Yes	() No	
2A-2	Can the proposed full infiltration BMP(s) avoid placement within 10 feet of existing underground utilities, structures, or retaining walls?	⊙ Yes	<b>O</b> No	
2A-3	Can the proposed full infiltration BMP(s) avoid placement within 50 feet of a natural slope (>25%) or within a distance of 1.5H from fill slopes where H is the height of the fill slope?	⊙Yes	<b>O</b> No	
2B	When full infiltration is determined to be feasible, a geotechnical investi must be prepared that considers the relevant factors identified in Append If all questions in Step 2B are answered "Yes," then answer "Yes" to Cri If there are "No" answers continue to Step 2C.	dix C.2.1.		
2B-1	<b>Hydroconsolidation.</b> Analyze hydroconsolidation potential per approved ASTM standard due to a proposed full infiltration BMP. Can full infiltration BMPs be proposed within the DMA without increasing hydroconsolidation risks?		O No	
2B-2	<b>Expansive Soils.</b> Identify expansive soils (soils with an expansion index greater than 20) and the extent of such soils due to proposed full infiltration BMPs. Can full infiltration BMPs be proposed within the DMA without increasing expansive soil risks?	⊙ Yes	() No	



Categor	ization of Infiltration Feasibility Condition based on Geotechnical Conditions	Worksheet	C.4-1: Form I-8A <sup>2</sup>	
2B-3	<b>Liquefaction</b> . If applicable, identify mapped liquef Evaluate liquefaction hazards in accordance with Sectio City of San Diego's Guidelines for Geotechnical Reports recent edition). Liquefaction hazard assessment sh account any increase in groundwater elevation or mounding that could occur as a result of proposed is percolation facilities. Can full infiltration BMPs be proposed within the increasing liquefaction risks?	n 6.4.2 of the (2011 or most all take into groundwater infiltration or	⊙Yes	O No
2B-4	<b>Slope Stability</b> . If applicable, perform a slope stabilit accordance with the ASCE and Southern California Earth (2002) Recommended Procedures for Implementation of Publication 117, Guidelines for Analyzing and Mitigat Hazards in California to determine minimum slope set infiltration BMPs. See the City of San Diego's G Geotechnical Reports (2011) to determine which type of analysis is required. Can full infiltration BMPs be proposed within the increasing slope stability risks?	nquake Center f DMG Special ing Landslide backs for full uidelines for slope stability	⊙Yes	O No
2B-5	<b>Other Geotechnical Hazards.</b> Identify site-specific hazards not already mentioned (refer to Appendix C.2.1). Can full infiltration BMPs be proposed within the increasing risk of geologic or geotechnical hazards mentioned?	DMA without	⊙Yes	() No
2B-6	Setbacks. Establish setbacks from underground utilitie and/or retaining walls. Reference applicable ASTM or oth standard in the geotechnical report. Can full infiltration BMPs be proposed within the established setbacks from underground utilities, struc- retaining walls?	er recognized DMA using	⊙Yes	() No

Categori	zation of Infiltration Feasibility Condition based on Geotechnical Conditions	Worksheet	C.4–1: Forn	n I-8A <sup>2</sup>
2C	<b>Mitigation Measures.</b> Propose mitigation measures geologic/geotechnical hazard identified in Step 2 discussion of geologic/geotechnical hazards that would infiltration BMPs that cannot be reasonably mitigeotechnical report. See Appendix C.2.1.8 for typically reasonable and typically unreasonable mitigation Can mitigation measures be proposed to allow for full in BMPs? If the question in Step 2 is answered "Yes," then to Criteria 2 Result. If the question in Step 2C is answered "No," then answere Criteria 2 Result.	<ul> <li>B. Provide a</li> <li>d prevent full</li> <li>gated in the</li> <li>a list of</li> <li>on measures.</li> <li>filtration</li> <li>answer "Yes"</li> </ul>	• Yes	ONo
Criteria 2 Result	Can infiltration greater than 0.5 inches per hour be al increasing risk of geologic or geotechnical hazards t reasonably mitigated to an acceptable level?		⊙Yes	() No
	ult – Full Infiltration Geotechnical Screening <sup>4</sup>		Result	
infiltration conditions If either ar	s to both Criteria 1 and Criteria 2 are "Yes", a full a design is potentially feasible based on Geotechnical only. Inswer to Criteria 1 or Criteria 2 is "No", a full infiltration ot required.	⊙ Full infiltrat		n

<sup>&</sup>lt;sup>4</sup> To be completed using gathered site information and best professional judgement considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by City Engineer to substantiate findings.



Factor CategoryFactor DescriptionAssigned Weight (w)Factor Value (v)Product (r p = w x v)ASuitabilitySoil assessment methods0.2510.25Predominant soil texture0.2520.50Site soil variability0.2520.50Depth to groundwater / impervious layer0.2510.25Suitability Assessment Safety Factor, S_A = $\Sigma p$ 1.50.50Suitability Assessment Safety Factor, S_A = $\Sigma p$ 1.50.50BDesignRedundancy/resiliency0.2510.25Compaction during construction0.2510.25Design Safety Factor, S <sub>total</sub> = S_A X S_B2.01.0Combined Safety Factor, S <sub>total</sub> = S_A X S_B2.01.14Corrected for test-specific bias) Note: This worksheet is only applicable when the observed infiltration rate is greater than or equal to 1 inch/hr., K_design = K_observed / Stotal Note: This worksheet is only applicable when the observed infiltration rate is greater than or equal to 1 inch/hr., K_design = K_observed / Stotal than or equal to 1 inch/hr.0.57Supporting DataSupporting DataStotal for test forms:0.57	Fac	tor of Safety ar	nd Design Infiltration Rate Work	sheet	Work	sheet D.5-:	1: Form I-9
ASuitability AssessmentPredominant soil texture0.2520.50Suitability Assessment0.2520.50Site soil variability0.2520.50Depth to groundwater / impervious layer0.2510.25Suitability Assessment Safety Factor, $S_A = \Sigma p$ 1.5Level of pretreatment/ expected sediment loads0.510.50Redundancy/resiliency0.2510.25Compaction during construction0.2510.25Design Safety Factor, $S_B = \Sigma p$ 1.00.251Combined Safety Factor, $S_{total} = S_A X S_B$ (Minimum of 2 and Maximum of 9]2.01.14Observed Infiltration Rate, inch/hr., K <sub>observed</sub> than or equal to 1 inch/hr.1.140.57Design Infiltration Rate, in/hr., K <sub>design</sub> = K <sub>observed</sub> / S <sub>total</sub> Note: This worksheet is only applicable when the observed infiltration rate is greater than or equal to 1 inch/hr.0.57Design Infiltration Rate, in/hr., K <sub>design</sub> = K <sub>observed</sub> / S <sub>total</sub> Note: If the estimated design infiltration rate is less than or equal to 0.5 inch/hr. then the applicant may choose to implement partial infiltration BMPs.0.57	Fact	or Category	Factor Description				$\begin{array}{c} Product (p) \\ p = w x v \end{array}$
ASuitability AssessmentSite soil variability0.2520.50Depth to groundwater / impervious layer0.2510.25Suitability Assessment Safety Factor, $S_A = \Sigma p$ 1.5Suitability Assessment Safety Factor, $S_A = \Sigma p$ 1.5BDesignLevel of pretreatment/ expected sediment loads0.510.50Redundancy/resiliency0.2510.25Compaction during construction Design Safety Factor, $S_B = \Sigma p$ 1.0Combined Safety Factor, $S_{total} = S_A X S_B$ (Minimum of 2 and Maximum of 9)2.0Observed Infiltration Rate, inch/hr., $K_{observed}$ (corrected for test-specific bias) Note: This worksheet is only applicable when the observed infiltration rate is greater than or equal to 1 inch/hr.1.14Design Infiltration Rate, in/hr., $K_{design} = K_{observed} / S_{total}$ 0.57Note: If the estimated design infiltration rate is less than or equal to 0.5 inch/hr. then he applicant may choose to implement partial infiltration BMPs.0.57			Soil assessment methods	0.25		1	0.25
AAssessmentDepth to groundwater / impervious layer0.2510.25Suitability Assessment Safety Factor, $S_A = \Sigma p$ 1.5BDesignLevel of pretreatment/ expected sediment loads0.510.50Redundancy/resiliency0.2510.25Compaction during construction0.2510.25Design Safety Factor, $S_B = \Sigma p$ 1.00.25Combined Safety Factor, $S_{total} = S_A x S_B$ (Minimum of 2 and Maximum of 9)2.0Observed Infiltration Rate, inch/hr., $K_{observed}$ (corrected for test-specific bias) Note: This worksheet is only applicable when the observed infiltration rate is greater than or equal to 1 inch/hr.1.14Design Infiltration Rate, in/hr., $K_{design} = K_{observed} / S_{total}$ 0.57Note: If the estimated design infiltration rate is less than or equal to 0.5 inch/hr. then the applicant may choose to implement partial infiltration BMPs.0.57			Predominant soil texture	0.25		2	0.50
Depth to groundwater / impervious layer0.2510.25Suitability Assessment Safety Factor, $S_A = \Sigma p$ 1.5Suitability Assessment Safety Factor, $S_A = \Sigma p$ 1.5BLevel of pretreatment/ expected sediment loads0.510.50Redundancy/resiliency0.2510.25Compaction during construction Design Safety Factor, $S_B = \Sigma p$ 0.2510.25Combined Safety Factor, $S_{total} = S_A x S_B$ (Minimum of 2 and Maximum of 9]2.01.14Observed Infiltration Rate, inch/hr., $K_{observed}$ (corrected for test-specific bias) Note: This worksheet is only applicable when the observed infiltration rate is greater than or equal to 1 inch/hr.1.14Design Infiltration Rate, in/hr., $K_{design} = K_{observed} / S_{total}$ Note: If the estimated design infiltration rate is less than or equal to 0.5 inch/hr. then the applicant may choose to implement partial infiltration BMPs.0.57	А		Site soil variability	0.25		2	0.50
BDesignLevel of pretreatment/ expected sediment loads0.510.50Redundancy/resiliency0.2510.25Compaction during construction0.2510.25Design Safety Factor, S <sub>B</sub> = $\Sigma$ p1.00.25Combined Safety Factor, S <sub>total</sub> = S <sub>A</sub> x S <sub>B</sub> [Minimum of 2 and Maximum of 9]2.0Observed Infiltration Rate, inch/hr., K <sub>observed</sub> (corrected for test - specific bias) Note: This worksheet is only applicable when the observed infiltration rate is greater than or equal to 1 inch/hr.1.14Design Infiltration Rate, in/hr., K <sub>design</sub> = K <sub>observed</sub> / S <sub>total</sub> Note: If the estimated design infiltration rate is less than or equal to 0.5 inch/hr. then the applicant may choose to implement partial infiltration BMPs.0.57		Assessment		0.25		1	0.25
BDesignsediment loads0.510.50Redundancy/resiliency0.2510.25Compaction during construction0.2510.25Design Safety Factor, S (Minimum of 2 and Maximum of 9)1.00.251Observed Infiltration Rate, inch/hr., K observed Infiltration Rate, inch/hr., K observed Infiltration rate is greater1.14Design Infiltration Rate, in/hr., K design infiltration rate is less than or equal to 1 inch/hr.0.57Design Infiltration Rate, in/hr., K design infiltration rate is less than or equal to 0.5 inch/hr. then the applicant may choose to implement partial infiltration BMPs.0.57Supporting DataSupporting Data0.57			Suitability Assessment Safety Facto	or, $S_A = \Sigma$	Cp.		1.5
DesignCompaction during construction0.2510.25Design Safety Factor, $S_B = \Sigma p$ 1.0Combined Safety Factor, $S_{total} = S_A x S_B$ [Minimum of 2 and Maximum of 9]2.0Observed Infiltration Rate, inch/hr., $K_{observed}$ (corrected for test-specific bias) Note: This worksheet is only applicable when the observed infiltration rate is greater than or equal to 1 inch/hr.1.14Design Infiltration Rate, in/hr., $K_{design} = K_{observed} / S_{total}$ Note: If the estimated design infiltration rate is less than or equal to 0.5 inch/hr. then the applicant may choose to implement partial infiltration BMPs.0.57Supporting DataSupporting Data				0.5		1	0.50
Design Safety Factor, $S_B = \Sigma p$ 1.0Combined Safety Factor, $S_{total} = S_A x S_B$ [Minimum of 2 and Maximum of 9]2.0Observed Infiltration Rate, inch/hr., $K_{observed}$ (corrected for test-specific bias) Note: This worksheet is only applicable when the observed infiltration rate is greater than or equal to 1 inch/hr.1.14Design Infiltration Rate, in/hr., $K_{design} = K_{observed} / S_{total}$ Note: If the estimated design infiltration rate is less than or equal to 0.5 inch/hr. then the applicant may choose to implement partial infiltration BMPs.0.57Supporting DataSupporting Data	В	Design	Redundancy/resiliency	0.25		1	0.25
Combined Safety Factor, S <sub>total</sub> = S <sub>A</sub> x S <sub>B</sub> 2.0         [Minimum of 2 and Maximum of 9]       2.0         Observed Infiltration Rate, inch/hr., K <sub>observed</sub> 1.14         (corrected for test-specific bias)       1.14         Note: This worksheet is only applicable when the observed infiltration rate is greater       1.14         Design Infiltration Rate, in/hr., K <sub>design</sub> = K <sub>observed</sub> / S <sub>total</sub> 0.57         Note: If the estimated design infiltration rate is less than or equal to 0.5 inch/hr. then       0.57         Supporting Data       3.11			Compaction during construction	0.25		1	0.25
[Minimum of 2 and Maximum of 9]       2.0         Observed Infiltration Rate, inch/hr., K <sub>observed</sub> (corrected for test-specific bias)       1.14         Note: This worksheet is only applicable when the observed infiltration rate is greater than or equal to 1 inch/hr.       1.14         Design Infiltration Rate, in/hr., K <sub>design</sub> = K <sub>observed</sub> / S <sub>total</sub> 0.57         Note: If the estimated design infiltration rate is less than or equal to 0.5 inch/hr. then the applicant may choose to implement partial infiltration BMPs.       0.57			Design Safety Factor, $S_B = \Sigma p$				1.0
(corrected for test-specific bias)         Note: This worksheet is only applicable when the observed infiltration rate is greater         than or equal to 1 inch/hr.         Design Infiltration Rate, in/hr., K <sub>design</sub> = K <sub>observed</sub> / S <sub>total</sub> Note: If the estimated design infiltration rate is less than or equal to 0.5 inch/hr. then         the applicant may choose to implement partial infiltration BMPs.         Supporting Data	Com [Min	bined Safety Fact imum of 2 and Max	tor, $S_{total} = S_A x S_B$ kimum of 9]			2.0	
Note: If the estimated design infiltration rate is less than or equal to 0.5 inch/hr. then the applicant may choose to implement partial infiltration BMPs. Supporting Data	(cori Note:	rected for test-sp This worksheet is	ecific bias) only applicable when the observed infiltr	ration rat	e is greater		
	Note	: If the estimated d	esign infiltration rate is less than or equa		nch/hr. the		
Briefly describe infiltration test and provide reference to test forms:	Supp	oorting Data					
	Brief	fly describe infilt	ration test and provide reference to t	test form	ıs:		

**Note**: Worksheet D.5–1: Form I–9 is only applicable to design BMPs in "full infiltration condition". This form is not applicable for categorization of infiltration feasibility (Worksheet C.4–1: Form I–8) and/or for designing BMPs in "partial infiltration condition" or "no infiltration condition".



# Appendix B: Stormwater Pollutant Control Hydrologic Calculations and Sizing Methods

	Sizing Method for Pollutant Removal Criteria	Worksh	eet B.5-1
1	Area draining to the BMP		sq. ft.
2	Adjusted runoff factor for drainage area (Refer to Appendix B.1 and B.2)		
3	85 <sup>th</sup> percentile 24-hour rainfall depth		inches
4	Design capture volume [Line 1 x Line 2 x (Line 3/12)]		cu. ft.
BM	P Parameters		
5	Surface ponding [6 inch minimum, 12 inch maximum]		inches
6	Media thickness [18 inches minimum], also add mulch layer and washed ASTM 33 fine aggregate sand thickness to this line for sizing calculations		inches
7	Aggregate storage (also add ASTM No 8 stone) above underdrain invert (12 inches typical) – use 0 inches if the aggregate is not over the entire bottom surface area		inches
8	Aggregate storage below underdrain invert (3 inches minimum) – use 0 inches if the aggregate is not over the entire bottom surface area		inches
9	Freely drained pore storage of the media	0.2	in/in
10	Porosity of aggregate storage Media filtration rate to be used for sizing (maximum filtration rate of 5	0.4	in/in
11	in/hr. with no outlet control; if the filtration rate is controlled by the outlet use the outlet controlled rate (includes infiltration into the soil and flow rate through the outlet structure) which will be less than 5 in/hr.)		in/hr.
Bas	eline Calculations		
12	Allowable routing time for sizing	6	hours
13	Depth filtered during storm [ Line 11 x Line 12]		inches
14	Depth of Detention Storage [Line 5 + (Line 6 x Line 9) + (Line 7 x Line 10) + (Line 8 x Line 10)]		inches
15	Total Depth Treated [Line 13 + Line 14]		inches
Opt	ion 1 – Biofilter 1.5 times the DCV		
16	Required biofiltered volume [1.5 x Line 4]		cu. ft.
17	Required Footprint [Line 16/ Line 15] x 12		sq. ft.
Opt	ion 2 - Store 0.75 of remaining DCV in pores and ponding		
18	Required Storage (surface + pores) Volume [0.75 x Line 4]		cu. ft.
19	Required Footprint [Line 18/ Line 14] x 12		sq. ft.
Foo	tprint of the BMP		
20	BMP Footprint Sizing Factor (Default 0.03 or an alternative minimum footprint sizing factor from Line 11 in Worksheet B.5-4)		
21	Minimum BMP Footprint [Line 1 x Line 2 x Line 20]		sq. ft.
22	Footprint of the BMP = Maximum (Minimum (Line 17, Line 19), Line 21)		sq. ft.
23	Provided BMP Footprint		sq. ft.
24	Is Line 23 ≥ Line 22? If Yes, then footprint criterion is met. If No, increase the footprint of the BMP.	□ Yes	□ No

# Worksheet B.5-1: Sizing Method for Pollutant Removal Criteria



Maxwell® IV Drainage System Calculations Prepared on May 06, 2022

Project: 3774 5th Avenue - San Diego, CA

Contact: Gabriela Torres at Labib Funk + Associates - El Segundo, CA



Given: Drywell to be located in subterranean parking 10' bgs, all depths are -10'

		10 000 000
Measured Infiltration Rate	<u>1.14</u> in/hr	
Safety Factor	2.00	
Design Infiltration Rate	<u>0.57</u> in/hr	
Mitigated Volume	<u>531</u> ft <sup>3</sup>	
Required Drawdown Time	<u>36</u> hours	
Min. Depth to Infiltration	<u>10</u> ft	
Groundwater Depth for Design	<u>90+</u> ft	100'-10'

#### Proposed:

Drywell Rock Shaft Diameter	<u>6</u> ft
Drywell Chamber Depth	<u>15</u> ft
Rock Porosity	<u>40</u> %
Depth to Infiltration	<u>11</u> ft
Drywell Bottom Depth	<u>37</u> ft

### Apply Safety Factor to get Design Rate.

 $1.14 \quad \frac{in}{hr} \div 2 = 0.57 \quad \frac{in}{hr}$ 

## Convert Design Rate from in/hr to ft/sec.

 $0.57 \quad \frac{in}{hr} \times \frac{1 ft}{12 in} \times \frac{1 hr}{3600 \text{ sec}} = 0.000013 \frac{ft}{\text{ sec}}$ 

A 6 foot diameter drywell provides 18.85 SF of infiltration area per foot of depth, plus 28.27 SF at the bottom.

For a 37 foot deep drywell, infiltration occurs between 11 feet and 37 feet below grade. This provides 26 feet of infiltration depth in addition to the bottom area. Infiltration area per drywell is calculated below.

26 ft x  $18.85 \frac{\text{ft}^2}{\text{ft}}$  +  $28.27 \text{ ft}^2$  =  $518 \text{ ft}^2$ 

Combine design rate with infiltration area to get flow (disposal) rate for each drywell.

 $0.000013 \frac{ft}{sec} \times 518 ft^2 = 0.00684 \frac{ft^3}{sec}$ 

### Volume of disposal for each drywell based on various time frames are included below.

36 hrs: 0.0068 CFS x 36 hours x  $\frac{\frac{3600 \, sec}{1 \, hr}}{\frac{3600 \, sec}{1 \, hr}}$  = 886 cubic feet of retained water disposed of. 22 hrs: 0.0068 CFS x 22 hours x  $\frac{\frac{3600 \, sec}{1 \, hr}}{\frac{3600 \, sec}{1 \, hr}}$  = 542 cubic feet of retained water disposed of.

Chamber diameter = 4 feet. Drywell rock shaft diameter = 6 feet. Volume provided in each drywell with chamber depth of 15 feet.  $15 \text{ ft} \times 12.57 \text{ ft}^2 + 22 \text{ ft} \times 28.27 \text{ ft}^2 \times 40\% = 437 \text{ ft}^3$ 

The MaxWell System is composed of 1 drywell(s).

Total volume provided =  $437 \text{ ft}^3$ Total 22 hour infiltration volume =  $542 \text{ ft}^3$ Total 36 hour infiltration volume =  $886 \text{ ft}^3$ Total infiltration flowrate =  $0.00684 \frac{\text{ft}^3}{\text{sec}}$ 

Based on the total mitigated volume of 531 CF, the actual drawdown time is only 22 hours. Using the Capture Efficiency Method for Volume-Based, Constant Drawdown BMPs, the DCV fraction , X1, is 0.76. Taking the DCV multiplied by 0.76 = 404 CF. The storage provided in the drywell is 437 CF therefore no additional storage is required.

For any questions, please contact Alex Bennett at 213-248-4167 or via email at Alex.Bennett@Oldcastle.com

Torrent Resources (CA) Incorporated 9950 Alder Avenue Bloomington, CA 92316 Phone 909-829-0740

3774 5th Avenue San Diego, CA

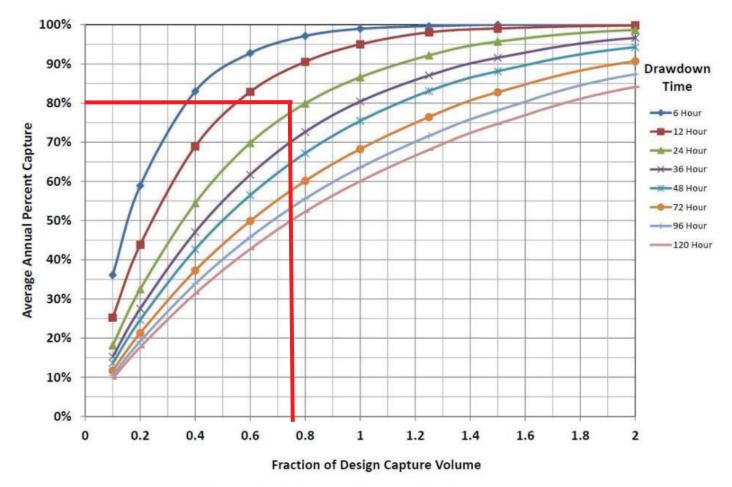


Figure B.4-1: Percent Capture Nomograph

6-HR	0.37	17-HR	0.65	28-HR	0.86	39-HR	1.01
7-HR	0.40	18-HR	0.67	29-HR	0.87	40- HR	1.03
8-HR	0.43	19-HR	0.69	30-HR	0.89	41-HR	1.04
9-HR	0.46	20-HR	0.71	31-HR	0.90	42-HR	1.06
10-HR	0.48	21.HP	0.74	32-HR	0.91	43-HR	1.07
11-HR	0.51	22-HR	0.76	33-HR	0.93	44-HR	1.08
12-HR	0.54	23-нк	0.70	34-HR	0.94	45-HR	1.10
13-HR	0.56	24-HR	0.8	35-HR	0.96	46- HR	1.11
14-HR	0.58	25-HR	0.81	36-HR	0.97	47-HR	1.13
15-HR	0.61	26-HR	0.83	37-HR	0.98	48- HR	1.14
16-HR	0.63	27-HR	0.84	38-HR	1.00		

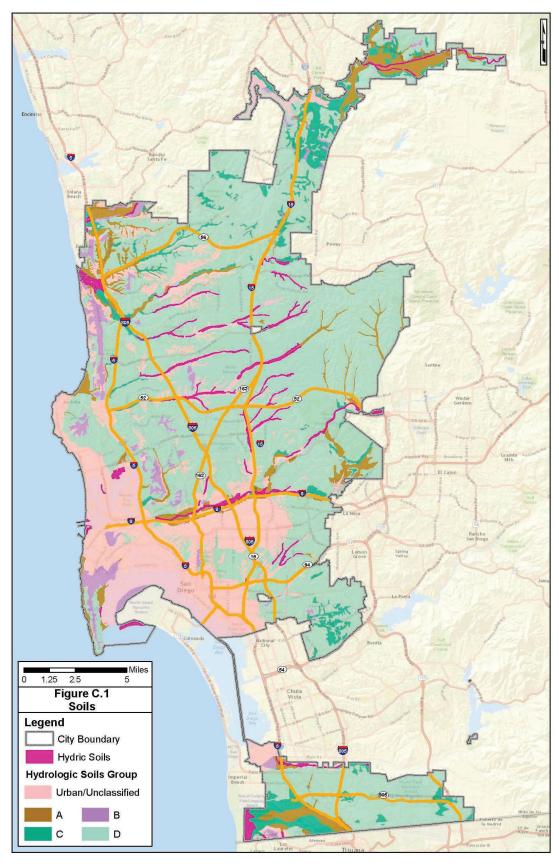


Figure C.4-1: Soils Exhibit



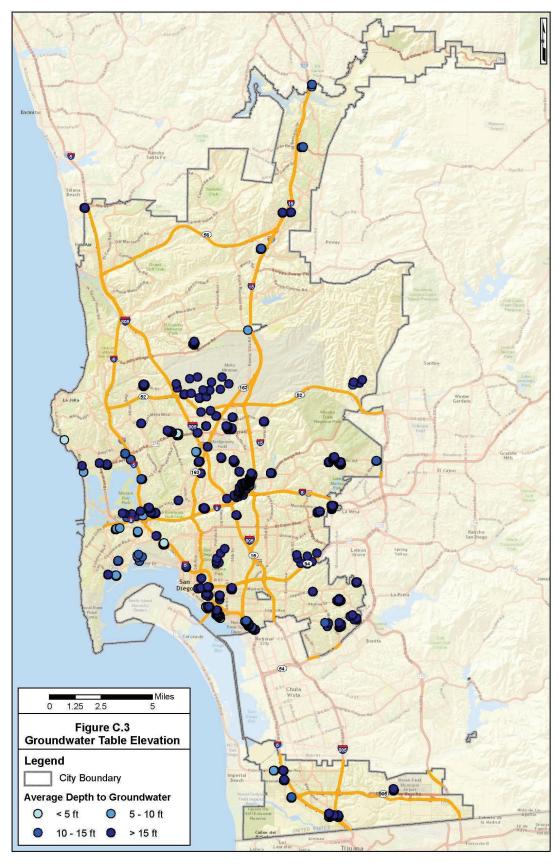
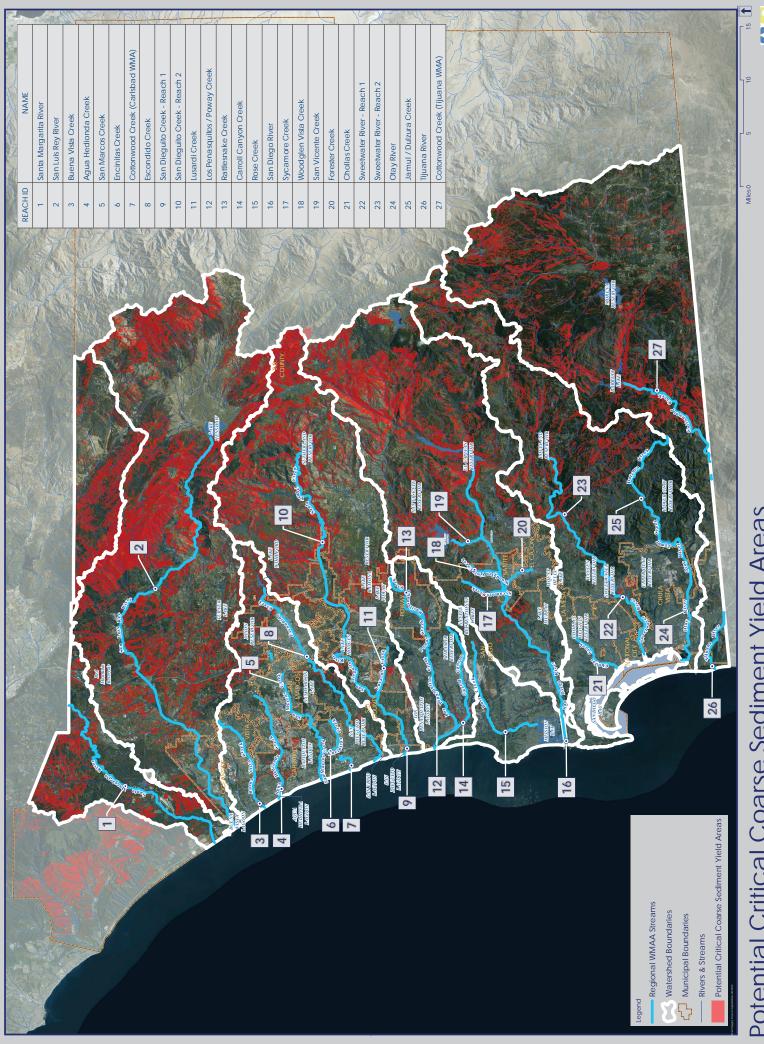


Figure C.4-3 : Groundwater Table Elevation Exhibit





# Potential Critical Coarse Sediment Yield Areas Regional San Diego County Watersheds



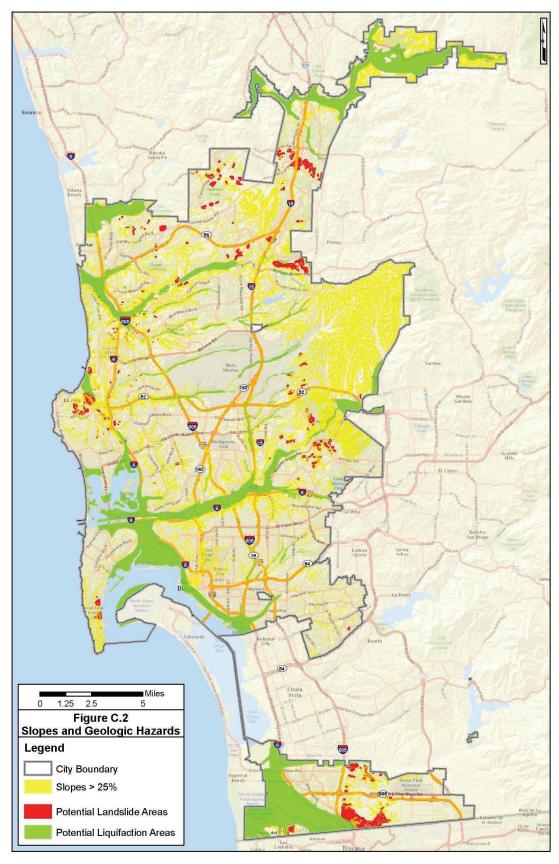


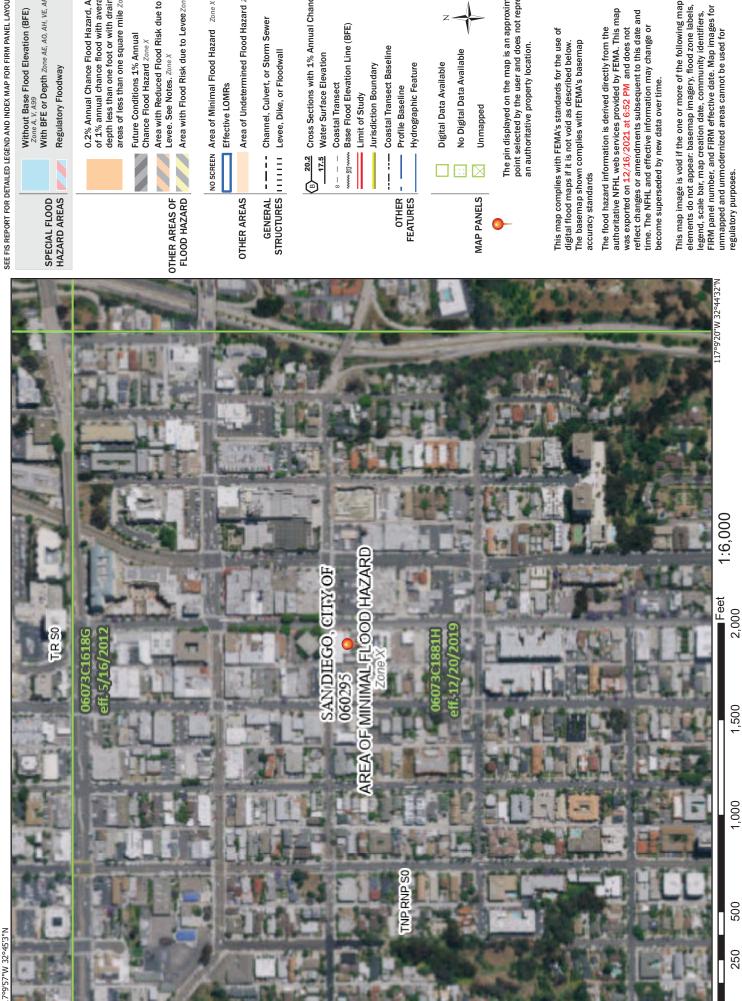
Figure C.4-2 : Slopes and Geologic Hazards Exhibit



# National Flood Hazard Layer FIRMette

S FEMA





#### point selected by the user and does not represent an authoritative property location. Area of Undetermined Flood Hazard Zone D 0.2% Annual Chance Flood Hazard, Areas depth less than one foot or with drainage The pin displayed on the map is an approximate areas of less than one square mile Zone X of 1% annual chance flood with average Area with Flood Risk due to Levee Zone D Cross Sections with 1% Annual Chance SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT With BFE or Depth Zone AE, AO, AH, VE, AR Area with Reduced Flood Risk due to NO SCREEN Area of Minimal Flood Hazard Zone X Without Base Flood Elevation (BFE) authoritative NFHL web services provided by FEMA. This map reflect changes or amendments subsequent to this date and Channel, Culvert, or Storm Sewer Base Flood Elevation Line (BFE) time. The NFHL and effective information may change or The flood hazard information is derived directly from the was exported on 12/16/2021 at 6:52 PM and does not This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. Future Conditions 1% Annual Chance Flood Hazard Zone X The basemap shown complies with FEMA's basemap Coastal Transect Baseline STRUCTURES IIIIII Levee, Dike, or Floodwall No Digital Data Available Water Surface Elevation Levee. See Notes. Zone X Digital Data Available Jurisdiction Boundary Hydrographic Feature **Regulatory Floodway** become superseded by new data over time. **Coastal Transect** Effective LOMRs Profile Baseline Limit of Study Unmapped (B) 20.2 mm 513 mm 17.5 accuracy standards HAZARD AREAS OTHER AREAS OF FLOOD HAZARD **OTHER AREAS** GENERAL MAP PANELS OTHER FEATURES SPECIAL FLOOD Legend

2,000 Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

1,000 500

# ATTACHMENT 3 STRUCTURAL BMP MAINTENANCE INFORMATION

This is the cover sheet for Attachment 3.

PDP SWQMP Template Date: January, 2016 PDP SWQMP Submittal Date: May 11, 2022



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# Indicate which Items are Included:

Attachment Sequence	Contents	Checklist
Attachment 3a	Structural BMP Maintenance Thresholds and Actions (Required)	□ Included See Structural BMP Maintenance Information Checklist.
Attachment 3b	Maintenance Agreement (Form DS- 3247) (when applicable)	<ul><li>Included</li><li>Not Applicable</li></ul>



# Use this checklist to ensure the required information has been included in the Structural BMP Maintenance Information Attachment:

# Preliminary Design / Planning / CEQA level submittal:

- Attachment 3a must identify:
  - × Typical maintenance indicators and actions for proposed structural BMP(s) based on Section 7.7 of the BMP Design Manual
- Attachment 3b is not required for preliminary design / planning / CEQA level submittal.

# Final Design level submittal:

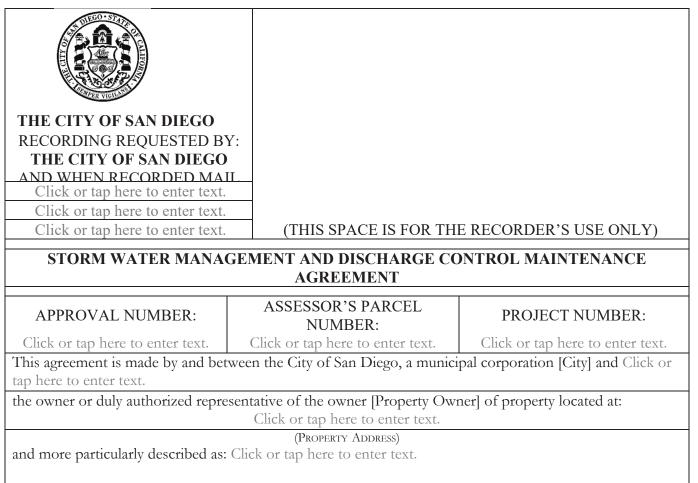
# Attachment 3a must identify:

- □ Specific maintenance indicators and actions for proposed structural BMP(s). This shall be based on Section 7.7 of the BMP Design Manual and enhanced to reflect actual proposed components of the structural BMP(s)
- $\Box$  How to access the structural BMP(s) to inspect and perform maintenance
- □ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
- □ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
- □ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
- $\hfill\square$  When applicable, frequency of bioretention soil media replacement
- □ Recommended equipment to perform maintenance
- □ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management

Attachment 3b: For private entity operation and maintenance, Attachment 3b must include a Storm Water Management and Discharge Control Maintenance Agreement (Form DS-3247). The following information must be included in the exhibits attached to the maintenance agreement:

- $\Box$  Vicinity map
- □ Site design BMPs for which DCV reduction is claimed for meeting the pollutant control obligations.
- $\Box$  BMP and HMP location and dimensions
- □ BMP and HMP specifications/cross section/model
- $\Box$  Maintenance recommendations and frequency
- $\Box$  LID features such as (permeable paver and LS location, dim, SF).





(LEGAL DESCRIPTION OF PROPERTY)

in the City of San Diego, County of San Diego, State of California.

Property Owner is required pursuant to the City of San Diego Municipal Code, Chapter 4, Article 3, Division 3, Chapter 14, Article 2, Division 2, and the Land Development Manual, Storm Water Standards to enter into a Storm Water Management and Discharge Control Maintenance Agreement [Maintenance Agreement] for the installation and maintenance of Permanent Storm Water Best Management Practices [Permanent Storm Water BMP's] prior to the issuance of construction permits. The Maintenance Agreement is intended to ensure the establishment and maintenance of Permanent Storm Water BMP's onsite, as described in the attached exhibit(s), the project's Storm Water Quality Management Plan [SWQMP] and Grading and/or Improvement Plan Drawing No(s), or Building Plan Project No(s): Click or tap here to enter text.

Improvement Plan Drawing No(s) or Building Plan Project No(s): Click or tap here to enter text.



**Continued on Page 2** 



# Page 2 of 2 City of San Diego • Development Services Department • Storm Water Requirements Applicability Checklist

NOW, THEREFORE, the parties agree as follows:

- 1. Property Owner shall have prepared, or if qualified, shall prepare an Operation and Maintenance Procedure [OMP] for Permanent Storm Water BMP's, satisfactory to the City, according to the attached exhibit(s), consistent with the Grading and/or Improvement Plan Drawing No(s), or Building Plan Project No(s):Click or tap here to enter text.
- 2. Property Owner shall install, maintain and repair or replace all Permanent Storm Water BMP's within their property, according to the OMP guidelines as described in the attached exhibit(s), the project's WQTR and Grading and/or Improvement Plan Drawing No(s), or Building Plan Project No(s)Click or tap here to enter text.
- 3. Property Owner shall maintain operation and maintenance records for at least five (5) years. These records shall be made available to the City for inspection upon request at any time.

This Maintenance Agreement shall commence upon execution of this document by all parties named hereon, and shall run with the land.

Executed by the City of San Diego and by Property Owner in San Diego, California.

	See Attached Exhibits(s):Click or tap here to enter text.
	THE CITY OF SAN DIEGO
(Owner Signature)	
Click or tap here to enter text.	APPROVED:
(Print Name and Title)	
Click or tap here to enter text.	(City Control engineer Signature
Company/Organization Name)	
Click or tap to enter a date.	(Print Name)
(Date)	
	(Date)

NOTE: ALL SIGNATURES MUST INCLUDE NOTARY ACKNOWLEDMENTS PER CIVIL CODE SEC. 1180 ET.SEQ



# ATTACHMENT 4 COPY OF PLAN SHEETS SHOWING PERMANENT STORM WATER BMPS

This is the cover sheet for Attachment 4.



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# Use this checklist to ensure the required information has been included on the plans:

The plans must identify:

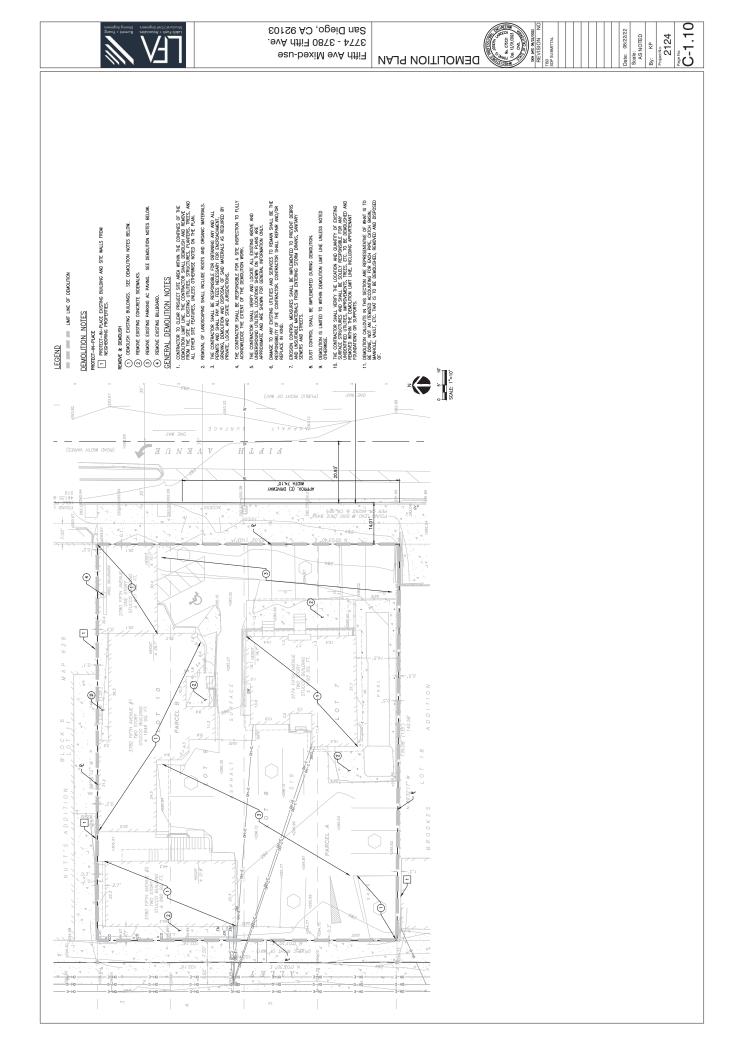
- □ Structural BMP(s) with ID numbers matching Form I-6 Summary of PDP Structural BMPs
- □ The grading and drainage design shown on the plans must be consistent with the delineation of DMAs shown on the DMA exhibit
- □ Details and specifications for construction of structural BMP(s)
- □ Signage indicating the location and boundary of structural BMP(s) as required by the City Engineer
- □ How to access the structural BMP(s) to inspect and perform maintenance
- □ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
- □ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
- □ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
- □ Recommended equipment to perform maintenance
- □ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management
- □ Include landscaping plan sheets showing vegetation requirements for vegetated structural BMP(s)
- $\Box$  All BMPs must be fully dimensioned on the plans
- □ When propritery BMPs are used, site specific cross section with outflow, inflow and model number shall be provided. Broucher photocopies are not allowed.

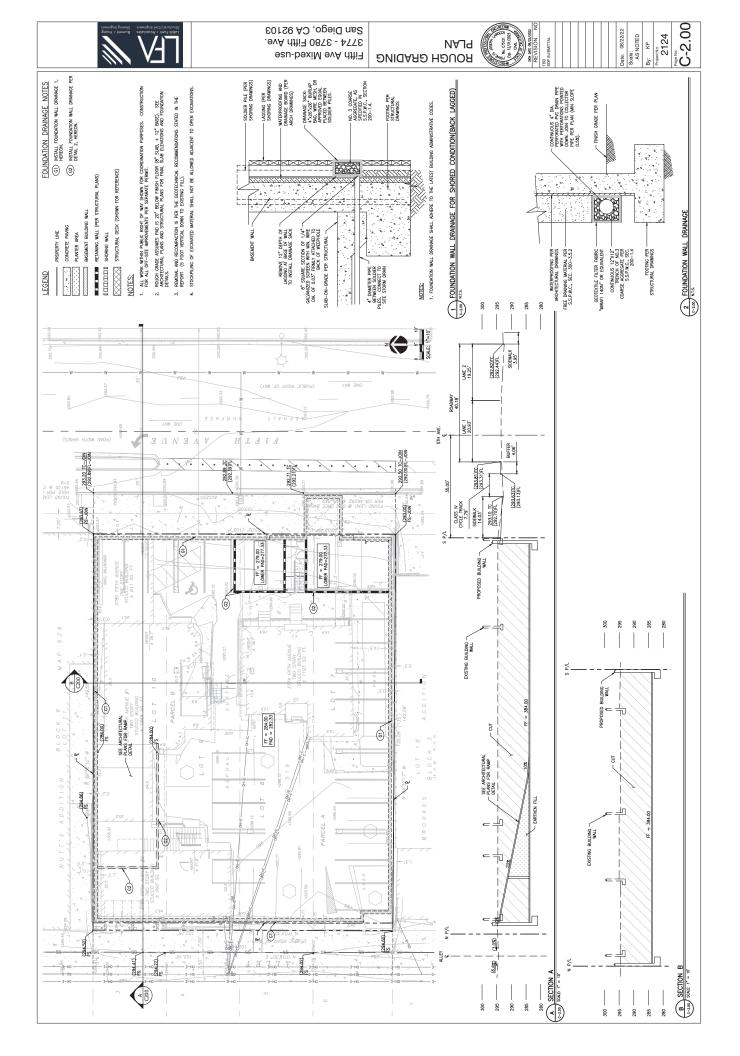


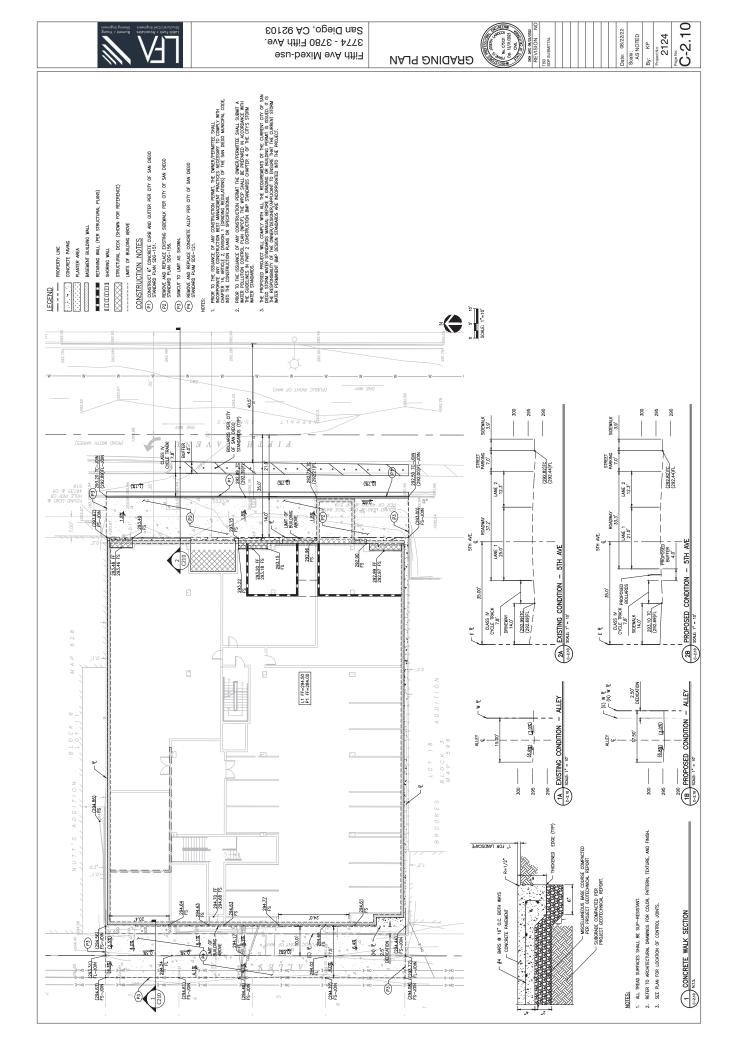
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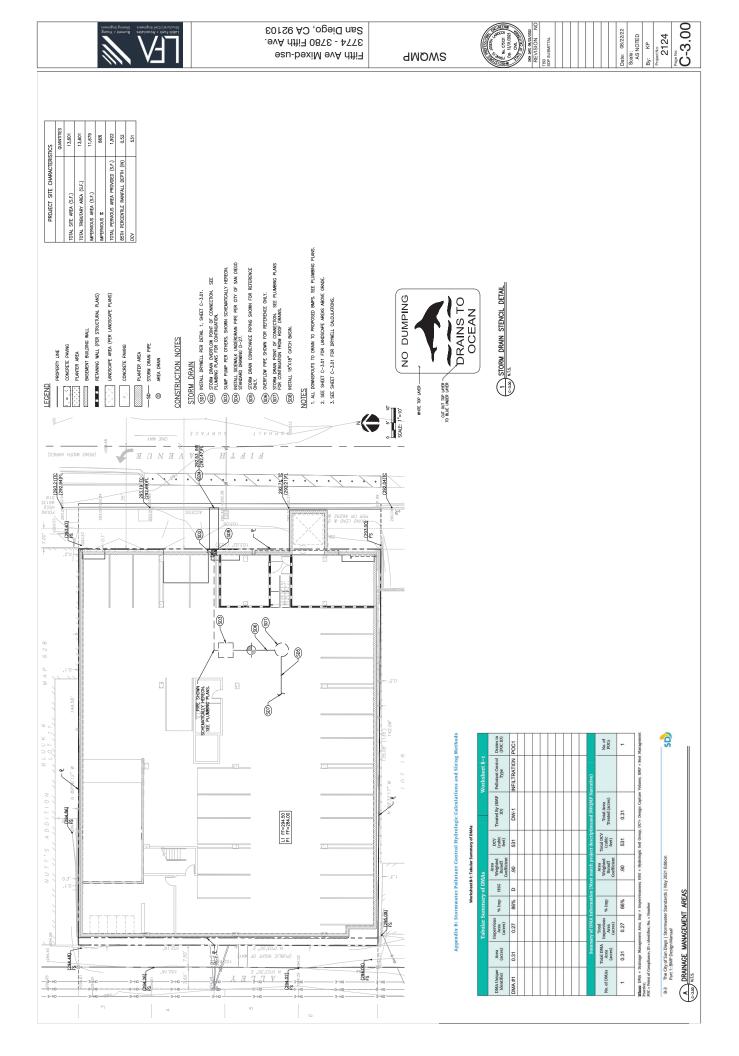


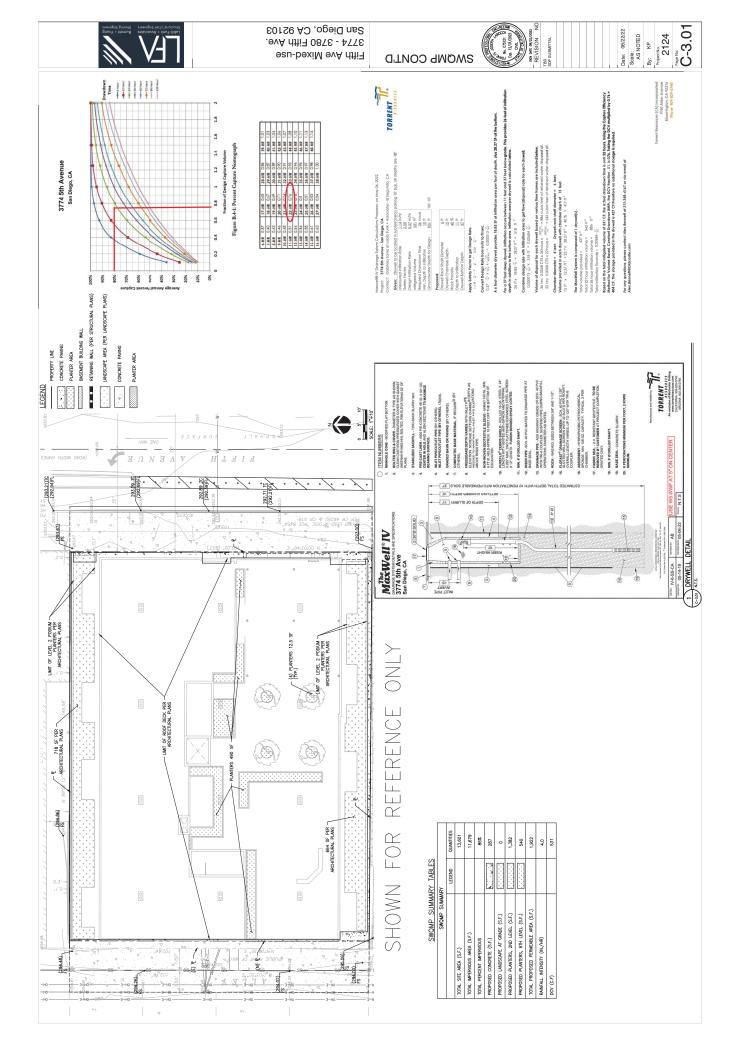
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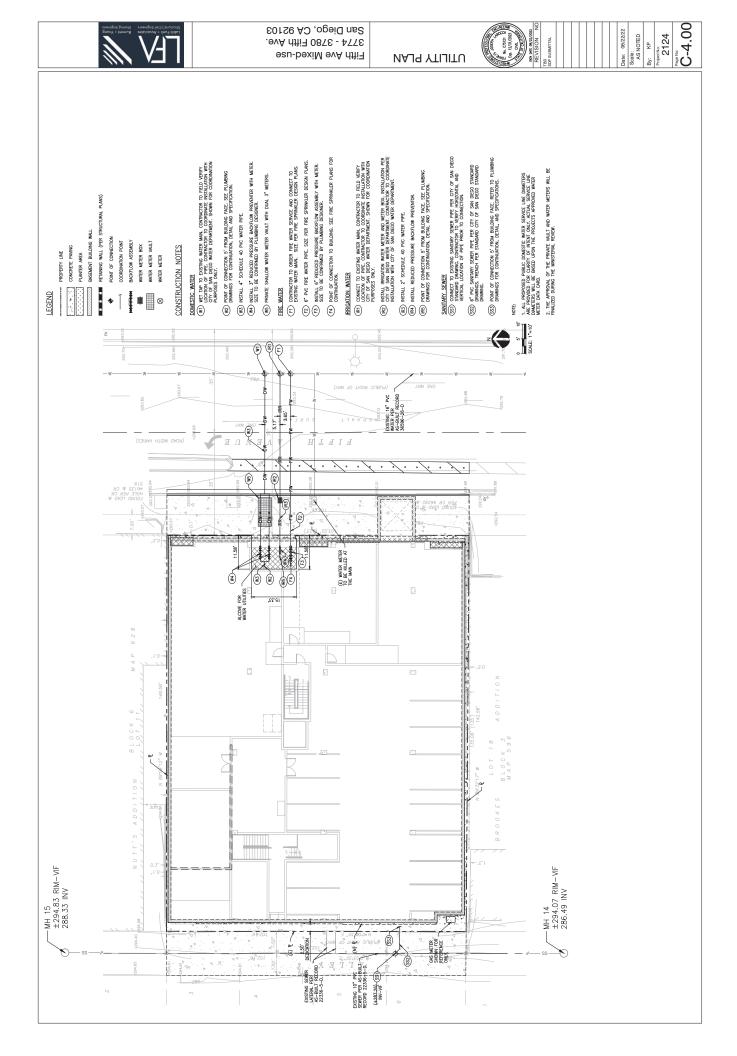












# ATTACHMENT 5 DRAINAGE REPORT

Attach project's drainage report. Refer to Drainage Design Manual to determine the reporting requirements.



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# HYDROLOGY & DRAINAGE REPORT FOR 5<sup>TH</sup> AVE.

3774 5<sup>th</sup> Ave. San Diego, CA 92103

> Prepared for: City of San Diego

Prepared by: Labib Funk + Associates Structural | Shoring | Civil Consulting Engineers 319 Main St. El Segundo, California 90245 JLA Job # 21814 August 12, 2022

# TABLE OF CONTENTS

- I.0 Project description
  - I.I Existing Conditions
  - I.2 Proposed Conditions
- 2.0 Standards and methods
- 3.0 Analysis
- 4.0 Conclusions

# **Appendices**

- Appendix A Vicinity Map
- Appendix B City of San Diego Drainage Design Manual, Table A-1. Runoff Coefficients For Rational Method
- Appendix C City of San Diego Drainage Design Manual, Figure A-1. Intensity Duration- Frequency Design Chart; Figure A-4. Rational Formula – Overland Time of Flow Nomograph
- Appendix D FlowMaster Calculation

# **Exhibits**

Exhibits A – Existing Conditions Drainage Areas Map

Exhibits B – Proposed Conditions Drainage Areas Map



# **I.0 PROJECT DESCRIPTION**

# I.I Existing Project Site Description

The site is 0.32 acres in size and is occupied by a one-story commercial building, and three two story commercial building. The site currently slopes from east to west at less than a 5% slope. There is no run-on to the site. Storm runoff from the buildings and site sheet flow easterly into the public street. The path of the public storm drain is still to be determined. The runoff then enters the public storm drain system and eventually drains into the San Diego Bay.

See pre-development drainage area map in Exhibit A for more details of the project.

The existing impervious area is 13,717 SF or 0.32 AC, which covers 99.00% of the site.

# I.2 Proposed Project Site Description

The project will consist of construction of new 8 story mixed-use building, apartments, with commercial use, over underground parking garage, miscellaneous landscape and hardscape.

See post-development drainage area map in Exhibit B for more detail of the project.

The proposed impervious area is 11,679 SF or 0.27 AC, which represents 86.0% of the site.

# 2.0 STANDARD AND METHODS

# Purpose of calculations

Calculate the storm runoff generated by the new site conditions and the impact to the downstream lands and calculate the discharge pipe size.

# Hydrologic model and methods used:

This report uses the "Rational Method" as demonstrated in the City of San Diego Drainage Design Manual, Appendix A.  $\mathbf{Q} = \mathbf{CIA}$  (Equation A-1) For pipe discharge calculation see Flow Master worksheet in Appendix E.

Drainage Report 5<sup>th</sup> Ave. – 3774 5<sup>th</sup> Ave, San Diego 92103

319 Main Street El Segundo, California 90245 t: 213/239 9700



# Water quality design storm:

The design storm for this report shall be the 100-year storm for the stormwater conveyance.

# 3.0 ANALYSIS

# Pre-development runoff volumes and peak flows:

Based on commercial zoning (CC-3-9) in Table A-1 and the revision described in footnote 2 of the City of San Diego Drainage Design Manual, the maximum runoff coefficient of 0.95 was used as a conservative estimate for the existing 99% imperviousness. See Exhibit "A" for plan view of the drainage area.

The intensity, 4.4 in/hr, was determined conservatively using the Intensity-Duration-Frequency Design Chart shown in Appendix C with the minimum time of concentration of 5 minutes.

# $Q_{100} = CIA = 0.95 \times 4.4$ in/hr x 0.32 AC = 1.34 CFS

# Post-development runoff volumes and peak flows:

Based on commercial zoning (CC-3-9) in Table A-1 and the revision described in footnote 2, the runoff coefficient was increased from its baseline value of 0.85 to a weighted value of C = 0.91 based upon the proposed conditions of the property. See Exhibit "B" for plan view of the drainage area.

Because the site drainage is limited to conveyance via roof downspouts, a conservative time of concentration of 5 minutes was determined acceptable via a conversation with the City of San Diego.

The intensity, 4.4 in/hr, was determined using Figure A-1 shown in Appendix C.

 $Q_{100} = CIA = 0.91 \times 4.4$  in/hr x 0.32 AC = 1.28 CFS

# 4.0 CONCLUSION

The entirety of the site's storm runoff will be directed to the infiltration drywell and overflow will discharge through the curb face before eventually being conveyed through the municipal storm drain system. The proposed site has been found to decrease the runoff generated from the property from its existing condition. Therefore, the proposed project will not impact the existing stormwater infrastructure.

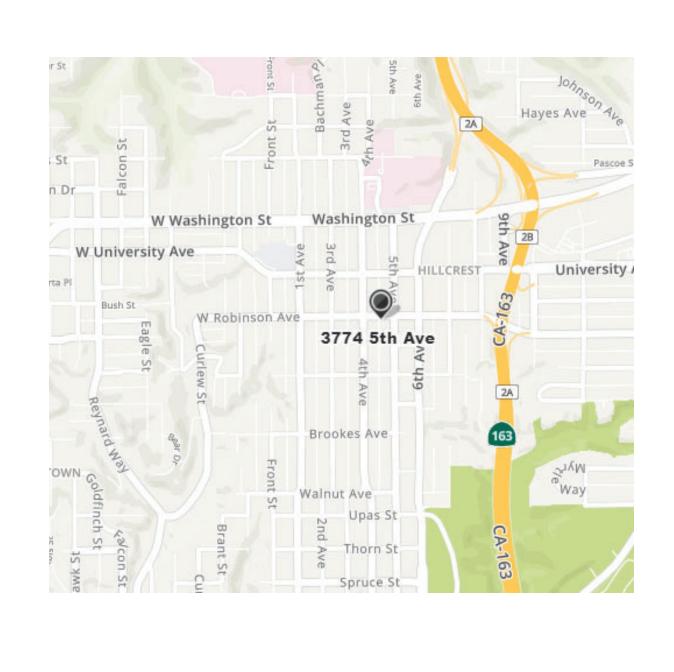
Drainage Report 5<sup>th</sup> Ave. - 3774 5<sup>th</sup> Ave, San Diego 92103 319 Main Street El Segundo, California 90245 t: 213/239 9700



# APPENDIX A Vicinity Map

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### APPENDIX B City Of San Diego Drainage Design Manual Table A-I, Runoff Coefficients for Rational Method

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> info@labibse.com www.labibse.com

#### APPENDIX A: RATIONAL METHOD AND MODIFIED RATIONAL METHOD

Land Use	Runoff Coefficient (C)				
Lanu Use	Soil Type (1)				
Residential:					
Single Family	0.55				
Multi-Units	0.70				
Mobile Homes	0.65				
Rural (lots greater than $\frac{1}{2}$ acre)	0.45				
Commercial <sup>(2)</sup>					
80% Impervious	0.85				
Industrial <sup>(2)</sup>					
90% Impervious	0.95				

#### Table A-1. Runoff Coefficients for Rational Method

#### Note:

<sup>(1)</sup> Type D soil to be used for all areas.

<sup>(2)</sup> Where actual conditions deviate significantly from the tabulated imperviousness values of 80% or 90%, the values given for coefficient C, may be revised by multiplying 80% or 90% by the ratio of actual imperviousness to the tabulated imperviousness. However, in case shall the final coefficient be less than 0.50. For example: Consider commercial property on D soil.

Actual imperviousness	=	50%
Tabulated imperviousness	=	80%
Revised C = $(50/80) \times 0.85$	=	0.53

The values in Table A–1 are typical for urban areas. However, if the basin contains rural or agricultural land use, parks, golf courses, or other types of nonurban land use that are expected to be permanent, the appropriate value should be selected based upon the soil and cover and approved by the City.

### A.1.3. Rainfall Intensity

The rainfall intensity (I) is the rainfall in inches per hour (in/hr.) for a duration equal to the  $T_c$  for a selected storm frequency. Once a particular storm frequency has been selected for design and a  $T_c$  calculated for the drainage area, the rainfall intensity can be determined from the Intensity-Duration-Frequency Design Chart (Figure A-1).



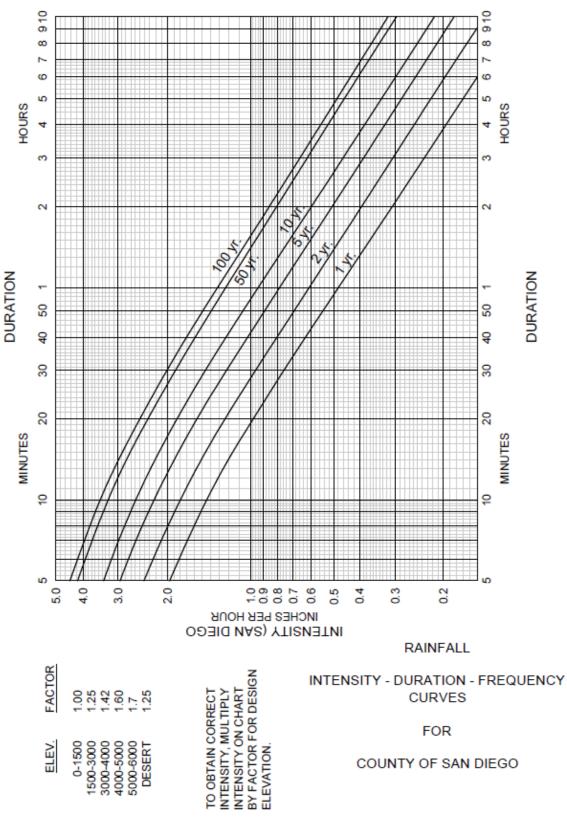


### APPENDIX C

City Of San Diego Drainage Design Manual Figure A-1. Intensity-Duration-Frequency Design Chart Figure A-4. Rational Formula – Overland Time of Flow Nomograph

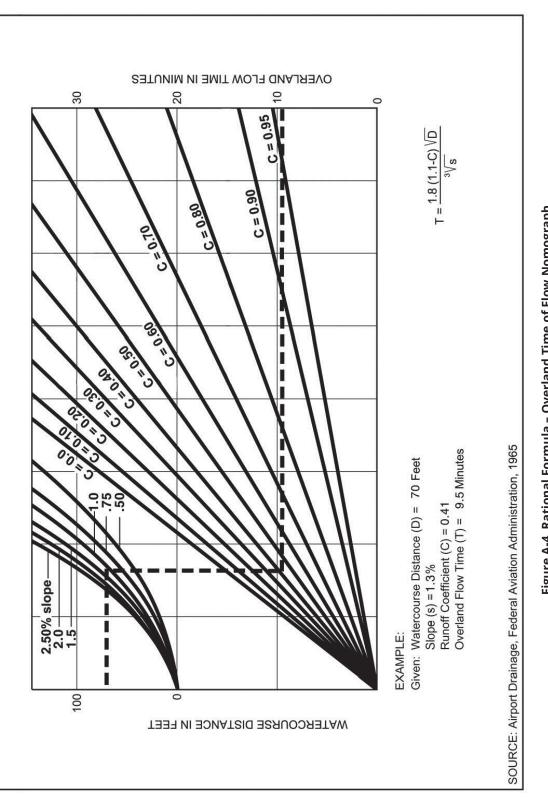
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APPENDIX A: RATIONAL METHOD AND MODIFIED RATIONAL METHOD

Figure A-4. Rational Formula - Overland Time of Flow Nomograph

<u>Note</u>: Use formula for watercourse distances in excess of 100 feet.



### APPENDIX D FlowMaster Worksheet

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> info@labibse.com www.labibse.com

S1	torm Water Con	veyance	Pipe Sizing
Project Description			
Friction Method	Manning Formula		
Solve For	Normal Depth		
Input Data			
Roughness Coefficient		0.010	
Channel Slope		0.02000	ft/ft
Diameter		8.00	in
Discharge		1.28	ft³/s
Results			
		4.00	1.
Normal Depth Flow Area		4.36	in #2
Wetted Perimeter		0.19 1.11	ft² ft
Hydraulic Radius		2.11	in
Top Width		0.66	ft
Critical Depth		0.53	ft
Percent Full		54.4	%
Critical Slope		0.00691	ft/ft
Velocity		6.59	ft/s
Velocity Head		0.67	ft
Specific Energy		1.04	ft
Froude Number		2.15	
Maximum Discharge		2.39	ft³/s
Discharge Full		2.22	ft³/s
Slope Full		0.00664	ft/ft
Flow Type	SuperCritical		
GVF Input Data			
Downstream Depth		0.00	in
Length		0.00	in
Number Of Steps		0	
GVF Output Data			
Upstream Depth		0.00	in
Profile Description			
Profile Headloss		0.00	ft
Average End Depth Over Rise		0.00	%
Normal Depth Over Rise		54.44	%
Downstream Velocity		Infinity	ft/s

### **Storm Water Conveyance Pipe Sizing**

8/11/2022 4:01:03 PM

 Bentley Systems, Inc.
 Haestad Methods SoBtitute © EnterMaster V8i (SELECTseries 1) [08.11.01.03]

 27 Siemons Company Drive Suite 200 W Watertown, CT 06795 USA +1-203-755-1666
 Page 1 of 2

### **Storm Water Conveyance Pipe Sizing**

### GVF Output Data

Upstream Velocity	Infinity	ft/s
Normal Depth	4.36	in
Critical Depth	0.53	ft
Channel Slope	0.02000	ft/ft
Critical Slope	0.00691	ft/ft



EXHIBIT A Existing Conditions Drainage Areas Map

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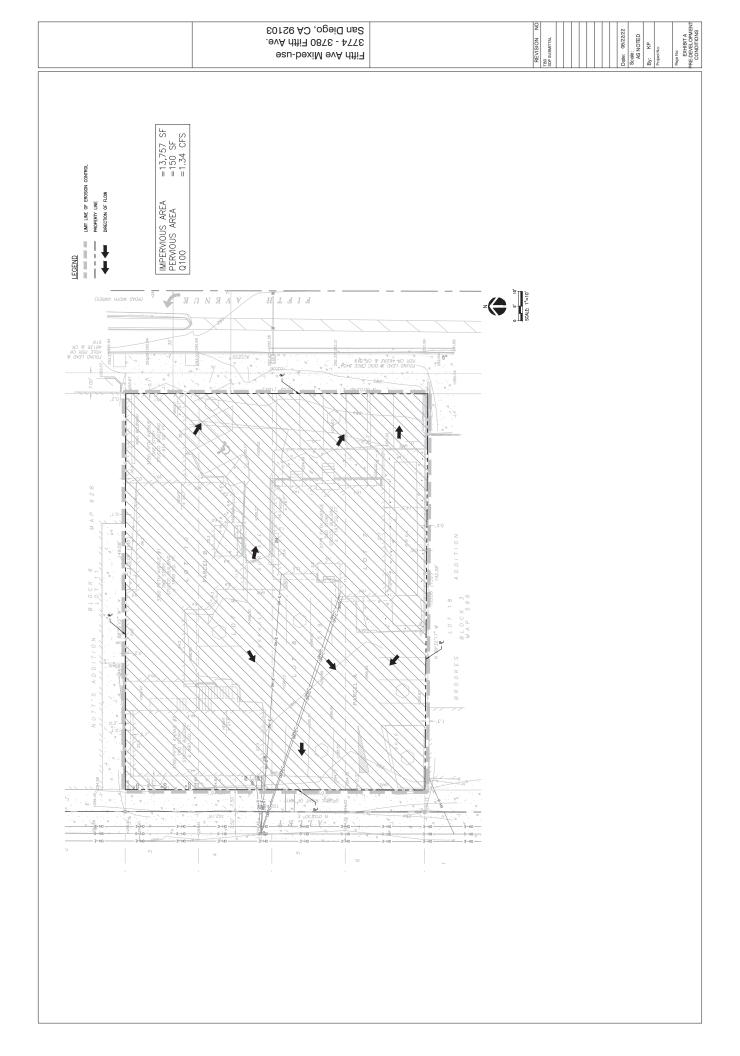
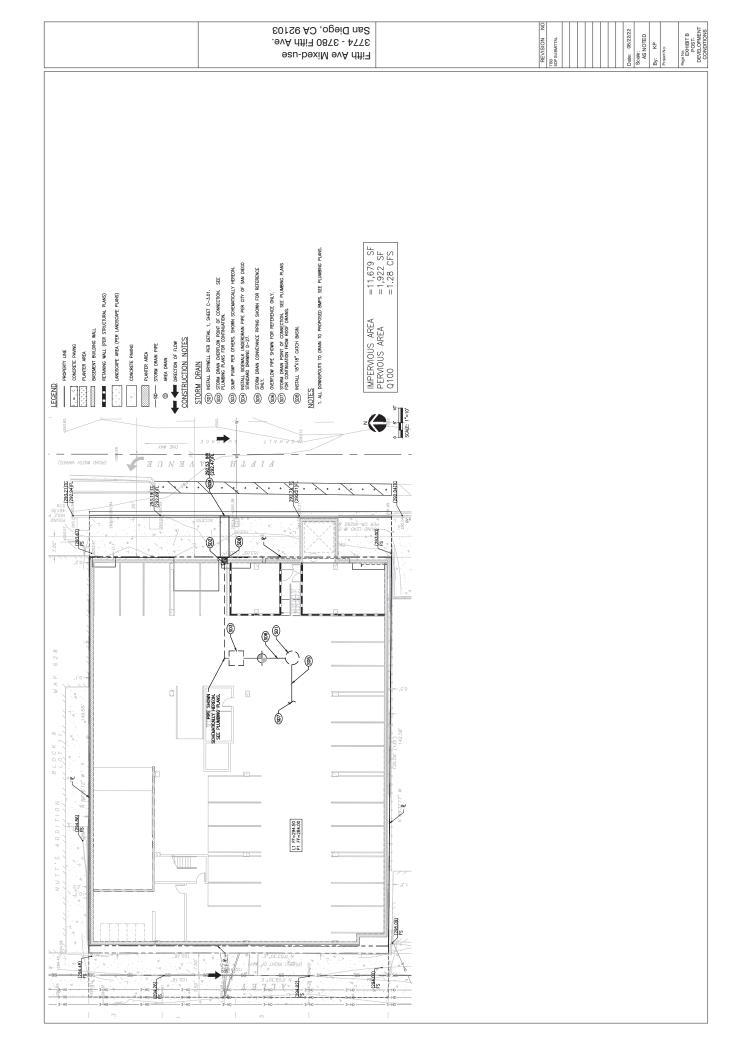




EXHIBIT B Proposed Conditions Drainage Areas Map

Drainage Report 5<sup>th</sup> Ave. - 3774 5<sup>th</sup> Ave, San Diego 92103 319 Main Street El Segundo, California 90245 t: 213/239 9700

> info@labibse.com www.labibse.com



Project Name: 3774 5th Ave.

### ATTACHMENT 6 GEOTECHNICAL AND GROUNDWATER INVESTIGATION REPORT

Attach project's geotechnical and groundwater investigation report. Refer to Appendix C.4 to determine the reporting requirements.



Project Name: 3774 5th Ave.

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# PHASE II SUBSURFACE

### 3774 and 3780 Fifth Avenue

San Diego, California 92130

October 19, 2021 Partner Project Number: 21-337285.1

Prepared for:

### **Kalonymus Development Partners**

13323 West Washington Boulevard Los Angeles, California 90066



Engineers who understand your business

## PARTNER

October 19, 2021

Max Zeff Kalonymus Development Partners 13323 West Washington Boulevard Los Angeles, California 90066

Subject: Phase II Subsurface Investigation Report 3774 and 3780 Fifth Avenue San Diego, California 92130 Partner Project Number: 21-337285.1

Dear Mr. Zeff:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the assessment performed at the above-referenced property. The following report describes the field activities, methods, and findings of the Phase II Subsurface Investigation conducted at the above-referenced property.

This assessment was performed consistent with acceptable industry standards. The independent conclusions represent Partner's best professional judgment based upon existing conditions and the information and data available to us during the course of this assignment.

We appreciate the opportunity to provide these services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact Drew McCreery at 310-774-3165.

Sincerely,

#### Partner Engineering and Science, Inc.

an

Sean Hanrahan Project Assessor

Drew McCreery National Client Manager

HUNGO THEN Hunter White Project Manager 0. 8423 Joe Mangine, PG Senior Project Manager

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### ATTACHMENTS

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### **1.0 INTRODUCTION**

### 1.1 Purpose

The purpose of the investigation was to identify the location of on-site underground storage tanks (USTs) former tankholds, and/or other associated features and to evaluate the potential impact of petroleum hydrocarbons, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and/or metals to soil gas and/or soil as a consequence of a release or releases from the potential on-site burn ash, off-site dry cleaning, printing, and awning manufacturing facilities, and former on-site USTs. Kalonymus Development Partners provided project authorization of Partner Proposal Number P21-337285.1.

### 1.2 Limitations

This report presents a summary of work conducted by Partner. The work includes observations of site conditions encountered and the analytical results provided by an independent third-party laboratory of samples collected during the course of the project. The number and location of samples were selected to provide the required information. It cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

Conclusions and/or recommendations are based on the observations, laboratory analyses, and the governing regulations. Conclusions and/or recommendations beyond those stated and reported herein should not be inferred from this document.

Partner warrants that the environmental consulting services contained herein were accomplished in accordance with generally accepted practices in the environmental engineering, geology, and hydrogeology fields that existed at the time and location of work. No other warranties are implied or expressed.

### 1.3 User Reliance

Partner was engaged by Kalonymus Development Partners (the Addressee), or their authorized representative, to perform this investigation. The engagement agreement specifically states the scope and purpose of the investigation, as well as the contractual obligations and limitations of both parties. This report and the information therein, are for the exclusive use of the Addressee. This report has no other purpose and may not be relied upon, or used, by any other person or entity without the written consent of Partner. Third parties that obtain this report, or the information therein, shall have no rights of recourse or recovery against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, the Addressee and their respective officers, employees, vendors, successors and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such use. Unauthorized use of this report shall constitute acceptance of, and commitment to, these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted Partner's standard Terms and Conditions, a copy of which can be found at <u>http://www.partneresi.com/terms-and-conditions.php.</u>

### 2.0 SITE BACKGROUND

### 2.1 Site Description

The subject property consists of two parcels of land comprising approximately 0.35 acre located on the west side of Fifth Avenue within a mixed residential and commercial area of San Diego, San Diego County, California. The subject property is currently developed with six buildings, which are occupied by various commercial and residential tenants. In addition to the structures, the subject property is improved with asphalt-paved parking areas and associated landscaping.

The subject property is bound by commercial properties to the north and south, bound by Fifth Avenue followed by commercial properties to the east and bound by an alley followed by commercial/residential properties to the west. Refer to Figure 1 for a site vicinity map showing site features and surrounding properties.

### 2.2 Site History

Frey Environmental Inc. (FREY) completed a *Phase I Environmental Site Assessment Report* (Phase I) for the subject property, dated September 18, 2020 on behalf of Max Zeff. According to the reviewed historical sources, the subject property was previously undeveloped as early as 1906; developed residentially *circa* 1921; and developed with mixed commercial and residential buildings from 1921 to present day.

The following recognized environmental conditions (RECs) and vapor encroachment concerns (VECs) were identified in the FREY Phase I:

- "Between approximately 1930 and 1960, it was common practice for residences to dispose of waste by burning piles of trash in the City of San Diego. Based on Site development with dwellings during this time period, burn ash is a potential REC for the Site."
- "Three (3) properties with uses of concern identified in the Immediate Site Vicinity on the Sanborn maps are as follows:
  - "Dry cleaning" at 423 ½ Robinson Avenue (adjacent west-northwest of Site) from 1956 to 1970. This address is currently occupied by Veribest/ Green Earth Cleaning (419 Robinson Avenue).
  - "Printing" at 429 Robinson Avenue (adjacent north-northwest) from 1960 to 1970. This address appears to currently be occupied by the Crest Café (425 Robinson Avenue).
  - "Awning Manufacturing" at 3766 <sup>3</sup>/<sub>4</sub> Fifth Avenue (adjacent south-southwest) from 1950 to 1970. This building is currently occupied by what appears to be a storage garage for the Bahn Thai restaurant.

Due to the potential/likely use of petroleum hydrocarbon and/or chlorinated solvents in industries such as dry cleaning, printing, and manufacturing (an awning manufacturer may have done metal work such as cutting and welding), these three adjacent property uses cannot be ruled out as RECs and may present VECs."

• "Between 1974 and 1976, two (2) 550-gallon gasoline USTs , a fuel pump, and associated piping were installed on the western side of Parcel B, likely for private use. The fueling system was removed from the Site under DEH [San Diego Department of Environmental Health] supervision in 1990. Evidence of contamination from the USTs was observed during the removal activities, further Site assessment was directed, and a LUST [leaking underground storage tank] cleanup case was created for the Site.



Subsequent investigations included the drilling of nine soil borings and the collection of soil samples to a maximum depth of 45 feet bgs [below ground surface]. The volume of soil with TPHg [total petroleum hydrocarbons as gasoline] in excess of 1,000 ppm [parts per million] was estimated to be approximately 700 cubic yards. A vapor risk assessment was reportedly conducted; however, full details of this assessment were not identified by FREY. The cleanup case for the Site received closure in 2001 but with management requirements set forth which included the following: 1) contaminated soil excavated as part of subsurface construction work must be managed in accordance with the legal requirements of the time; and 2) if structures are to be placed over the former excavation, further evaluation may need to be completed to evaluate vapor risk."

### 2.3 Geology and Hydrogeology

Review of the United States Geological Survey (USGS) *La Jolla & Point Loma, California* Quadrangle topographic map, indicates the subject property is situated approximately 290 feet above mean sea level, and the local topography is sloping gently to the east. Refer to Figure 2 for a topographic map of the site vicinity.

The site is located in the Peninsula Ranges Geomorphic Province of Southern California, within the San Diego Embayment, which is bound to the north by the Santa Ana Mountains, on the east by several northwest trending fault zones, to the south by the US-Mexico border, and to the west by the Pacific Ocean.

Based on borings advanced during this investigation, the underlying subsurface consists predominantly of reddish brown, fine to medium grained silty sand from the ground surface to approximately two feet bgs. From two to five feet bgs, the subsurface consists predominantly of brown, damp, fine grained sandy clay.

Groundwater was not encountered during this investigation and was not a part of the scope of work. According to the State Water Resources Control Board (SWRCB) Geotracker website, a nearby Leaking Underground Storage Tank (LUST) site at 3864 1st Avenue in the San Diego, which is approximately 1,000 feet northwest of the subject property and is overseen by the San Diego Regional Water Quality Control Board (SDRWQCB) as Case Number T0607300594. The site maintains five groundwater monitoring wells in the area. The most recent monitoring data available on the GeoTracker Website was for April 4, 2006, with depth to groundwater ranging from 187.14 to 191.32 feet bgs with an inferred direction of flow to the east.



### 3.0 FIELD ACTIVITIES

The Phase II Subsurface Investigation scope included a geophysical survey, the advancement of six borings (B1 through B6), and installation of three temporary sub-slab soil gas probes (SS1 through SS3) to collect representative soil and/or soil gas samples. Refer to Table 1 for a summary of the borings, sampling schedule, and laboratory analyses for this investigation.

### 3.1 Preparatory Activities

Prior to the initiation of fieldwork, Partner completed the following activities.

### 3.1.1 Utility Clearance

Partner delineated the work area with white spray paint and notified Dig Alert to clear public utility lines as required by law at least two business days prior to drilling activities. Dig Alert issued ticket number A212740832-00A for the project.

### 3.1.2 Health and Safety Plan

Partner prepared a site-specific Health and Safety Plan, which was reviewed with on-site personnel involved in the project prior to the commencement of drilling activities.

### 3.2 Geophysical Survey

On October 7, 2021 Ground Penetrating Radar Systems (GPRS) conducted a geophysical survey under the supervision of Partner. The purpose of the geophysical survey was to identify USTs remaining in place and/or backfilled tankholds and clear boring locations of utilities. The geophysical survey was conducted with a Geonics EM-61 and a Fischer M-Scope electromagnetic induction (EM) equipment, a Schonstedt GA-52 magnetic gradiometer, a Sensors and Software Noggin ground penetrating radar (GPR) unit, and a Metrotech 9890 utility locator with line-tracing capabilities.

GPRS systematically free-traversed the potential UST location with the aforementioned equipment. The equipment data were interpreted in real time and compiled as necessary in order to identify subsurface anomalies consistent with USTs, disturbed soil resembling backfilled tankholds, piping trenches, utility lines, and/or other subsurface conduits/features.

The geophysical survey identified one anomaly in the southwestern portion of the subject property. The shape of the anomaly was consistent with a backfilled excavation, generally corresponding to the location of a former UST. No large metallic features were identified within the anomaly, which confirms that the USTs have been removed, consistent with DEH records.

In addition, GPRS systematically free-traversed each proposed boring location with the aforementioned equipment and the equipment data were interpreted in real time for evidence of utility lines and/or other subsurface features of potential concern. Based on the findings of the GPR survey, no subsurface utilities were identified within the proposed boring locations.

Refer to Figure 3 for a map of the former UST location.



### 3.3 Drilling Equipment

On October 7, 2021, Partner subcontracted with Munoz Direct Push (Munoz) to provide and operate drilling equipment. Munoz, under the direction of Partner, advanced borings B1 through B6 with a limited-access Geoprobe Model 420MT direct push rig. Sub-slab soil gas sampling locations were advanced through the buildings concrete slab using a rotary hammer drill. Sampling equipment was decontaminated between sample intervals and boring locations to prevent cross-contamination.

### 3.4 Sample Locations

Boring B1 was advanced to the north of the off-site former awning manufacturer. Borings B2 and B3 were advanced to the northeast and center of former UST, respectively. Borings B4, through B6 were advanced in the northwest, northeast, and southeast exterior portions of the subject property, respectively.

Sub-slab probe SS1 was installed to the south of the off-site former printing facility. Sub-slab probes SS2 and SS3 were advanced to the southeast and east of the off-site dry cleaning facility, respectively.

Refer to Figure 3 for a map indicating sample locations.

### 3.5 Soil Sampling

Borings B1 through B4 and B6 were overlain by asphalt, which was penetrated using a punch bit attachment advanced by the direct-push drill rig. Boring B5 was overlain by concrete, which was penetrated using a concrete coring attachment advanced by the direct-push drill rig. Borings B1 through B6 were advanced to a terminal depth of 5 feet bgs.

Soil samples were collected using a 2-foot long by 1.5-inch diameter sampler with a 2-foot long acetate liner and sampling point. The sampler was advanced by the direct-push drill rig using 4-foot long by 1.25-inch diameter hollow rods with the inner rods in place. At approximately 1 foot above the desired sampling depth, an inner rod was removed and the sampler was advanced to the desired sampling depth to allow undisturbed soil to enter the sampling liner. The sampler was retrieved from the subsurface and the soil-filled liner was removed.

Each acetate liner was cut using a pipe-cutter. Samples were collected from the lower half of the liner using a disposable plastic syringe and retained in two sodium bisulfate-preserved and one methanol-preserved volatile organics analysis (VOA) vials in accordance with United States Environmental Protection Agency (EPA) Method 5035 sampling protocol. The remainder of the lower half of the liner was capped on either end with Teflon tape and plastic caps. The capped liners and VOA vials were labeled for identification and stored in an iced cooler. Soil in the upper half of the liner was visually inspected for discoloration, monitored for odors, classified in accordance with the Unified Soil Classification System, placed in a sealable plastic bag, and field-screened with a photoionization detector (PID). None of the samples exhibited discoloration or an odor and none of the PID readings suggested the presence of elevated volatile organics concentrations.

Soil samples were collected from borings B3 through B6 at 1, 2, and 5 feet bgs.



### 3.6 Soil Gas Sampling

### Soil Gas Probe Construction

Soil gas probes were constructed at 5 feet bgs within boreholes B1 and B2. A new section of ¼-inch diameter Nylaflow tubing with a new ¼-inch diameter polypropylene filter at the terminal end was inserted into the borehole to the desired sampling depth. One-inch diameter polyvinyl chloride (PVC) casing was used as a guide for the tubing such that the desired sampling depth was achieved. Sand was poured into the boring annulus to form an approximately 1-foot long sand pack around the polypropylene filter, at which time the PVC piping was withdrawn. Approximately 1 foot of dry, granular bentonite was placed atop the sand pack and the remainder of the borehole was backfilled with hydrated bentonite to the next desired sampling depth where a soil gas probe was similarly constructed. The sampling end of the tubing was fitted with a valve and the probe was labeled for identification.

### Sub-Slab Soil Gas Probe Construction

Each sub-slab soil gas probe, consisting of a pre-fabricated stainless steel screen and casing, was manually inserted into a <sup>1</sup>/<sub>2</sub>-inch diameter hole drilled within the concrete building slab using the rotary hammer drill. Sand was poured into the annulus to form a sand pack around the probe screen and approximately 2 inches of dry, granular bentonite was placed atop the sand pack. The annulus was backfilled with hydrated bentonite to the ground surface to form a seal and the barbed sampling end of the probe was fitted with a cap prior to sampling.

### Soil Gas Sampling Methodology

Soil gas samples were collected in general accordance with the July 2015 Department of Toxic Substances Control (DTSC) and Los Angeles Regional Water Quality Control Board (LARWQCB) "Advisory – Active Soil Gas Investigations."

Soil gas samples were collected using 1-liter, stainless-steel, cylindrical SUMMA canisters. The sampling containers were provided by SunStar Laboratories, Inc. (SunStar) a state-certified laboratory (California Department of Public Health Environmental Laboratory Accreditation Program certificate number 2250) in Lake Forest, California, which subjected each canister to a rigorous cleaning process using a combination of dilution, heat, and high vacuum. After cleaning, the canisters were batch certified to be free of target contaminants to a specified reporting limit via gas chromatography/mass spectroscopy prior to delivery.

Partner received the SUMMA canisters evacuated to approximately minus 30 inches of mercury. The SUMMA canisters were fitted with stainless-steel flow controllers, which SunStar calibrated to maintain constant flow (approximately 0.1 liter per minute) for approximately 5 to 10 minutes of sampling time.

Each probe was allowed to equilibrate for a minimum of two hours after installation prior to sampling. After equilibration, the sample tubing and sampler screen were purged of ambient air using a plastic syringe. A tracer gas [1,1-diflouroethane (1,1-DFA)] was placed around each probe at the ground surface while sampling to detect ambient air intrusion. The tracer gas was not detected in any sample, indicating that the integrity of the bentonite seal was maintained. Once the sampling tubing was purged of ambient air, the sampling end of the tubing was fitted to the sampling canister and the port valve was opened, causing

air to enter the sample container due to the pressure differential. Partner closed the valves after the canister was evacuated to approximately minus 1 to 2 inches of mercury, with pertinent data (e.g., time, canister vacuum) recorded at the start and end of sampling.

The SUMMA canisters were labeled for identification and stored away from direct sunlight prior to analysis.

Soil gas samples were collected from borings B1 and B2 at 5 feet bgs. Sub-slab soil gas samples were collected from probes SS1 through SS3 at approximately 6 inches bgs,

### 3.7 Post-Sampling Activities

Probes were removed from the subsurface and the boreholes were backfilled with hydrated bentonite chips following sampling activities. Boreholes advanced in improved areas were capped with concrete or asphalt patch to match existing ground cover after being backfilled.

No significant amounts of derived wastes were generated during this investigation.



### 4.0 DATA ANALYSIS

### 4.1 Laboratory Analysis

Partner collected 12 soil samples and five soil gas samples on October 7, 2021 which were transported in an iced cooler (soil samples) or at ambient temperature (soil gas samples) under chain-of-custody protocol to SunStar for analysis. Based on field-screening results, visual observations, and/or olfactory observations, one soil sample per boring associated with the burn ash and/or the UST (four soil samples total) was analyzed for Carbon Chain Total Petroleum Hydrocarbons (TPH-cc) via EPA Method 8015M, VOCs via EPA Method 8260B, California Administrative Manual (CAM) 17 Metals via EPA Method 6010B/7471A, and SVOCs via EPA Method 8270. Each soil gas sample (five samples total) was analyzed for VOCs via EPA Method 70-15. The remaining soil samples were placed on hold at the laboratory.

Laboratory analytical results are included in Appendix B and discussed below.

### 4.2 Regulatory Agency Comparison Criteria

#### Department of Toxic Substances Control Attenuation Factor and Regional Screening Levels

Regional Screening Levels (RSLs) are generic, risk-based chemical concentrations developed by the EPA for use in initial screening-level evaluations. RSLs combine human health toxicity values with standard exposure factors to estimate contaminant concentrations that are considered to be health protective of human exposures over a lifetime through direct-contact exposure pathways (e.g., via inhalation and/or ingestion of and/or dermal contact with impacted soil and/or indoor air). RSLs are not legally enforceable standards, but rather are considered guidelines to evaluate if potential risks associated with encountered chemical impacts may warrant further evaluation.

The DTSC Office of Human and Ecological Risk (HERO) developed California-Modified RSLs based on a review of 1) RSL concentrations, and 2) recent toxicity values.

While soil gas detections are not immediately comparable to the indoor air quality guidelines within the RSLs, the DTSC issued a recommended default attenuation factor of 0.03 for sub-slab soil gas and nearsource exterior soil gas in the June 2015 document *Office of Solid Waste and Emergency Response (OSWER) Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air.* With the subsurface contaminant concentrations and default attenuation factors, the associated contaminant concentrations in soil gas can be estimated as Calculated Residential and Commercial/Industrial Soil Gas Screening Levels (SGSLs).

### Maximum Soil Screening Levels

Maximum Soil Screening Levels (SSLs) are concentrations of petroleum hydrocarbons that are allowed to remain in soil without potentially degrading the quality of groundwater underlying a site. Maximum SSLs are established and enforced by the Los Angeles Regional Water Quality Control Board (LARWQCB).

### 4.3 Soil Sample Data Analysis

None of the analyzed soil samples contained detectable concentrations of VOCs, SVOCs, or TPH-cc above laboratory reporting limits (RLs), and the RLs were below respective RSLs and SSLs.



Barium, copper, nickel, vanadium and zinc were detected in each of the analyzed soil samples above laboratory RLs, but below applicable screening levels. Lead was detected in one of the analyzed soil samples (B3-2) above the laboratory RL, but below applicable screening levels. Cobalt was detected in soil samples B3-2, B4-5 and B5-2 above laboratory RLs, but below applicable screening levels. Chromium was detected in each of the soil samples above the laboratory RL, but below applicable screening levels.

Based on the findings, the soil samples placed on hold at the laboratory were not analyzed.

Refer to Table 2 for a summary of the soil sample CAM 17 Metals laboratory analysis results.

### 4.4 Soil Gas Sample Data Analysis

Benzene; acetone; 1,3-butadiene; carbon disulfide; chloroform; isopropyl alcohol; styrene; 2-butanone (MEK); freon 152; dichlorodifluoromethane; 1,2,4-trimethylbenzene; ethylbenzene; methyl isobutyl ketone; heptane; hexane; cyclohexane; tetrahydrofuran; toluene; m,p-xylene; o-xylene; tetrachloroethene (PCE); and trichloroethene (TCE) were detected in the analyzed soil gas samples at concentrations above laboratory RLs. None of the remaining VOCs were detected in the analyzed soil gas samples at concentrations above laboratory RLs and the laboratory RLs were below applicable SGSLs.

Benzene, 1,3-butadiene, chloroform, TCE and/or PCE were detected in one or more of the analyzed soil gas samples at concentrations above the residential and/or commercial/industrial SGSLs.

Refer to Table 3 for a summary of the soil gas sample VOCs laboratory analysis results.

### 4.5 Discussion

1,3-Butadiene was detected in three analyzed soil gas samples at concentrations above the MTCA Method B Cancer SGSL. 1,3-Butadiene is a VOC with a double bond, therefore it is highly reactive, leading to a low SGSL. However, due to its reactivity, 1,3-butadiene has a short half-life in the subsurface leading to the conclusion that the detected concentrations are either an artifact of the sampling process or an artifact of the analysis. Based on the above, the concentrations of 1,3-butadiene detected in soil gas do not pose a significant concern to human health at this time.

Partner notes that trihalomethanes (THMs) (including bromoform, bromodichloromethane, dibromochloromethane, and chloroform) are formed in drinking water primarily as a result of the chlorination of organic matter present naturally in raw water supplies. The rate and degree of THM formation increases as a function of the chlorine and humic acid concentration; the temperature; the pH; and the bromide ion concentration. Chloroform is the most common THM, and the principal disinfection by-product (DBP) in chlorinated drinking water. In the presence of bromides, brominated THMs are formed preferentially, and chloroform concentrations decrease proportionally. It is assumed that most THMs present in water are ultimately transferred to air as a result of their volatility. That said, it is Partner's opinion that the chloroform detected in soil gas samples is likely attributable to leaking water lines in the vicinity of the sampling location.

Benzene was detected in analyzed soil gas samples SS1, SS2, B1-SV5, and B2-SV5 at concentrations above residential and/or commercial/industrial SGSLs. Benzene concentrations increase when closer to the location of the former UST. Based on the above, a release or releases associated with the former UST may have occurred that has impacted soil gas and is considered a vapor intrusion concern.



PCE was detected in each analyzed soil gas sample at concentrations above residential and commercial/industrial SGSLs. TCE was detected in analyzed soil gas samples SS2, SS3, and B1-SV5 at concentrations above residential SGSLs. Concentrations of PCE and TCE increase with proximity to the off-site dry cleaning facility. Based on these results, it appears that a release or releases from the off-site dry cleaning facility has impacted soil gas and is considered a vapor intrusion concern.



### 5.0 SUMMARY AND CONCLUSIONS

Partner conducted a Phase II Subsurface Investigation at the subject property to evaluate the potential impact of petroleum hydrocarbons, VOCs, SVOCs, and/or metals to soil gas and/or soil as a consequence of a release or releases from the potential on-site burn ash, off-site dry cleaning, printing, and awning manufacturing facilities, and former on-site USTs. The scope of the Phase II Subsurface Investigation included a geophysical survey, the advancement of six borings (B1 through B6), and installation of three temporary sub-slab soil gas probes (SS1 through SS3) to collect representative soil and/or soil gas samples . Four soil samples were analyzed for TPH-cc, VOCs, SVOCs and CAM 17 Metals, and five soil gas samples were analyzed for VOCs.

Subsurface lithology encountered in the upper 2 feet bgs consisted of reddish brown, damp, silty sand. From two to 5 feet bgs the subsurface consisted of brown to gray sandy clay.

The geophysical survey identified one large anomaly in the southwestern portion of the subject property. The shape of the anomaly was consistent with a backfilled excavation, generally corresponding to the location of a former UST. No large metallic features were identified within the anomaly, which confirms that the USTs have been removed.

1,3-Butadiene was detected in three analyzed soil gas samples at concentrations above the MTCA Method B Cancer SGSL. 1,3-Butadiene is a VOC with a double bond, therefore it is highly reactive, leading to a low SGSL. However, due to its reactivity, 1,3-butadiene has a short half-life in the subsurface leading to the conclusion that the detected concentrations are either an artifact of the sampling process or an artifact of the analysis. Based on the above, the concentrations of 1,3-butadiene detected in soil gas do not pose a significant concern to human health at this time.

Partner notes that trihalomethanes (THMs) (including bromoform, bromodichloromethane, dibromochloromethane, and chloroform) are formed in drinking water primarily as a result of the chlorination of organic matter present naturally in raw water supplies. The rate and degree of THM formation increases as a function of the chlorine and humic acid concentration; the temperature; the pH; and the bromide ion concentration. Chloroform is the most common THM, and the principal disinfection by-product (DBP) in chlorinated drinking water. In the presence of bromides, brominated THMs are formed preferentially, and chloroform concentrations decrease proportionally. It is assumed that most THMs present in water are ultimately transferred to air as a result of their volatility. That said, it is Partner's opinion that the chloroform detected in soil gas samples is likely attributable to leaking water lines in the vicinity of the sampling location.

Benzene was detected in analyzed soil gas samples SS1, SS2, B1-SV5, and B2-SV5 at concentrations above residential and/or commercial/industrial SGSLs. Benzene concentrations increase when closer to the location of the former UST. Based on the above, a release or releases associated with the former UST may have occurred that has impacted soil gas and is considered a vapor intrusion concern.

PCE was detected in each analyzed soil gas sample at concentrations above residential and commercial/industrial SGSLs. TCE was detected in analyzed soil gas samples SS2, SS3, and B1-SV5 at concentrations above residential SGSLs. Concentrations of PCE and TCE increase with proximity to the off-

site dry cleaning facility. Based on these results, it appears that a release or releases from the off-site dry cleaning facility has impacted soil gas and is considered a vapor intrusion concern.

Partner recommends additional investigation with respect to the identified soil gas impacts at this time.



TABLES



Table 1: Summary of Investigation Scope 3774 and 3780 Fifth Avenue San Diego, California 92130 21-337285.1 October 7, 2021

Boring Identification	REC/Issue	Location	Terminal Depth (feet bgs)	Matrix Sampled	Sampling Depths* (feet bgs)	Target Analytes
SS1	Offsite dry cleaning facility	South of the off-site printing facility	0.5	Soil Gas	0.5	VOCs
SS2	Offsite dry cleaning facility	Southeast of the off-site dry cleaning facility	0.5	Soil Gas	0.5	VOCs
SS3	Offisite dry cleaning facility	Southeast of the off-site dry cleaning facility	0.5	Soil Gas	0.5	VOCs
B1	Former Awning manufacturing facility and former UST	North of the off-site awning manufacturer	5	Soil Gas	5	VOCs
B2	Former UST, offsite dry cleaning facility, former awning manufacturing	Northeast of the former UST	5	Soil Gas	5	VOCs
B3	Former UST, offsite dry cleaning facility, former awning manufacturing	Center of thr former UST	5	Soil	1, <u>2</u> , 5	VOCs, SVOCs, TPH-cc, Metals
B4	Former UST, offsite dry cleaning facility, former awning manufacturing	Northwest exterior of subject property	5	Soil	1, 2, <u>5</u>	VOCs, SVOCs, TPH-cc, Metals
B5	Former UST, offsite dry cleaning facility	Northeast exterior of subject property	5	Soil	1, <u>2</u> , 5	VOCs, SVOCs, TPH-cc, Metals
B6	Former UST, offsite dry cleaning facility, former awning manufacturing	Southeast exterior of subject property	5	Soil	1, 2, <u>5</u>	VOCs, SVOCs, TPH-cc, Metals

Notes:

compounds (SVOCs) via EPA Method 8270. Depths in italics analyzed for volatile organic compounds (VOCs) via EPA Method 8260B (soil) and via EPA Method TO-15 (soil gas). Underlined \*Depths in bold analyzed for carbon chain total petroleum hydrocarbons (TPH-cc) via United States Environmental Protection Agency (EPA) Method 8015M and semi-volatile organic depths analyzed for California Administrative Manual (CAM) 17 Metals via EPA Method 6010B/7471A.

REC = recognized environmental condition

bgs = below ground surface

UST = underground storage tank



Table 2: Soil Sample CAM 17 Metals Laboratory Results (mg/kg) 3774 and 3780 Fifth Avenue San Diego, California 92130 21-337285.1

October 7, 2021

Element	Residential Soil RSL	Commercial/Industrial Soil RSL	Background Concentrations*	B3-2	B4-5	B5-2	B6-5
Barium (Ba) <sup>1</sup>	15,000	220,000	299 - 719	110	110	140	130
Chromium (Cr) <sup>1</sup>	120,000	1,800,000	0 - 345	8.2	11	6.3	10
Cobalt (Co) <sup>1</sup>	23	250	5.7 - 24.1	5.9	3.4	5.4	<2.0
Copper (Cu) <sup>1</sup>	3,100	47,000	9.4 - 48	21	4.0	2.0	3.4
Lead (Pb)	80	320	10.1 - 37.7	69	< 3.0	<3.0	< 3.0
Nickel (Ni)	15,000	64,000	0 - 137	3.7	3.2	2.9	2.6
Vanadium (V)	390	5,800	59 - 165	33	29	17	28
Zinc (Zn)1	23,000	350,000	117 - 181	97	13	8.3	11
Other Metals	Varies	Varies	Varies - Varies	ND	ND	ND	ND

Notes:

\*From Kearney Foundation of Soil Science March 1996 report Background Concentrations of Trace and Major Elements in California Soils. Background concentrations of metals are considered to be within one standard deviation from the mean metal concentrations determined by the study. Concentrations indicated in milligrams per kilogram (mg/kg).

CAM = California Administrative Manual

RSL = June 2020 DTSC Regional Screening Levels (RSLs). If DTSC RSLs do not exist, May 2021 United States Environmental Protection Agency (EPA) RSLs were utilized, as denoted by <sup>1</sup>.

< = not detected above indicated laboratory Reporting Limit (RL)

ND = not detected above laboratory RLs

Values in **bold** exceed laboratory RLs

Highlighted values exceed residential regulatory guidelines

Highlighted values exceed residential and commercial/industrial regulatory guidelines



### Table 3: Soil Gas Sample VOCs Laboratory Results 3774 and 3780 Fifth Avenue San Diego, California 92130 21-337285.1 October 7, 2021

EPA Method		VOCs via TO-15					
Units			ų)	ւg/m³)			
Analyte	Residential SGSL^	Commercial/ Industrial SGSL^	SS1	SS2	SS3	B1-SV5	B2-SV-5
Benzene	3.2	14	5.3	3.3	<3.3	84	27
Acetone	1,066,667	4,666,667	330	180	<12	62	330
1,3-Butadiene	0.57	2.4	57	<4.5	<4.5	71	35
Carbon Disulfide	24,333	103,333	8.7	<3.2	<3.2	17	10
Chloroform	4.0	18	14	19	82	10	44
Isopropyl Alcohol	NE	NE	9.3	9.3	<13	4.6	28
Styrene	31,333	130,000	100	4.0	<4.3	6.8	3.5
2-Butanone (MEK)	173,333	733,333	16	20	<15	18	73
Freon 152	NE	NE	54	<27	<27	<27	<27
Dichlorodifluoromethane	3,333	14,667	<5.0	4.4	<5.0	73	<5.0
1,2,4-Trimethylbenzene	2,100	8,667	<5.0	4.2	<5.0	4.5	6.8
Ethylbenzene	NE	NE	5.9	<4.4	<4.4	9.2	7.6
Methyl Isobutyl Ketone	NE	NE	<42	4.8	<42	11	11
Heptane	14,000	60,000	<4.2	<4.2	<4.2	33	21
Hexane	24,333	103,333	<3.6	<3.6	<3.6	47	36
Cyclohexane	210,000	866,667	<3.5	<3.5	<3.5	14	9.7
Tetrahydrofuran	70,000	293,333	<3.0	<3.0	<3.0	4.4	<3.0
Toluene	10,333	43,333	13	4.2	<3.8	74	39
m,p-Xylene	3,333	14,667	<8.8	5.8	24	18	16
o-Xylene	3,333	14,667	<4.4	<4.4	<4.4	6.5	7.8
PCE	15	67	110	230	2,400	650	70
TCE	16	100	8.3	17	99	54	6.5
Other VOCs	Varies	Varies	ND	ND	ND	ND	ND

Notes:

<sup>^</sup>Calculated soil gas screening levels (SGSLs) for soil gas concentrations were derived by dividing the June 2020 Department of Toxic Substances Control (DTSC) or May 2021 United States Environmental Protection Agency (EPA) Regional Screening Level (RSL) for each compound using the more conservative 2015 attenuation factor of 0.03 regardless of depth. DTSC RSLs are provided in the June 2020 DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3. Where DTSC RSLs were not available, EPA RSLs were utilized.

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

 $\mu g/m^3$  = micrograms per cubic meter

PCE = tetrachloroethene

TCE = trichloroethene

< = not detected above indicated laboratory Reporting Limit (RL)

NE = not established

ND = not detected above laboratory RLs

Values in **bold** exceed laboratory RLs

Highlighted values exceed residential regulatory guidelines

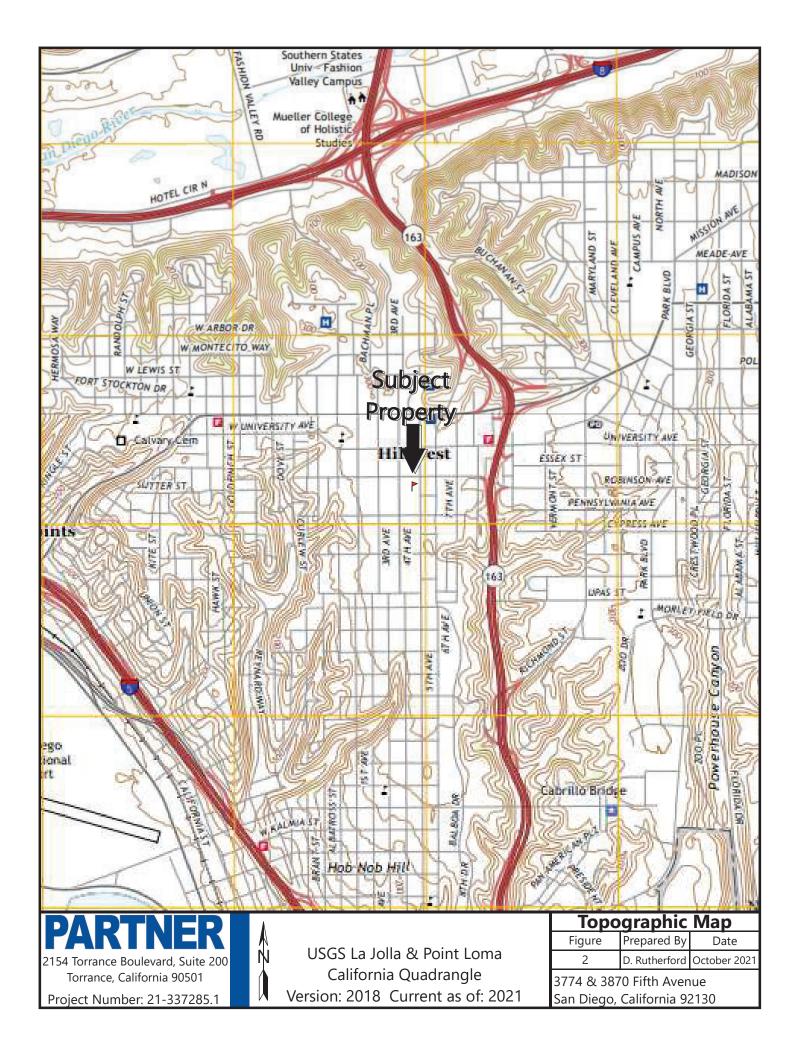
Highlighted values exceed residential and commercial/industrial regulatory guidelines

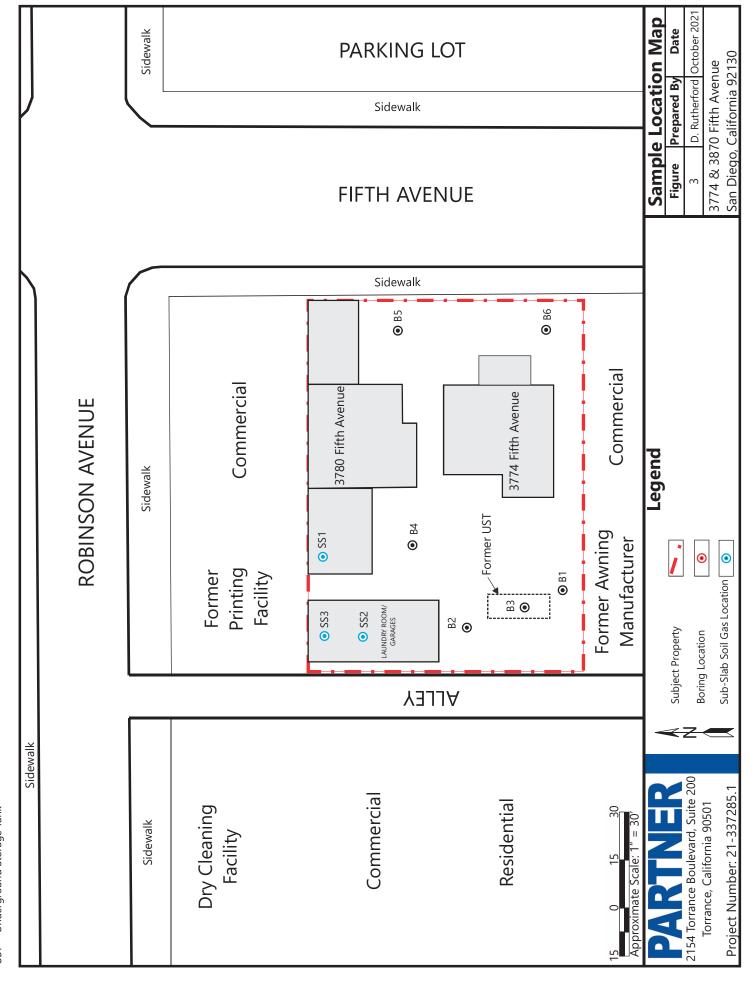


**FIGURES** 









Notes: UST = Underground Storage Tank

**APPENDIX A: BORING LOGS** 



Boring I	dentification:	B1				Page 1 of 7
Boring Location:		North of former off-site awning manufacturer			Date Started:	10/7/2021
Site Address:		3774 3	8780 Fif	th Avenue	Date Completed:	10/7/2021
				lifornia 92130	Depth to Groundwater (feet bgs):	NA
-	Number:	+	7285.1		Field Technician:	S. Hanrahan
Drill Rig	Туре:	Geopr	obe mo	odel 420MT		R
	g Equipment:		e Liner	s, Nylaflow Tubing, SUMMA cannisters	2154 Torrance Boule	
	e Diameter:	1.5"	lucco	Description	Torrance, California S	0504
Depth	Sample	PID	USCS	Description Brown, dry, coarse sand with some fine to medium	Notes	
1		0.0	SP	gravels	3" Asphalt at surface	
2		0.0	CL	Brown and grey, damp, sandy clay		
3						
4						
5		0.0	CL	Brown, damp, sandy clay	Soil gas probe installed at 5 feet bgs	
6					Boring terminated at 5 feet bgs, backfille bentonite, and capped with concrete up	
7						
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Boring I	dentification:	B2				Page 1 of 1
Boring Location:		Northeast of the former UST			Date Started:	10/7/2021
Site Ado	dress:			th Avenue	Date Completed:	10/7/2021
		_		lifornia 92130	Depth to Groundwater (feet bgs):	NA
	Number:	21-337			Field Technician:	S. Hanrahan
Drill Rig	Туре:	Geopr	obe mo	del 420MT	PARTNE	R
	g Equipment:		e Liner	s, Nylaflow Tubing, SUMMA cannisters	2154 Torrance Boule	
	e Diameter:	1.5"	uses	Description	Torrance, California 9 <b>Notes</b>	0504
Depth	Sample	PID	USCS	<b>Description</b> Brown, dry, coarse sand with some fine to medium		
1		0.0	SP	gravels	3" Asphalt at surface	
2		0.0	CL	Brown and grey, damp, sandy clay		
3						
4						
5		0.0	CL	Brown, damp, sandy clay	Soil gas probe installed at 5 feet bgs	
6					Boring terminated at 5 feet bgs, backfille bentonite, and capped with concrete up	
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Boring lo	dentification:	B3				Page 1 of 1
Boring Location:		Center of thr former UST			Date Started:	10/7/2021
Site Add	recc.	3774 3	8780 Fif	th Avenue	Date Completed:	10/7/2021
		-		lifornia 92130	Depth to Groundwater (feet bgs):	NA
Project N		1	7285.1		Field Technician:	S. Hanrahan
Drill Rig	Туре:	Geopr	obe mo	odel 420MT	PARTNE	R
	g Equipment:		e Liner	s, Nylaflow Tubing	2154 Torrance Boule	
	e Diameter:	1.5"	lucco		Torrance, California S	00504
Depth	Sample	PID	USCS	Description Brown, dry, coarse sand with some fine to medium	Notes	
1	B3-1	0.0	SP	gravels	3" Asphalt at surface	
2	B3-2	0.0	CL	Brown and grey, damp, sandy clay		
3						
4						
5	B3-5	0.0	CL	Brown, damp, sandy clay		
6					Boring terminated at 5 feet bgs, backfille bentonite, and capped with concrete up	
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25						

Boring lo	dentification:	B4				Page 1 of 1
Boring Location:		Northwest of subject property			Date Started:	10/7/2021
Site Add	recc.	3774 3780 Fifth Avenue			Date Completed:	10/7/2021
				lifornia 92130	Depth to Groundwater (feet bgs): NA	
Project N			7285.1		Field Technician:	S. Hanrahan
Drill Rig	Туре:	Geopr	obe mo	odel 420MT	PARTNE	R
	g Equipment:		e Liner	s, Nylaflow Tubing	2154 Torrance Boule	
	e Diameter:	1.5"	uses	Description	Torrance, California S	90504
Depth	Sample	PID	USCS	<b>Description</b> Reddish brown, dry, fine to medium grained sand	Notes	
1	B4-1	0.0	SP	with medium gravels	3" Asphalt at surface	
2	B4-2	0.0	SC	Reddish brown, damp, fine grained sand with grey clays		
3						
4						
5	B4-5	0.0	CL	Brown, damp sandy clay		
6					Boring terminated at 5 feet bgs, backfille bentonite, and capped with concrete up	
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Boring lo	dentification:	B5				Page 1 of 1
Boring Location:		Northeast exterior of subject property			Date Started:	10/7/2021
Site Address:				th Avenue	Date Completed:	10/7/2021
			-	lifornia 92130	Depth to Groundwater (feet bgs):	NA
Project N		21-337			Field Technician:	S. Hanrahan
Drill Rig	Туре:	Geopr	obe mo	del 420MT	PARTNE	R
	g Equipment:		e Liner	s, Nylaflow Tubing	2154 Torrance Boule	
	e Diameter:	1.5"		Description	Torrance, California 9 <b>Notes</b>	0504
Depth	Sample	PID	USCS	<b>Description</b> Reddish brown, damp, fine to medium grained silty		
1	B5-1	0.0	SM	sand Reddish brown, damp, fine grained sand with grey	5" Concrete at surface	
2	B5-2	0.0	SC	clays		
3						
4						
5	B5-5	0.0	CL	Brown, damp sandy clay		
6					Boring terminated at 5 feet bgs, backfille bentonite, and capped with concrete up	
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borning it	dentification:	B6				Page 1 of 7
Boring Location:		Southeast exterior of subject property			Date Started:	10/7/2021
Site Address:				th Avenue	Date Completed:	10/7/2021
				lifornia 92130	Depth to Groundwater (feet bgs):	NA
	Number:	21-337			Field Technician:	S. Hanrahan
Drill Rig	Туре:	Geopr	obe mo	del 420MT	PARTNE	R
	g Equipment:		e Liner	s, Nylaflow Tubing	2154 Torrance Boule	
1	e Diameter:	1.5"		Description	Torrance, California S	0504
Depth	Sample	PID	USCS	<b>Description</b> Reddish brown, damp, fine to medium grained silty	Notes	
1	B6-1	0.0	SM	sand Reddish brown, damp, fine grained sand with grey	3" Asphalt at surface	
2	B6-2	0.0	SC	clays		
3						
4						
5	B6-5	0.0	CL	Brown, damp sandy clay		
6					Boring terminated at 5 feet bgs, backfille bentonite, and capped with concrete up	
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**APPENDIX B: LABORATORY ANALYTICAL REPORTS** 



# SunStar – Laboratories, Inc.

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

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

13 October 2021

Hunter White Partner Engineering & Science, Inc.--Tor 2154 Torrance Blvd., Suite 200 Torrance, CA 90501 RE: 3774 & 3780 Fifth Ave

Enclosed are the results of analyses for samples received by the laboratory on 10/08/21 17:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi Project Manager

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

Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B3-2	T213065-02	Soil	10/07/21 10:00	10/08/21 17:25
B4-5	T213065-06	Soil	10/07/21 10:30	10/08/21 17:25
B5-2	T213065-08	Soil	10/07/21 11:33	10/08/21 17:25
B6-5	T213065-12	Soil	10/07/21 12:20	10/08/21 17:25

SunStar Laboratories, Inc.

Mike Jaroudi, Project Manager

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

Partner Engineering & Science, Inc Tor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

#### **DETECTIONS SUMMARY**

Sample ID: B3-2	Laborato	ory ID:	T213065-02		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Barium	110	1.0	mg/kg	EPA 6010b	
Chromium	8.2	2.0	mg/kg	EPA 6010b	
Cobalt	5.9	2.0	mg/kg	EPA 6010b	
Copper	21	1.0	mg/kg	EPA 6010b	
Lead	69	3.0	mg/kg	EPA 6010b	
Nickel	3.7	2.0	mg/kg	EPA 6010b	
Vanadium	33	5.0	mg/kg	EPA 6010b	
Zinc	97	1.0	mg/kg	EPA 6010b	

Sample ID: B4-5	Laborator	ry ID:	T213065-06		
	F	Reporting			
Analyte	Result	Limit	Units	Method	Notes
Barium	110	1.0	mg/kg	EPA 6010b	
Chromium	11	2.0	mg/kg	EPA 6010b	
Cobalt	3.4	2.0	mg/kg	EPA 6010b	
Copper	4.0	1.0	mg/kg	EPA 6010b	
Nickel	3.2	2.0	mg/kg	EPA 6010b	
Vanadium	29	5.0	mg/kg	EPA 6010b	
Zinc	13	1.0	mg/kg	EPA 6010b	

Sample ID: B5-2	Laboratory ID:	T213065-08		
	Reporting	5		
Analyte	Result Limi	t Units	Method	Notes
Barium	<b>140</b> 1.	) mg/kg	EPA 6010b	
Chromium	<b>6.3</b> 2.	) mg/kg	EPA 6010b	
Cobalt	5.4 2.	) mg/kg	EPA 6010b	
Copper	<b>2.0</b> 1.	) mg/kg	EPA 6010b	
Nickel	<b>2.9</b> 2.1	) mg/kg	EPA 6010b	
Vanadium	17 5.	) mg/kg	EPA 6010b	
Zinc	<b>8.3</b> 1.	) mg/kg	EPA 6010b	

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Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

Sample ID: B6-5	Laboratory ID	:	T213065-12		
	Repor	ting			
Analyte	Result L	imit	Units	Method	Notes
Barium	130	1.0	mg/kg	EPA 6010b	
Chromium	10	2.0	mg/kg	EPA 6010b	
Copper	3.4	1.0	mg/kg	EPA 6010b	
Nickel	2.6	2.0	mg/kg	EPA 6010b	
Vanadium	28	5.0	mg/kg	EPA 6010b	
Zinc	11	1.0	mg/kg	EPA 6010b	

SunStar Laboratories, Inc.

Mike Jaroudi, Project Manager

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501		<b>Reported</b> : 10/13/21 16							
		T213(	B3-2 065-02 (So	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Extractable Petroleum Hydrocarbons by 8	015B								
C6-C12 (GRO)	ND	10	mg/kg	1	1101130	10/11/21	10/13/21	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		104 %	65-1	135	"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	1101127	10/11/21	10/12/21	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	110	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	10/12/21	"	
Cadmium	ND	2.0	"	"	"	"	10/12/21	"	
Chromium	8.2	2.0	"	"	"	"	"	"	
Cobalt	5.9	2.0	"	"	"	"		"	
Copper	21	1.0	"	"	"	"	"	"	
Lead	69	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	3.7	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"		"	"	"	"	
Thallium	ND	5.0	"	"	"	"	"	"	
Vanadium	33	5.0	"	"	"	"	"	"	
Zinc	97	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	1101126	10/11/21	10/12/21	EPA 7471A Soil	

SunStar Laboratories, Inc.

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200		Proje Project Numb		2 3780 Fifth 5.2	Ave			Reported:		
Torrance CA, 90501		Project Manag	ger: Hunter	White				10/13/21 16:	06	
			B3-2							
			65-02 (So	oil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar L	aboratori	es, Inc.						
Volatile Organic Compounds by EPA Metl	10d 8260B									
Bromobenzene	ND	0.0021	mg/kg	1	1101138	10/11/21	10/12/21	EPA 8260B/5035		
Bromochloromethane	ND	0.0021	"	"	"	"	"			
Bromodichloromethane	ND	0.0021	"	"	"	"	"			
Bromoform	ND	0.0021	"	"	"	"	"			
Bromomethane	ND	0.0021	"	"	"	"	"	"		
n-Butylbenzene	ND	0.0021	"	"	"	"	"	"		
sec-Butylbenzene	ND	0.0021	"	"	"	"	"			
tert-Butylbenzene	ND	0.0021	"	"	"	"	"			
Carbon tetrachloride	ND	0.0021	"	"	"	"	"	"		
Chlorobenzene	ND	0.0021	"	"	"	"	"	"		
Chloroethane	ND	0.0021	"	"	"	"	"	"		
Chloroform	ND	0.0021	"	"	"	"	"			
Chloromethane	ND	0.0021	"	"	"	"	"			
2-Chlorotoluene	ND	0.0021	"	"	"	"	"			
4-Chlorotoluene	ND	0.0021	"	"	"	"	"	"		
Dibromochloromethane	ND	0.0021	"	"	"	"	"	"		
1,2-Dibromo-3-chloropropane	ND	0.0042	"	"	"	"	"	"		
1,2-Dibromoethane (EDB)	ND	0.0021	"	"	"	"	"	"		
Dibromomethane	ND	0.0021	"	"	"	"	"	"		
1,2-Dichlorobenzene	ND	0.0021	"	"	"	"	"			
1,3-Dichlorobenzene	ND	0.0021	"	"	"	"	"	"		
1,4-Dichlorobenzene	ND	0.0021	"	"	"	"	"	"		
Dichlorodifluoromethane	ND	0.0021	"	"	"	"	"	"		
1,1-Dichloroethane	ND	0.0021	"	"	"	"	"			
1,2-Dichloroethane	ND	0.0021	"	"	"	"	"			
1,1-Dichloroethene	ND	0.0021	"	"	"	"	"			
cis-1,2-Dichloroethene	ND	0.0021	"	"	"	"	"			
trans-1,2-Dichloroethene	ND	0.0021	"	"	"	"	"			
1,2-Dichloropropane	ND	0.0021	"	"	"	"	"			
1,3-Dichloropropane	ND	0.0021	"	"	"		"			
2,2-Dichloropropane	ND	0.0021	"	"	"	"	"	"		

SunStar Laboratories, Inc.

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501	ect: 3774 & per: 328625 ger: Hunter		Ave			<b>Reported:</b> 10/13/21 16:06			
		T010	B3-2	<b>.</b>					
		12130	)65-02 (So	11)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Volatile Organic Compounds by EPA Meth	10d 8260B								
1,1-Dichloropropene	ND	0.0021	mg/kg	1	1101138	10/11/21	10/12/21	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	0.0021	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.0021	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.0021	"	"	"	"	"	"	
Isopropylbenzene	ND	0.0021	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.0021	"	"	"	"	"	"	
Methylene chloride	ND	0.0084	"	"	"	"	"	"	
Naphthalene	ND	0.0021	"	"	"	"	"	"	
n-Propylbenzene	ND	0.0021	"	"	"	"	"	"	
Styrene	ND	0.0021	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.0021	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.0021	"	"	"	"	"	"	
Tetrachloroethene	ND	0.0021	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.0021	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.0021	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.0021	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.0021	"	"	"	"	"	"	
Trichloroethene	ND	0.0021	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.0021	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.0021	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0021	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0021	"	"	"	"	"	"	
Vinyl chloride	ND	0.0021	"	"	"	"	"	"	
Benzene	ND	0.0021	"	"		"	"	"	
Toluene	ND	0.0021	"	"		"	"	"	
Ethylbenzene	ND	0.0021	"	"		"	"	"	
m,p-Xylene	ND	0.0042	"	"		"	"	"	
p-Xylene	ND	0.0021	"	"		"	"	"	
Surrogate: Toluene-d8		103 %	76.1-	-127	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	85.9-		"	"	"	"	
Surrogate: Dibromofluoromethane		101 %	77.8-		"	"	"	"	

SunStar Laboratories, Inc.

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

Partner Engineering & Science, Inc Tor	Partner Engineering & Science, IncTor Project: 3774 & 3780 Fifth Ave											
2154 Torrance Blvd., Suite 200	]	Project Numb	er: 32862	5.2				Reported				
Torrance CA, 90501	F	roject Manag	ger: Hunter	White				10/13/21 16	:06			
			B3-2									
		T213(	)65-02 (Sc	oil)								
Analista	Derrelt	Reporting	T. ite	Dilution	Detab	Durana	A	Mada a	Nataa			
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
		SunStar L	aboratori	es, Inc.								
Semivolatile Organic Compounds by EPA		2.0	/1	10	1101120	10/11/01	10/12/21	ED4 00500				
Carbazole	ND	3.0	mg/kg "	10	1101139	10/11/21	10/12/21	EPA 8270C	R-07			
Phenol	ND	10	"				"	"	R-07			
Aniline	ND	3.0	"				"	"	R-07			
2-Chlorophenol	ND	10	"					"	R-07			
1,4-Dichlorobenzene	ND	3.0	"						R-07			
N-Nitrosodi-n-propylamine	ND	3.0	"						R-07			
1,2,4-Trichlorobenzene	ND	3.0	"						R-07			
4-Chloro-3-methylphenol	ND	10	"				"	"	R-07			
2-Methylnaphthalene	ND	3.0							R-07			
1-Methylnaphthalene	ND	3.0	"						R-07			
Acenaphthene	ND	3.0					"	"	R-07			
4-Nitrophenol	ND	10	"	"	"	"	"	"	R-07			
2,4-Dinitrotoluene	ND	3.0	"	"	"	"	"	"	R-07			
Pentachlorophenol	ND	10	"	"	"	"	"	"	R-07			
Pyrene	ND	3.0	"	"	"	"	"	"	R-07			
Acenaphthylene	ND	3.0	"	"	"	"	"	"	R-07			
Anthracene	ND	3.0	"	"	"	"	"	"	R-07			
Benzo (a) anthracene	ND	3.0	"	"	"	"	"	"	R-07			
Benzo (b) fluoranthene	ND	3.0	"	"	"	"	"	"	R-07			
Benzo (k) fluoranthene	ND	3.0	"	"	"	"	"	"	R-07			
Benzo (g,h,i) perylene	ND	10	"	"	"	"	"	"	R-07			
Benzo (a) pyrene	ND	3.0	"	"	"	"	"	"	R-07			
Benzyl alcohol	ND	3.0	"	"	"	"	"	"	R-07			
Bis(2-chloroethoxy)methane	ND	3.0	"	"	"	"	"	"	R-07			
Bis(2-chloroethyl)ether	ND	3.0	"	"	"	"	"	"	R-07			
Bis(2-chloroisopropyl)ether	ND	3.0	"	"	"	"	"	"	R-07			
Bis(2-ethylhexyl)phthalate	ND	3.0	"	"	"	"	"	"	R-07			
4-Bromophenyl phenyl ether	ND	3.0	"	"	"	"	"	"	R-07			
Butyl benzyl phthalate	ND	3.0	"	"		"	"	"	R-07			
4-Chloroaniline	ND	3.0	"	"		"	"	"	R-07			
2-Chloronaphthalene	ND	3.0	"	"		"	"	"	<b>R-07</b>			
4-Chlorophenyl phenyl ether	ND	3.0	"	"	"	"	"	"	R-07			

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501		Proje Project Numb roject Manag				<b>Reported:</b> 10/13/21 16:06			
		T213(	B3-2 )65-02 (So	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Semivolatile Organic Compounds by EPA	Method 8270C								
Chrysene	ND	3.0	mg/kg	10	1101139	10/11/21	10/12/21	EPA 8270C	R-07
Dibenz (a,h) anthracene	ND	3.0	"	"	"	"	"	"	R-07
Dibenzofuran	ND	3.0	"	"	"	"	"	"	R-07
Di-n-butyl phthalate	ND	3.0	"	"	"	"	"	"	R-07
1,2-Dichlorobenzene	ND	3.0	"	"	"	"	"	"	R-07
1,3-Dichlorobenzene	ND	3.0	"	"	"	"	"	"	R-07
2,4-Dichlorophenol	ND	10	"	"	"	"	"	"	R-07
Diethyl phthalate	ND	3.0	"	"	"	"	"	"	R-07
2,4-Dimethylphenol	ND	10	"	"	"	"	"	"	R-07
Dimethyl phthalate	ND	3.0	"	"	"	"	"	"	R-07
4,6-Dinitro-2-methylphenol	ND	10	"	"	"	"	"	"	R-07
2,4-Dinitrophenol	ND	10	"	"	"	"	"	"	R-07
2,6-Dinitrotoluene	ND	10	"	"	"	"	"	"	R-07
Di-n-octyl phthalate	ND	3.0	"	"	"	"	"	"	R-07
Fluoranthene	ND	3.0	"	"	"	"	"	"	R-07
Fluorene	ND	3.0	"	"	"	"	"	"	R-07
Hexachlorobenzene	ND	15	"	"	"	"	"	"	R-07
Hexachlorobutadiene	ND	3.0	"	"	"	"	"	"	R-07
Hexachlorocyclopentadiene	ND	10	"	"	"	"	"	"	R-07
Hexachloroethane	ND	3.0	"	"	"	"	"	"	R-07
Indeno (1,2,3-cd) pyrene	ND	3.0	"	"	"	"	"	"	R-07
Isophorone	ND	3.0	"	"	"	"	"	"	R-07
2-Methylphenol	ND	10	"	"	"	"	"	"	R-07
4-Methylphenol	ND	10	"	"	"	"	"	"	R-07
Naphthalene	ND	3.0	"	"	"	"	"	"	R-07
2-Nitroaniline	ND	3.0	"	"	"	"	"	"	R-07
3-Nitroaniline	ND	3.0	"		"	"	"		R-07
4-Nitroaniline	ND	3.0	"	"	"	"	"		R-07
Nitrobenzene	ND	10	"	"	"	"	"		R-07
2-Nitrophenol	ND	10	"	"	"	"	"		R-07
N-Nitrosodimethylamine	ND	3.0	"	"	"	"	"		R-07
N-Nitrosodiphenylamine	ND	3.0	"	"	"	"	"	"	R-07

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501		Proje Project Numb Project Manag	ber: 32862		Ave			<b>Reported:</b> 10/13/21 16:	
		T213(	B3-2 )65-02 (So	il)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Semivolatile Organic Compounds by EPA	Method 8270C								
2,3,5,6-Tetrachlorophenol	ND	3.0	mg/kg	10	1101139	10/11/21	10/12/21	EPA 8270C	R-07
2,3,4,6-Tetrachlorophenol	ND	3.0	"	"	"	"	"	"	R-07
Phenanthrene	ND	3.0	"	"	"	"	"	"	R-07
Azobenzene	ND	3.0	"	"	"	"	"	"	R-07
Pyridine	ND	3.0	"	"	"	"	"	"	R-07
2,4,5-Trichlorophenol	ND	10	"	"	"	"	"	"	R-07
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	R-07
Surrogate: 2-Fluorophenol		71.3 %	15-	121	"	"	"	"	R-07
Surrogate: Phenol-d6		85.6 %	24-	113	"	"	"	"	R-07
Surrogate: Nitrobenzene-d5		74.2 %	21.3	-119	"	"	"	"	R-07
Surrogate: 2-Fluorobiphenyl		81.6 %	32.4	-102	"	"	"	"	R-07
Surrogate: 2,4,6-Tribromophenol		72.9 %	18.1	-105	"	"	"	"	R-07
Surrogate: Terphenyl-dl4		77.2 %	29.1	-130	"	"	"	"	R-07

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Mike Jaroudi, Project Manager

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501	Project: 3774 & 3780 Fifth Ave Project Number: 328625.2 Project Manager: Hunter White								:06
			B4-5 )65-06 (Sa	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Extractable Petroleum Hydrocarbons by 8	015B								
C6-C12 (GRO)	ND	10	mg/kg	1	1101130	10/11/21	10/13/21	EPA 8015B	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		88.0 %	65-	135	"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	1101127	10/11/21	10/12/21	EPA 6010b	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	110	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	10/12/21	"	
Cadmium	ND	2.0	"	"	"	"	10/12/21	"	
Chromium	11	2.0	"	"	"	"	"	"	
Cobalt	3.4	2.0	"	"	"	"	"	"	
Copper	4.0	1.0	"	"	"	"	"	"	
Lead	ND	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	3.2	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	5.0	"		"	"	"	"	
Vanadium	29	5.0	"		"	"	"	"	
Zinc	13	1.0	"	"	"	"	"	"	
Cold Vapor Extraction EPA 7470/7471									
Mercury	ND	0.10	mg/kg	1	1101126	10/11/21	10/12/21	EPA 7471A Soil	

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501		Proje Project Numb Project Manag	oer: 328625		Ave			<b>Reported:</b> 10/13/21 16:	
			B4-5 065-06 (So	il)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.		1	<u> </u>		
Volatile Organic Compounds by EPA Meth	10d 8260B								
Bromobenzene	ND	0.0018	mg/kg	1	1101138	10/11/21	10/12/21	EPA 8260B/5035	
Bromochloromethane	ND	0.0018	"	"	"	"	"	"	
Bromodichloromethane	ND	0.0018	"	"	"	"	"	"	
Bromoform	ND	0.0018	"	"	"	"	"	"	
Bromomethane	ND	0.0018	"	"	"	"	"		
n-Butylbenzene	ND	0.0018	"	"	"	"	"		
sec-Butylbenzene	ND	0.0018	"	"	"	"	"	"	
ert-Butylbenzene	ND	0.0018	"	"	"	"	"		
Carbon tetrachloride	ND	0.0018	"	"	"	"	"	"	
Chlorobenzene	ND	0.0018	"	"	"	"	"	"	
Chloroethane	ND	0.0018	"	"	"	"	"	"	
Chloroform	ND	0.0018	"	"	"	"	"	"	
Chloromethane	ND	0.0018	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.0018	"	"	"	"	"		
4-Chlorotoluene	ND	0.0018	"	"	"	"	"	"	
Dibromochloromethane	ND	0.0018	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	0.0037	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0018	"	"	"	"	"		
Dibromomethane	ND	0.0018	"	"	"	"	"		
1,2-Dichlorobenzene	ND	0.0018	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.0018	"	"	"	"	"		
1,4-Dichlorobenzene	ND	0.0018	"	"	"	"	"		
Dichlorodifluoromethane	ND	0.0018	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.0018	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0018	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.0018	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.0018	"	"	"	"	"	"	
rans-1,2-Dichloroethene	ND	0.0018	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.0018	"	"	"	"	"		
1,3-Dichloropropane	ND	0.0018	"	"	"	"	"		
2,2-Dichloropropane	ND	0.0018		"	"				

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200		Proje Project Numb	Reported:						
Torrance CA, 90501		Project Manag						10/13/21 16:	
			B4-5						
			65-06 (So	il)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Volatile Organic Compounds by EPA Meth	nod 8260B								
1,1-Dichloropropene	ND	0.0018	mg/kg	1	1101138	10/11/21	10/12/21	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	0.0018	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.0018	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.0018	"	"	"	"	"	"	
Isopropylbenzene	ND	0.0018	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.0018	"	"	"	"	"	"	
Methylene chloride	ND	0.0073	"	"	"	"	"	"	
Naphthalene	ND	0.0018	"	"	"	"	"	"	
n-Propylbenzene	ND	0.0018	"	"	"	"	"	"	
Styrene	ND	0.0018	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.0018	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.0018	"	"	"	"	"	"	
Fetrachloroethene	ND	0.0018	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.0018	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.0018	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.0018	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.0018	"	"	"	"	"	"	
Frichloroethene	ND	0.0018	"	"	"	"	"	"	
Frichlorofluoromethane	ND	0.0018	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.0018	"	"	"	"	"	"	
,3,5-Trimethylbenzene	ND	0.0018	"	"	"	"	"	"	
,2,4-Trimethylbenzene	ND	0.0018	"	"	"	"	"	"	
Vinyl chloride	ND	0.0018	"	"	"	"	"	"	
Benzene	ND	0.0018	"	"	"	"	"	"	
Toluene	ND	0.0018	"	"	"	"	"	"	
Ethylbenzene	ND	0.0018	"	"	"	"	"	"	
n,p-Xylene	ND	0.0037	"	"	"	"	"	"	
p-Xylene	ND	0.0018	"	"	"	"	"	"	
Surrogate: Toluene-d8		101 %	76.1·	-127	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	85.9		"	"	"	"	
Surrogate: Dibromofluoromethane		102 %	77.8-		"	"	"	"	

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Partner Engineering & Science, IncTor	_	Proje								
2154 Torrance Blvd., Suite 200		Project Numb						<b>Reported:</b> 10/13/21 16:06		
Torrance CA, 90501	Р	roject Manag	er: Hunter	White						
			B4-5							
		T2130	)65-06 (So	il)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
		SunStar L				1				
Semivolatile Organic Compounds by EPA	Method 8270C									
Carbazole	ND	0.30	mg/kg	1	1101139	10/11/21	10/12/21	EPA 8270C		
Phenol	ND	1.0	"	"	"	"	"	"		
Aniline	ND	0.30	"	"	"	"	"			
2-Chlorophenol	ND	1.0	"	"	"	"	"	"		
1,4-Dichlorobenzene	ND	0.30	"	"	"	"	"	"		
N-Nitrosodi-n-propylamine	ND	0.30	"	"	"	"	"	"		
1,2,4-Trichlorobenzene	ND	0.30		"	"	"	"	"		
4-Chloro-3-methylphenol	ND	1.0		"	"	"	"	"		
2-Methylnaphthalene	ND	0.30		"	"	"	"	"		
l-Methylnaphthalene	ND	0.30	"	"	"	"	"			
Acenaphthene	ND	0.30	"	"	"	"	"	"		
4-Nitrophenol	ND	1.0	"	"	"	"	"	"		
2,4-Dinitrotoluene	ND	0.30	"	"	"	"	"	"		
Pentachlorophenol	ND	1.0	"	"	"	"	"	"		
Pyrene	ND	0.30	"	"	"	"	"	"		
Acenaphthylene	ND	0.30	"	"	"	"	"	"		
Anthracene	ND	0.30	"	"	"	"	"	"		
Benzo (a) anthracene	ND	0.30	"	"	"	"	"	"		
Benzo (b) fluoranthene	ND	0.30	"	"	"	"	"	"		
Benzo (k) fluoranthene	ND	0.30	"	"	"	"	"	"		
Benzo (g,h,i) perylene	ND	1.0	"	"	"	"	"	"		
Benzo (a) pyrene	ND	0.30		"	"	"	"			
Benzyl alcohol	ND	0.30		"	"	"	"			
Bis(2-chloroethoxy)methane	ND	0.30		"	"	"	"			
Bis(2-chloroethyl)ether	ND	0.30		"	"	"	"			
Bis(2-chloroisopropyl)ether	ND	0.30		"	"	"	"			
Bis(2-ethylhexyl)phthalate	ND	0.30		"	"	"	"			
4-Bromophenyl phenyl ether	ND	0.30		"	"	"	"			
Butyl benzyl phthalate	ND	0.30		"	"	"	"			
4-Chloroaniline	ND	0.30		"	"	"	"			
2-Chloronaphthalene	ND	0.30		"	"	"	"			
4-Chlorophenyl phenyl ether	ND	0.30		"	"	"	"			

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PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501		Proje Project Numb Project Manag		<b>Reported:</b> 10/13/21 16:06					
		T213(	B4-5 )65-06 (So	il)					
		Reporting		-					
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Semivolatile Organic Compounds by EPA	Method 8270C								
Chrysene	ND	0.30	mg/kg	1	1101139	10/11/21	10/12/21	EPA 8270C	
Dibenz (a,h) anthracene	ND	0.30	"	"	"	"	"	"	
Dibenzofuran	ND	0.30	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	0.30	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.30	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.30	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	1.0	"	"	"	"	"	"	
Diethyl phthalate	ND	0.30	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	1.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	0.30	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	1.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	1.0	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	1.0	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	0.30	"	"	"	"	"	"	
Fluoranthene	ND	0.30	"	"	"	"	"	"	
Fluorene	ND	0.30	"	"	"	"	"	"	
Hexachlorobenzene	ND	1.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.30	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	1.0	"	"	"		"	"	
Hexachloroethane	ND	0.30	"	"	"		"	"	
Indeno (1,2,3-cd) pyrene	ND	0.30	"	"	"		"	"	
(sophorone	ND	0.30	"				"		
2-Methylphenol	ND	1.0	"				"		
4-Methylphenol	ND	1.0	"				"		
Naphthalene	ND	0.30	"			"	"		
2-Nitroaniline	ND	0.30	"	"		"	"		
3-Nitroaniline	ND	0.30	"			"	"		
4-Nitroaniline	ND	0.30	"		"	"	"		
Nitrobenzene	ND	1.0	"	"		"	"		
2-Nitrophenol	ND	1.0	"	"		"	"		
N-Nitrosodimethylamine	ND	0.30	"	"		"	"	"	
N-Nitrosodiphenylamine	ND	0.30	"					"	

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501		<b>Reported:</b> 10/13/21 16							
			B4-5 )65-06 (So	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar Laboratories, Inc.							
Semivolatile Organic Compounds by EPA	Method 8270C	thod 8270C							
2,3,5,6-Tetrachlorophenol	ND	0.30	mg/kg	1	1101139	10/11/21	10/12/21	EPA 8270C	
2,3,4,6-Tetrachlorophenol	ND	0.30	"	"	"	"	"	"	
Phenanthrene	ND	0.30	"	"	"	"	"	"	
Azobenzene	ND	0.30	"	"	"	"	"	"	
Pyridine	ND	0.30	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.0	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1.0	"	"	"	"	"		
Surrogate: 2-Fluorophenol		88.3 %	15-	121	"	"	"	"	
Surrogate: Phenol-d6		102 %	24-	113	"	"	"	"	
Surrogate: Nitrobenzene-d5		97.2 %	21.3-119		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		94.9 %	32.4-102		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		103 %	18.1	-105	"	"	"	"	
Surrogate: Terphenyl-dl4		90.5 %	29.1	-130	"	"	"	"	

SunStar Laboratories, Inc.

Mike Jaroudi, Project Manager

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

Partner Engineering & Science, IncTor										
2154 Torrance Blvd., Suite 200		Project Numb	er: 328625	5.2				Reported:		
Torrance CA, 90501		Project Manag	ger: Hunter	White				10/13/21 16	:06	
			B5-2							
		T213(	)65-08 (So	il)						
		Reporting								
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar L	aboratori	es, Inc.						
Extractable Petroleum Hydrocarbons by 8	015B									
C6-C12 (GRO)	ND	10	mg/kg	1	1101130	10/11/21	10/13/21	EPA 8015B		
C13-C28 (DRO)	ND	10	"	"	"	"	"	"		
C29-C40 (MORO)	ND	10	"	"	"	"	"	"		
Surrogate: p-Terphenyl		88.6 %	65-1	135	"	"	"	"		
Metals by EPA 6010B										
Antimony	ND	3.0	mg/kg	1	1101127	10/11/21	10/12/21	EPA 6010b		
Silver	ND	2.0	"	"	"	"	"	"		
Arsenic	ND	5.0	"	"	"	"	"	"		
Barium	140	1.0	"	"	"	"	"	"		
Beryllium	ND	1.0	"	"	"	"	"	"		
Cadmium	ND	2.0	"	"	"	"	"	"		
Chromium	6.3	2.0	"	"	"	"	"	"		
Cobalt	5.4	2.0	"	"	"	"	"	"		
Copper	2.0	1.0	"	"	"	"	"	"		
Lead	ND	3.0	"	"	"	"	"	"		
Molybdenum	ND	5.0	"	"	"	"	"	"		
Nickel	2.9	2.0	"	"	"	"	"	"		
Selenium	ND	5.0	"	"	"	"	"	"		
Thallium	ND	5.0	"	"	"	"	"	"		
Vanadium	17	5.0	"	"	"	"	"	"		
Zinc	8.3	1.0	"	"		"	"	"		
Cold Vapor Extraction EPA 7470/7471										
Mercury	ND	0.10	mg/kg	1	1101126	10/11/21	10/12/21	EPA 7471A Soil		

SunStar Laboratories, Inc.

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200		Project Numb	oer: 32862		Ave		<b>Reported:</b>		
Torrance CA, 90501		Project Manag	ger: Hunter	White				10/13/21 16:	06
			B5-2 )65-08 (So	sil)					
			05-00 (50	,iii)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Volatile Organic Compounds by EPA Meth	10d 8260B								
Bromobenzene	ND	0.0019	mg/kg	1	1101138	10/11/21	10/12/21	EPA 8260B/5035	
Bromochloromethane	ND	0.0019	"	"	"	"	"	"	
Bromodichloromethane	ND	0.0019	"		"	"	"		
Bromoform	ND	0.0019	"	"	"	"	"	"	
Bromomethane	ND	0.0019	"	"	"	"	"	"	
n-Butylbenzene	ND	0.0019	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.0019	"	"	"	"	"	"	
ert-Butylbenzene	ND	0.0019	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.0019	"	"	"	"	"		
Chlorobenzene	ND	0.0019	"	"	"	"	"	"	
Chloroethane	ND	0.0019	"	"	"	"	"	"	
Chloroform	ND	0.0019	"	"	"	"	"	"	
Chloromethane	ND	0.0019	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.0019	"	"	"	"	"		
4-Chlorotoluene	ND	0.0019	"	"	"	"	"		
Dibromochloromethane	ND	0.0019	"	"	"	"	"		
1,2-Dibromo-3-chloropropane	ND	0.0038	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0019	"	"	"	"	"		
Dibromomethane	ND	0.0019	"	"	"	"	"		
1,2-Dichlorobenzene	ND	0.0019	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.0019	"	"	"	"	"		
1,4-Dichlorobenzene	ND	0.0019	"	"	"	"	"		
Dichlorodifluoromethane	ND	0.0019	"	"	"	"	"		
1,1-Dichloroethane	ND	0.0019	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0019	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.0019	"	"	"	"	"		
cis-1,2-Dichloroethene	ND	0.0019	"	"	"	"	"	"	
rans-1,2-Dichloroethene	ND	0.0019	"	"	"	"	"		
1,2-Dichloropropane	ND	0.0019	"	"	"	"	"		
1,3-Dichloropropane	ND	0.0019	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.0019	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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

Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501		Proje Project Numb Project Manag	er: 328625		Ave			<b>Reported:</b> 10/13/21 16	
			B5-2						
		T2130	65-08 (So	il)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratorio	es, Inc.					
Volatile Organic Compounds by EPA Meth	10d 8260B								
l,1-Dichloropropene	ND	0.0019	mg/kg	1	1101138	10/11/21	10/12/21	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	0.0019	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.0019	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.0019	"	"	"	"	"	"	
Isopropylbenzene	ND	0.0019	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.0019	"	"	"	"	"	"	
Methylene chloride	ND	0.0075	"	"	"	"	"	"	
Naphthalene	ND	0.0019	"	"	"	"	"	"	
n-Propylbenzene	ND	0.0019	"	"	"	"	"	"	
Styrene	ND	0.0019	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.0019	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.0019	"	"	"	"	"	"	
Tetrachloroethene	ND	0.0019	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.0019	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.0019	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.0019	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.0019	"	"	"	"	"	"	
Trichloroethene	ND	0.0019	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.0019	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.0019	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0019	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0019	"	"	"	"	"	"	
Vinyl chloride	ND	0.0019	"	"	"	"	"	"	
Benzene	ND	0.0019	"	"	"	"	"	"	
Toluene	ND	0.0019	"	"		"	"	"	
Ethylbenzene	ND	0.0019	"	"		"	"	"	
m,p-Xylene	ND	0.0038	"	"		"	"	"	
p-Xylene	ND	0.0019	"	"		"	"	"	
Surrogate: Toluene-d8		103 %	76.1-	127	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	85.9-		"	"	"	"	
Surrogate: Dibromofluoromethane		103 %	77.8-		"	"	"	"	

SunStar Laboratories, Inc.

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200	ם	Proje roject Numb	ect: 3774 &			Reported:				
Torrance CA, 90501		roject Numb oject Manag						10/13/21 16:06		
1011ance CA, 20201	PI	ojeci manag	ser. muniter	w litte				10/15/21 10	.00	
			B5-2							
		T213(	)65-08 (So	oil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar L			Durin	Treparea	1 1141 9 200			
Semivolatile Organic Compounds by EPA		Sunstar L	abbi atbi i	cs, mc.						
Carbazole	ND	0.30	mg/kg	1	1101139	10/11/21	10/12/21	EPA 8270C		
Phenol	ND	1.0	"	"	"	"	"	"		
Aniline	ND	0.30	"	"	"	"	"	"		
2-Chlorophenol	ND	1.0	"	"	"	"	"	"		
1,4-Dichlorobenzene	ND	0.30	"	"	"	"	"	"		
N-Nitrosodi-n-propylamine	ND	0.30	"	"	"	"	"	"		
1,2,4-Trichlorobenzene	ND	0.30	"	"	"	"	"	"		
I-Chloro-3-methylphenol	ND	1.0	"	"	"	"	"	"		
l-Methylnaphthalene	ND	0.30	"	"	"	"	"	"		
2-Methylnaphthalene	ND	0.30	"	"	"	"	"	"		
Acenaphthene	ND	0.30	"	"	"	"	"	"		
4-Nitrophenol	ND	1.0	"	"	"	"	"	"		
2,4-Dinitrotoluene	ND	0.30	"	"	"	"	"	"		
Pentachlorophenol	ND	1.0	"	"	"	"	"	"		
Pyrene	ND	0.30	"	"	"	"	"	"		
Acenaphthylene	ND	0.30	"	"	"	"	"	"		
Anthracene	ND	0.30	"	"	"	"	"	"		
Benzo (a) anthracene	ND	0.30	"	"	"	"	"	"		
Benzo (b) fluoranthene	ND	0.30	"	"	"	"	"	"		
Benzo (k) fluoranthene	ND	0.30	"	"	"	"	"	"		
Benzo (g,h,i) perylene	ND	1.0	"	"	"	"	"	"		
Benzo (a) pyrene	ND	0.30	"	"	"	"	"	"		
Benzyl alcohol	ND	0.30	"	"	"	"	"	"		
Bis(2-chloroethoxy)methane	ND	0.30	"	"	"	"	"			
Bis(2-chloroethyl)ether	ND	0.30	"	"	"	"	"	"		
Bis(2-chloroisopropyl)ether	ND	0.30	"	"	"	"	"			
Bis(2-ethylhexyl)phthalate	ND	0.30	"	"	"	"	"	"		
4-Bromophenyl phenyl ether	ND	0.30	"	"	"	"	"			
Butyl benzyl phthalate	ND	0.30	"	"	"	"	"			
I-Chloroaniline	ND	0.30	"	"	"	"	"	"		
2-Chloronaphthalene	ND	0.30	"		"	"	"	"		
I-Chlorophenyl phenyl ether	ND	0.30	"	"	"	"	"			

SunStar Laboratories, Inc.

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

Partner Engineering & Science, Inc Tor		-		& 3780 Fifth	Ave					
2154 Torrance Blvd., Suite 200	Р	roject Numb	er: 32862	5.2				Reported:		
Torrance CA, 90501	Pı	roject Manag	ger: Hunter	White				10/13/21 16	:06	
			B5-2							
		T213(	)65-08 (Sa	oil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar L	aboratori	es, Inc.						
Semivolatile Organic Compounds by EPA	Method 8270C									
Chrysene	ND	0.30	mg/kg	1	1101139	10/11/21	10/12/21	EPA 8270C		
Dibenz (a,h) anthracene	ND	0.30	"	"	"	"	"	"		
Dibenzofuran	ND	0.30	"	"	"	"	"	"		
Di-n-butyl phthalate	ND	0.30	"	"	"	"	"	"		
1,2-Dichlorobenzene	ND	0.30	"	"	"	"	"	"		
1,3-Dichlorobenzene	ND	0.30	"	"	"	"	"	"		
2,4-Dichlorophenol	ND	1.0	"	"	"	"	"	"		
Diethyl phthalate	ND	0.30	"	"	"	"	"	"		
2,4-Dimethylphenol	ND	1.0	"		"	"	"	"		
Dimethyl phthalate	ND	0.30	"		"	"	"	"		
4,6-Dinitro-2-methylphenol	ND	1.0	"	"	"	"	"	"		
2,4-Dinitrophenol	ND	1.0	"	"	"	"	"	"		
2,6-Dinitrotoluene	ND	1.0	"	"	"	"	"	"		
Di-n-octyl phthalate	ND	0.30	"	"	"	"	"	"		
Fluoranthene	ND	0.30	"		"		"	"		
Fluorene	ND	0.30	"		"		"	"		
Hexachlorobenzene	ND	1.5	"		"		"	"		
Hexachlorobutadiene	ND	0.30	"				"			
Hexachlorocyclopentadiene	ND	1.0	"				"			
Hexachloroethane	ND	0.30	"				"	"		
Indeno (1,2,3-cd) pyrene	ND	0.30	"		"	"	"	"		
Isophorone	ND	0.30	"		"		"	"		
2-Methylphenol	ND	1.0								
	ND	1.0								
4-Methylphenol	ND		"				"			
Naphthalene		0.30	"				"	"		
2-Nitroaniline	ND	0.30			"	"	"	"		
3-Nitroaniline	ND	0.30			"	"	"	"		
4-Nitroaniline	ND	0.30						"		
Nitrobenzene	ND	1.0	"	"	"	"	"			
2-Nitrophenol	ND	1.0	"		"	"	"	"		
N-Nitrosodimethylamine	ND	0.30	"	"	"	"	"	"		
N-Nitrosodiphenylamine	ND	0.30	"	"	"	"	"	"		

SunStar Laboratories, Inc.

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

Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200			Reported:							
Torrance CA, 90501		Project Manag	ger: Hunter	White				10/13/21 16:06		
			B5-2							
		T2130	)65-08 (So	oil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar Laboratories, Inc.								
Semivolatile Organic Compounds by EPA	Method 8270C	lethod 8270C								
2,3,5,6-Tetrachlorophenol	ND	0.30	mg/kg	1	1101139	10/11/21	10/12/21	EPA 8270C		
2,3,4,6-Tetrachlorophenol	ND	0.30	"	"	"	"	"	"		
Phenanthrene	ND	0.30	"	"	"	"	"	"		
Azobenzene	ND	0.30	"	"	"	"	"	"		
2,4,5-Trichlorophenol	ND	1.0	"	"	"	"	"	"		
Pyridine	ND	0.30	"	"	"	"	"	"		
2,4,6-Trichlorophenol	ND	1.0	"	"	"	"	"	"		
Surrogate: 2-Fluorophenol		84.7 %	15-	121	"	"	"	"		
Surrogate: Phenol-d6		97.4 %	24-	113	"	"	"	"		
Surrogate: Nitrobenzene-d5		94.7 %	21.3-119		"	"	"	"		
Surrogate: 2-Fluorobiphenyl		92.3 %	32.4-102		"	"	"	"		
Surrogate: 2,4,6-Tribromophenol		99.8 %	18.1	-105	"	"	"	"		
Surrogate: Terphenyl-dl4		91.2 %	29.1	-130	"	"	"	"		

SunStar Laboratories, Inc.

Mike Jaroudi, Project Manager

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

Partner Engineering & Science, IncTor		Project: 3774 & 3780 Fifth Ave									
2154 Torrance Blvd., Suite 200		Project Numb						Reported			
Torrance CA, 90501		Project Manag	ger: Hunter	White				10/13/21 16	:06		
			B6-5								
		T2130	)65-12 (So	oil)							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
		SunStar L	aboratori	es, Inc.							
Extractable Petroleum Hydrocarbons by 8	015B										
C6-C12 (GRO)	ND	10	mg/kg	1	1101130	10/11/21	10/13/21	EPA 8015B			
C13-C28 (DRO)	ND	10	"	"	"	"	"	"			
C29-C40 (MORO)	ND	10	"	"	"	"	"	"			
Surrogate: p-Terphenyl		106 %	65-	135	"	"	"	"			
Metals by EPA 6010B											
Antimony	ND	3.0	mg/kg	1	1101127	10/11/21	10/12/21	EPA 6010b			
Silver	ND	2.0	"	"	"	"	"	"			
Arsenic	ND	5.0	"	"	"	"	"	"			
Barium	130	1.0	"	"	"	"	"	"			
Beryllium	ND	1.0	"	"	"	"	"	"			
Cadmium	ND	2.0	"	"	"	"	"	"			
Chromium	10	2.0	"	"	"	"	"	"			
Cobalt	ND	2.0	"	"	"	"	"	"			
Copper	3.4	1.0	"	"	"	"	"	"			
Lead	ND	3.0	"	"	"	"	"	"			
Molybdenum	ND	5.0	"	"	"	"	"	"			
Nickel	2.6	2.0	"	"	"	"	"	"			
Selenium	ND	5.0	"	"	"	"	"	"			
Thallium	ND	5.0	"	"	"	"	"	"			
Vanadium	28	5.0	"	"	"	"	"	"			
Zinc	11	1.0	"		"	"	"	"			
Cold Vapor Extraction EPA 7470/7471											
Mercury	ND	0.10	mg/kg	1	1101126	10/11/21	10/12/21	EPA 7471A Soil			

SunStar Laboratories, Inc.

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

Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200		Project: 3774 & 3780 Fifth Ave Project Number: 328625.2							
Torrance CA, 90501		Project Manag	ger: Hunter	White				10/13/21 16:	:06
			B6-5						
		T2130	)65-12 (So	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Volatile Organic Compounds by EPA Meth	nod 8260B								
Bromobenzene	ND	0.0019	mg/kg	1	1101138	10/11/21	10/12/21	EPA 8260B/5035	
Bromochloromethane	ND	0.0019	"	"	"	"	"	"	
Bromodichloromethane	ND	0.0019	"		"	"	"		
Bromoform	ND	0.0019	"	"	"	"	"	"	
Bromomethane	ND	0.0019	"	"	"	"	"	"	
n-Butylbenzene	ND	0.0019	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.0019	"	"	"	"	"	"	
ert-Butylbenzene	ND	0.0019	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.0019	"	"	"	"	"	"	
Chlorobenzene	ND	0.0019	"	"	"	"	"	"	
Chloroethane	ND	0.0019	"	"	"	"	"		
Chloroform	ND	0.0019	"	"	"	"	"	"	
Chloromethane	ND	0.0019	"	"	"	"	"		
2-Chlorotoluene	ND	0.0019	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.0019	"	"	"	"	"	"	
Dibromochloromethane	ND	0.0019	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	0.0037	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0019	"	"	"	"	"	"	
Dibromomethane	ND	0.0019	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.0019	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.0019	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.0019	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.0019	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.0019	"	"	"	"	"		
1,2-Dichloroethane	ND	0.0019	"	"	"	"	"		
1,1-Dichloroethene	ND	0.0019	"	"	"	"	"		
cis-1,2-Dichloroethene	ND	0.0019	"	"	"	"	"	"	
rrans-1,2-Dichloroethene	ND	0.0019	"	"	"	"	"		
1,2-Dichloropropane	ND	0.0019	"	"	"	"	"		
1,3-Dichloropropane	ND	0.0019	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.0019	"	"	"	"	"	"	

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200		Proje Project Numb		z 3780 Fifth	Ave			Reported:	
Torrance CA, 90501		Project Manag						10/13/21 16	
			B6-5 65-12 (So	il)					
		Reporting		<u> </u>					
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Volatile Organic Compounds by EPA Meth									
1,1-Dichloropropene	ND	0.0019	mg/kg	1	1101138	10/11/21	10/12/21	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	0.0019	"	"		"	"	"	
trans-1,3-Dichloropropene	ND	0.0019	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.0019	"	"	"	"	"	"	
lsopropylbenzene	ND	0.0019	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.0019	"	"	"	"	"	"	
Methylene chloride	ND	0.0075	"	"	"	"	"	"	
Naphthalene	ND	0.0019	"	"	"	"	"		
n-Propylbenzene	ND	0.0019	"	"	"	"	"	"	
Styrene	ND	0.0019	"	"	"	"	"		
1,1,2,2-Tetrachloroethane	ND	0.0019	"	"	"	"	"		
1,1,1,2-Tetrachloroethane	ND	0.0019	"	"	"	"	"	"	
Tetrachloroethene	ND	0.0019	"	"	"	"	"		
1,2,3-Trichlorobenzene	ND	0.0019	"	"	"	"	"		
1,2,4-Trichlorobenzene	ND	0.0019	"	"	"	"	"		
1,1,2-Trichloroethane	ND	0.0019	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.0019	"	"	"	"	"	"	
Trichloroethene	ND	0.0019	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.0019	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.0019	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0019	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0019	"	"	"	"	"	"	
Vinyl chloride	ND	0.0019	"	"	"	"	"	"	
Benzene	ND	0.0019	"	"	"	"	"	"	
Toluene	ND	0.0019	"	"		"	"	"	
Ethylbenzene	ND	0.0019	"	"		"	"		
m,p-Xylene	ND	0.0037	"	"		"	"		
p-Xylene	ND	0.0019		"	"	"	"	"	
Surrogate: Toluene-d8		103 %	76.1·	-127	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	85.9		"	"	"	"	
Surrogate: Dibromofluoromethane		104 %	77.8-		"	"	"	"	

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200	p	Proje roject Numb		& 3780 Fifth 5 2			Reported		
Torrance CA, 90501		oject Manag						10/13/21 16	
	11		ger. Trunter	white				10/15/21 10	.00
			B6-5						
		T213(	)65-12 (So	oil)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Semivolatile Organic Compounds by EPA									
Carbazole	ND	0.30	mg/kg	1	1101139	10/11/21	10/12/21	EPA 8270C	
Phenol	ND	1.0	"	"	"	"	"	"	
Aniline	ND	0.30	"		"	"	"	"	
2-Chlorophenol	ND	1.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.30	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	0.30	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.30	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	1.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.30	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.30	"	"	"	"	"	"	
Acenaphthene	ND	0.30	"	"	"	"	"	"	
4-Nitrophenol	ND	1.0	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	0.30	"	"	"	"	"	"	
Pentachlorophenol	ND	1.0	"	"	"	"	"	"	
Pyrene	ND	0.30	"	"	"	"	"	"	
Acenaphthylene	ND	0.30	"	"	"	"	"	"	
Anthracene	ND	0.30	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.30	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.30	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.30	"					"	
Benzo (g,h,i) perylene	ND	1.0	"					"	
Benzo (a) pyrene	ND	0.30	"		"			"	
Benzyl alcohol	ND	0.30	"		"			"	
Bis(2-chloroethoxy)methane	ND	0.30	"		"		"	"	
Bis(2-chloroethyl)ether	ND	0.30	"		"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	0.30	"			"	"	"	
Bis(2-ethylhexyl)phthalate	ND	0.30	"				"	"	
4-Bromophenyl phenyl ether	ND	0.30	"				"	"	
Butyl benzyl phthalate	ND	0.30	"						
4-Chloroaniline	ND	0.30	"				"		
2-Chloronaphthalene	ND	0.30	"			"	"		
			"						
4-Chlorophenyl phenyl ether	ND	0.30	"	"	"	"	"	"	

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Partner Engineering & Science, IncTor Project: 3774 & 3780 Fifth Ave										
2154 Torrance Blvd., Suite 200									Reported:	
Torrance CA, 90501		Project Manager: Hunter White							10/13/21 16:06	
B6-5										
T213065-12 (Soil)										
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
-		SunStar L	aboratori	es. Inc.		-				
Semivolatile Organic Compounds by EPA	Method 8270C									
Chrysene	ND	0.30	mg/kg	1	1101139	10/11/21	10/12/21	EPA 8270C		
Dibenz (a,h) anthracene	ND	0.30	"	"	"	"	"	"		
Dibenzofuran	ND	0.30	"	"	"		"			
Di-n-butyl phthalate	ND	0.30	"	"	"	"	"	"		
1,2-Dichlorobenzene	ND	0.30	"	"	"		"	"		
1,3-Dichlorobenzene	ND	0.30	"	"	"		"	"		
2,4-Dichlorophenol	ND	1.0	"	"	"	"	"	"		
Diethyl phthalate	ND	0.30	"	"	"	"	"	"		
2,4-Dimethylphenol	ND	1.0	"	"	"	"	"	"		
Dimethyl phthalate	ND	0.30	"	"	"	"	"	"		
4,6-Dinitro-2-methylphenol	ND	1.0	"	"	"	"	"	"		
2,4-Dinitrophenol	ND	1.0	"	"	"	"	"	"		
2,6-Dinitrotoluene	ND	1.0	"	"	"	"	"	"		
Di-n-octyl phthalate	ND	0.30	"	"	"	"	"	"		
Fluoranthene	ND	0.30	"	"	"	"	"	"		
Fluorene	ND	0.30	"	"	"	"	"	"		
Hexachlorobenzene	ND	1.5	"	"	"	"	"	"		
Hexachlorobutadiene	ND	0.30	"	"	"	"	"	"		
Hexachlorocyclopentadiene	ND	1.0	"	"	"	"	"	"		
Hexachloroethane	ND	0.30	"	"	"	"	"	"		
Indeno (1,2,3-cd) pyrene	ND	0.30	"	"	"	"	"	"		
Isophorone	ND	0.30	"	"	"	"	"	"		
2-Methylphenol	ND	1.0	"	"	"			"		
4-Methylphenol	ND	1.0	"	"	"			"		
Naphthalene	ND	0.30	"	"	"			"		
2-Nitroaniline	ND	0.30	"				"			
3-Nitroaniline	ND	0.30	"	"	"		"	"		
4-Nitroaniline	ND	0.30	"	"	"		"	"		
Nitrobenzene	ND	1.0	"		"		"			
2-Nitrophenol	ND	1.0	"	"	"		"			
N-Nitrosodimethylamine	ND	0.30	"	"	"	"	"			
N-Nitrosodiphenylamine	ND	0.30	"					"		

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501		Proje Project Numb Project Manag	oer: 32862		Ave			<b>Reported:</b> 10/13/21 16	
			B6-5 )65-12 (So	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
Semivolatile Organic Compounds by EPA	Method 8270C								
2,3,5,6-Tetrachlorophenol	ND	0.30	mg/kg	1	1101139	10/11/21	10/12/21	EPA 8270C	
2,3,4,6-Tetrachlorophenol	ND	0.30	"	"	"	"	"	"	
Phenanthrene	ND	0.30	"	"	"	"	"	"	
Azobenzene	ND	0.30	"	"	"	"	"	"	
Pyridine	ND	0.30	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	1.0	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	1.0	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		78.2 %	15-	121	"	"	"	"	
Surrogate: Phenol-d6		92.2 %	24-	113	"	"	"	"	
Surrogate: Nitrobenzene-d5		87.8 %	21.3	-119	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		91.7 %	32.4	-102	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		96.2 %	18.1	-105	"	"	"	"	
Surrogate: Terphenyl-dl4		94.4 %	29.1	-130	"	"	"	"	

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Mike Jaroudi, Project Manager

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Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

# Extractable Petroleum Hydrocarbons by 8015B - Quality Control

# SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	
Batch 1101130 - EPA 3550B GC											
Blank (1101130-BLK1)	Prepared: 10/11/21 Analyzed: 10/12/21										
C6-C12 (GRO)	ND	10	mg/kg								
C13-C28 (DRO)	ND	10	"								
C29-C40 (MORO)	ND	10	"								
Surrogate: p-Terphenyl	104		"	100		104	65-135				
LCS (1101130-BS1)				Prepared: 1	0/11/21 Ai	nalyzed: 10	/12/21				
C13-C28 (DRO)	470	10	mg/kg	500		93.2	75-125				
Surrogate: p-Terphenyl	103		"	100		103	65-135				
LCS Dup (1101130-BSD1)				Prepared: 1	0/11/21 Ai	nalyzed: 10	/12/21				
C13-C28 (DRO)	430	10	mg/kg	500		86.8	75-125	7.10	20		
Surrogate: p-Terphenyl	104		"	100		104	65-135				

SunStar Laboratories, Inc.

Mike Jaroudi, Project Manager

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Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

# Metals by EPA 6010B - Quality Control

# SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

### Batch 1101127 - EPA 3050B

Blank (1101127-BLK1)				Prepared: 1	0/11/21 Ar	nalyzed: 10	/12/21	 
Antimony	ND	3.0	mg/kg					
Silver	ND	2.0	"					
Arsenic	ND	5.0	"					
Barium	ND	1.0	"					
Beryllium	ND	1.0						
Cadmium	ND	2.0						
Chromium	ND	2.0						
Cobalt	ND	2.0						
Copper	ND	1.0	"					
Lead	ND	3.0	"					
Molybdenum	ND	5.0	"					
Nickel	ND	2.0	"					
Selenium	ND	5.0	"					
Thallium	ND	5.0	"					
Vanadium	ND	5.0	"					
Zinc	ND	1.0	"					
LCS (1101127-BS1)				Prepared: 1	0/11/21 Ar	nalyzed: 10	/12/21	
Arsenic	96.2	5.0	mg/kg	100		96.2	75-125	
Barium	97.2	1.0	"	100		97.2	75-125	
Cadmium	96.9	2.0	"	100		96.9	75-125	
Chromium	97.4	2.0	"	100		97.4	75-125	
Lead	98.3	3.0	"	100		98.3	75-125	
Matrix Spike (1101127-MS1)	Source: T2	13057-	01	Prepared: 1	0/11/21 Ar	nalyzed: 10	/12/21	
Arsenic	54.7	5.0	mg/kg	96.2	ND	56.9	75-125	QM-05
Barium	111	1.0	"	96.2	48.2	65.8	75-125	QM-05
Cadmium	54.1	2.0	"	96.2	0.134	56.1	75-125	QM-05
Chromium	59.7	2.0	"	96.2	4.66	57.2	75-125	QM-05
Lead	58.3	3.0	"	96.2	7.50	52.8	75-125	QM-05

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Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

# Metals by EPA 6010B - Quality Control

# SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101127 - EPA 3050B										
Matrix Spike Dup (1101127-MSD1)	Source	e: T213057-	01	Prepared: 1	10/11/21 Ar	nalyzed: 10	/12/21			
Matrix Spike Dup (1101127-MSD1) Arsenic	<b>Source</b> 57.4	e: T213057- 5.0	01 mg/kg	Prepared: 1 99.0	10/11/21 Ar ND	nalyzed: 10 58.0	75-125	4.80	20	QM-05
			-	1		2		4.80 7.30	20 20	QM-05 QM-05

"

...

99.0

99.0

4.66

7.50

57.4

54.3

75-125

75-125

2.92

5.06

20

20

QM-05

QM-05

2.0

3.0

61.5

61.3

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Chromium

Lead

Mike Jaroudi, Project Manager

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Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

# Cold Vapor Extraction EPA 7470/7471 - Quality Control

# SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1101126 - EPA 7471A Soil										
Blank (1101126-BLK1)				Prepared: 1	0/11/21 Aı	nalyzed: 10	/12/21			
Mercury	ND	0.10	mg/kg							
LCS (1101126-BS1)				Prepared: 1	0/11/21 A1	nalyzed: 10	/12/21			
Mercury	0.383	0.10	mg/kg	0.417		91.9	80-120			
Matrix Spike (1101126-MS1)	Sour	ce: T213057-	01	Prepared: 1	0/11/21 A1	nalyzed: 10	/12/21			
Mercury	0.356	0.10	mg/kg	0.397	ND	89.7	75-125			
Matrix Spike Dup (1101126-MSD1)	Sour	ce: T213057-	01	Prepared: 1	0/11/21 A1	nalyzed: 10	/12/21			
Mercury	0.378	0.10	mg/kg	0.417	ND	90.8	75-125	6.06	20	

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Mike Jaroudi, Project Manager

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Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

# Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

### Batch 1101138 - EPA 5035 GCMS

Blank (1101138-BLK1)				Prepared: 10/11/21 Analyzed: 10/12/21
Bromobenzene	ND	0.0025	mg/kg	
Bromochloromethane	ND	0.0025	"	
Bromodichloromethane	ND	0.0025	"	
Bromoform	ND	0.0025	"	
Bromomethane	ND	0.0025	"	
n-Butylbenzene	ND	0.0025	"	
sec-Butylbenzene	ND	0.0025	"	
tert-Butylbenzene	ND	0.0025	"	
Carbon tetrachloride	ND	0.0025	"	
Chlorobenzene	ND	0.0025	"	
Chloroethane	ND	0.0025	"	
Chloroform	ND	0.0025	"	
Chloromethane	ND	0.0025	"	
2-Chlorotoluene	ND	0.0025	"	
4-Chlorotoluene	ND	0.0025	"	
Dibromochloromethane	ND	0.0025	"	
1,2-Dibromo-3-chloropropane	ND	0.0050	"	
1,2-Dibromoethane (EDB)	ND	0.0025	"	
Dibromomethane	ND	0.0025	"	
1,2-Dichlorobenzene	ND	0.0025	"	
1,3-Dichlorobenzene	ND	0.0025	"	
1,4-Dichlorobenzene	ND	0.0025	"	
Dichlorodifluoromethane	ND	0.0025	"	
1,1-Dichloroethane	ND	0.0025	"	
1,2-Dichloroethane	ND	0.0025	"	
1,1-Dichloroethene	ND	0.0025	"	
cis-1,2-Dichloroethene	ND	0.0025	"	
trans-1,2-Dichloroethene	ND	0.0025	"	
1,2-Dichloropropane	ND	0.0025	"	
1,3-Dichloropropane	ND	0.0025	"	
2,2-Dichloropropane	ND	0.0025	"	
1,1-Dichloropropene	ND	0.0025	"	
cis-1,3-Dichloropropene	ND	0.0025	"	
trans-1,3-Dichloropropene	ND	0.0025	"	
Hexachlorobutadiene	ND	0.0025	"	
Isopropylbenzene	ND	0.0025	"	

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Partner Engineering & Science, Inc Tor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

# Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

### Batch 1101138 - EPA 5035 GCMS

Blank (1101138-BLK1)				Prepared: 10/11/2	21 Analyzed: 10	)/12/21	
p-Isopropyltoluene	ND	0.0025	mg/kg				
Methylene chloride	ND	0.010	"				
Naphthalene	ND	0.0025	"				
n-Propylbenzene	ND	0.0025	"				
Styrene	ND	0.0025	"				
1,1,2,2-Tetrachloroethane	ND	0.0025	"				
1,1,1,2-Tetrachloroethane	ND	0.0025	"				
Tetrachloroethene	ND	0.0025	"				
1,2,3-Trichlorobenzene	ND	0.0025	"				
1,2,4-Trichlorobenzene	ND	0.0025	"				
1,1,2-Trichloroethane	ND	0.0025	"				
1,1,1-Trichloroethane	ND	0.0025	"				
Trichloroethene	ND	0.0025	"				
Trichlorofluoromethane	ND	0.0025	"				
1,2,3-Trichloropropane	ND	0.0025	"				
1,3,5-Trimethylbenzene	ND	0.0025	"				
1,2,4-Trimethylbenzene	ND	0.0025	"				
Vinyl chloride	ND	0.0025	"				
Benzene	ND	0.0025	"				
Toluene	ND	0.0025	"				
Ethylbenzene	ND	0.0025	"				
m,p-Xylene	ND	0.0050	"				
o-Xylene	ND	0.0025	"				
Surrogate: Toluene-d8	0.0507		"	0.0500	101	76.1-127	
Surrogate: 4-Bromofluorobenzene	0.0520		"	0.0500	104	85.9-114	
Surrogate: Dibromofluoromethane	0.0490		"	0.0500	98.0	77.8-142	
LCS (1101138-BS1)				Prepared: 10/11/2	21 Analyzed: 10	)/12/21	
Chlorobenzene	0.0539	0.0025	mg/kg	0.0500	108	79.1-117	
1,1-Dichloroethene	0.0541	0.0025	"	0.0500	108	68-126	
Trichloroethene	0.0585	0.0025	"	0.0500	117	80.6-119	
Benzene	0.0554	0.0025	"	0.0500	111	79.1-117	
Toluene	0.0555	0.0025	"	0.0500	111	79.5-118	
Surrogate: Toluene-d8	0.0505		"	0.0500	101	76.1-127	
Surrogate: 4-Bromofluorobenzene	0.0520		"	0.0500	104	85.9-114	
Surrogate: Dibromofluoromethane	0.0470		"	0.0500	94.0	77.8-142	

SunStar Laboratories, Inc.

# SunStar — Laboratories, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

# Volatile Organic Compounds by EPA Method 8260B - Quality Control

# SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101138 - EPA 5035 GCMS										
LCS Dup (1101138-BSD1)				Prepared: 1	0/11/21 Aı	nalyzed: 10	/12/21			
Chlorobenzene	0.0548	0.0025	mg/kg	0.0500		110	79.1-117	1.55	20	
1,1-Dichloroethene	0.0551	0.0025	"	0.0500		110	68-126	1.78	20	
Trichloroethene	0.0597	0.0025	"	0.0500		119	80.6-119	2.05	20	
Benzene	0.0566	0.0025	"	0.0500		113	79.1-117	2.14	20	
Toluene	0.0566	0.0025	"	0.0500		113	79.5-118	2.09	20	
Surrogate: Toluene-d8	0.0501		"	0.0500		100	76.1-127			
Surrogate: 4-Bromofluorobenzene	0.0518		"	0.0500		104	85.9-114			

0.0500

94.4

77.8-142

0.0472

SunStar Laboratories, Inc.

Surrogate: Dibromofluoromethane

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

Mike Jaroudi, Project Manager

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Pa	artner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
21	54 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
To	prrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

### Batch 1101139 - EPA 3550 ECD/GCMS

Blank (1101139-BLK1)				Prepared: 10/11/21 Analyzed: 10/12/21
Carbazole	ND	0.30	mg/kg	
Aniline	ND	0.30	"	
Phenol	ND	1.0	"	
2-Chlorophenol	ND	1.0	"	
1,4-Dichlorobenzene	ND	0.30	"	
N-Nitrosodi-n-propylamine	ND	0.30	"	
1,2,4-Trichlorobenzene	ND	0.30	"	
4-Chloro-3-methylphenol	ND	1.0	"	
1-Methylnaphthalene	ND	0.30	"	
2-Methylnaphthalene	ND	0.30	"	
Acenaphthene	ND	0.30	"	
4-Nitrophenol	ND	1.0	"	
2,4-Dinitrotoluene	ND	0.30	"	
Pentachlorophenol	ND	1.0	"	
Pyrene	ND	0.30	"	
Acenaphthylene	ND	0.30	"	
Anthracene	ND	0.30	"	
Benzo (a) anthracene	ND	0.30	"	
Benzo (b) fluoranthene	ND	0.30	"	
Benzo (k) fluoranthene	ND	0.30	"	
Benzo (g,h,i) perylene	ND	1.0	"	
Benzo (a) pyrene	ND	0.30	"	
Benzyl alcohol	ND	0.30	"	
Bis(2-chloroethoxy)methane	ND	0.30	"	
Bis(2-chloroethyl)ether	ND	0.30	"	
Bis(2-chloroisopropyl)ether	ND	0.30	"	
Bis(2-ethylhexyl)phthalate	ND	0.30	"	
4-Bromophenyl phenyl ether	ND	0.30	"	
Butyl benzyl phthalate	ND	0.30	"	
4-Chloroaniline	ND	0.30	"	
2-Chloronaphthalene	ND	0.30	"	
4-Chlorophenyl phenyl ether	ND	0.30	"	
Chrysene	ND	0.30	"	
Dibenz (a,h) anthracene	ND	0.30	"	
Dibenzofuran	ND	0.30	"	
Di-n-butyl phthalate	ND	0.30	"	

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2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

### Batch 1101139 - EPA 3550 ECD/GCMS

Batch 1101139 - EPA 3550 ECD/GCMS				
Blank (1101139-BLK1)				Prepared: 10/11/21 Analyzed: 10/12/21
1,2-Dichlorobenzene	ND	0.30	mg/kg	
1,3-Dichlorobenzene	ND	0.30	"	
2,4-Dichlorophenol	ND	1.0	"	
Diethyl phthalate	ND	0.30	"	
2,4-Dimethylphenol	ND	1.0	"	
Dimethyl phthalate	ND	0.30	"	
4,6-Dinitro-2-methylphenol	ND	1.0	"	
2,4-Dinitrophenol	ND	1.0	"	
2,6-Dinitrotoluene	ND	1.0	"	
Di-n-octyl phthalate	ND	0.30	"	
Fluoranthene	ND	0.30	"	
Fluorene	ND	0.30	"	
Hexachlorobenzene	ND	1.5	"	
Hexachlorobutadiene	ND	0.30	"	
Hexachlorocyclopentadiene	ND	1.0	"	
Hexachloroethane	ND	0.30	"	
Indeno (1,2,3-cd) pyrene	ND	0.30	"	
Isophorone	ND	0.30	"	
2-Methylphenol	ND	1.0	"	
4-Methylphenol	ND	1.0	"	
Naphthalene	ND	0.30	"	
2-Nitroaniline	ND	0.30	"	
3-Nitroaniline	ND	0.30	"	
4-Nitroaniline	ND	0.30	"	
Nitrobenzene	ND	1.0	"	
2-Nitrophenol	ND	1.0	"	
N-Nitrosodimethylamine	ND	0.30	"	
N-Nitrosodiphenylamine	ND	0.30	"	
2,3,5,6-Tetrachlorophenol	ND	0.30	"	
2,3,4,6-Tetrachlorophenol	ND	0.30	"	
Phenanthrene	ND	0.30	"	
Azobenzene	ND	0.30	"	
Pyridine	ND	0.30	"	
2,4,5-Trichlorophenol	ND	1.0	"	
2,4,6-Trichlorophenol	ND	1.0	"	

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Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

SunStar Laboratories, Inc.

		Reporting	TT	Spike	Source	0/850	%REC	DPD	RPD	NT -
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1101139 - EPA 3550 ECD/GCMS										
Blank (1101139-BLK1)				Prepared:	10/11/21 Ar	nalyzed: 10	)/12/21			
Surrogate: 2-Fluorophenol	2.83		mg/kg	3.33		85.0	15-121			
Surrogate: Phenol-d6	3.21		"	3.33		96.4	24-113			
Surrogate: Nitrobenzene-d5	3.11		"	3.33		93.2	21.3-119			
Surrogate: 2-Fluorobiphenyl	3.08		"	3.33		92.5	32.4-102			
Surrogate: 2,4,6-Tribromophenol	3.35		"	3.33		101	18.1-105			
Surrogate: Terphenyl-dl4	3.01		"	3.33		90.3	29.1-130			
LCS (1101139-BS1)				Prepared:	10/11/21 Ar	nalyzed: 10	)/12/21			
Phenol	2.80	1.0	mg/kg	3.33		84.0	34-114			
2-Chlorophenol	2.67	1.0	"	3.33		80.1	34-114			
1,4-Dichlorobenzene	2.60	0.30	"	3.33		77.9	34-114			
N-Nitrosodi-n-propylamine	3.22	0.30	"	3.33		96.5	30-110			
1,2,4-Trichlorobenzene	2.65	0.30	"	3.33		79.4	39-119			
4-Chloro-3-methylphenol	3.05	1.0	"	3.33		91.5	50-130			
Acenaphthene	2.58	0.30	"	3.33		77.4	34-114			
Pentachlorophenol	3.19	1.0	"	3.33		95.6	50-130			
Pyrene	1.89	0.30	"	3.33		56.7	33.7-123			
Surrogate: 2-Fluorophenol	2.88		"	3.33		86.5	15-121			
Surrogate: Phenol-d6	3.24		"	3.33		97.1	24-113			
Surrogate: Nitrobenzene-d5	3.14		"	3.33		94.2	21.3-119			
Surrogate: 2-Fluorobiphenyl	2.97		"	3.33		89.2	32.4-102			
Surrogate: 2,4,6-Tribromophenol	3.56		"	3.33		107	18.1-105			S-GC
Surrogate: Terphenyl-dl4	3.15		"	3.33		94.4	29.1-130			
LCS Dup (1101139-BSD1)				Prepared: 1	10/11/21 Ar	nalyzed: 10	)/12/21			
Phenol	2.68	1.0	mg/kg	3.33		80.5	34-114	4.24	42	
2-Chlorophenol	2.57	1.0	"	3.33		77.0	34-114	4.01	40	
1,4-Dichlorobenzene	2.41	0.30	"	3.33		72.3	34-114	7.38	28	
N-Nitrosodi-n-propylamine	3.07	0.30	"	3.33		92.1	30-110	4.73	38	
1,2,4-Trichlorobenzene	2.57	0.30	"	3.33		77.0	39-119	3.11	28	
4-Chloro-3-methylphenol	3.04	1.0	"	3.33		91.3	50-130	0.175	42	
Acenaphthene	2.61	0.30	"	3.33		78.4	34-114	1.31	31	
Pentachlorophenol	3.14	1.0	"	3.33		94.2	50-130	1.44	50	
Pyrene	1.86	0.30	"	3.33		55.8	33.7-123	1.60	31	
Surrogate: 2-Fluorophenol	2.64		"	3.33		79.2	15-121			
Surrogate: Phenol-d6	3.04		"	3.33		91.1	24-113			

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2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

# SunStar Laboratories, Inc.

Analyte Batch 1101139 - EPA 3550 ECD/GCMS	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
LCS Dup (1101139-BSD1)	Prepared: 10/11/21 Analyzed: 10/12/21										
Surrogate: Nitrobenzene-d5	2.94		mg/kg	3.33		88.3	21.3-119				
Surrogate: 2-Fluorobiphenyl	3.00		"	3.33		90.0	32.4-102				
Surrogate: 2,4,6-Tribromophenol	3.32		"	3.33		99.6	18.1-105				
Surrogate: Terphenyl-dl4	2.95		"	3.33		88.4	29.1-130				

SunStar Laboratories, Inc.

Mike Jaroudi, Project Manager

# SunStar – Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Partner Engineering & Science, Inc Tor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:06

### **Notes and Definitions**

- S-GC Surrogate recovery outside of established control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
- R-07 Reporting limit for this compound(s) has been raised to account for dilution necessary due to high levels of interfering compound(s) and/or matrix affect.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

SunStar Laboratories, Inc.

Mike Jaroudi, Project Manager

Samp	Réfin		Relin	2	Relin				5	11	Ó	9	8	+	6	5	-4	2	2	-	Laboratory ID #	Proj	Phone:	Client:		+
Sample disposal Instructions: Di	Réfinquished by: (signature)	19	Relinquished by: (signature)	hot	Relinguished by: (signature)				66-5	36-2	86-1	85-5	65-2	65-1	BH-5	B4-2	84-1	B3-5	83-2	83-1	Sample ID	Manager:	442-303-	Partnur	PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE 25712 Commercentre Drive, Lake Forest, CA 92630 949-297-5020	<ul> <li>Laboratories,</li> </ul>
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Rev. 02	Date 07/19
Receivin	g Form 001

# SAMPLE RECEIVING REVIEW SHEET

SunStar <u>Laboratories</u>, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Batch/Work Order #:	T213065				
Client Name:	Par ther	Project: 377	74 + 3780	Fifth	Ave.,
Delivered by:	🗌 Client 🛛 SunStar Co	ourier 🗌 GLS [	FedEx	UPS	
If Courier, Received by:	Dave	Date/Time Co Received:	1	0.8.21	1615
Lab Received by:	Travis	Date/Time La Received:		0.8.21	1725
Total number of coolers re	Thermome	ter ID: SC-1	Calibratio		
Temperature: Cooler #1	<b>5.</b> °C +/- the CF (+0.	1°C) = 5·3	°C correc	ted temperat	ture
Temperature: Cooler #2	°C +/- the CF (	°C) =	°C correc	cted temperat	ture
Temperature: Cooler #3	°C +/- the CF (	°C) =	°C correc	cted tempera	ture
Temperature criteria = (no frozen containers)	≤ <b>6°C</b> Wit	hin criteria?	⊠Yes	No	□N/A
	received same day	∕es ∕es → Acceptable	<b>No</b> →	te Non-Co	onformance Sheet
collected? Custody seals intact on co			Yes	Ino*	onformance Sheet
Sample containers intact	olen sample		Yes		AIVA
Sample labels match Chai	in of Custody IDs		Yes	□No*	
Total number of container	-		AYes	□No*	
	d for analyses requested on CC	DC	⊠Yes	□No*	
	ated on COC/containers for an		Yes	□No*	□N/A
Complete shipment receiv	ved in good condition with cor es preservatives and within me	rect temperatures,	Yes	_	
÷	nce Receiving Sheet if checked	Cooler/Sample Rev	iew - Initials	s and date:	00 10-8-21
Comments:	0 10 m				0 = .
	Concests 1.				
	water parts where point is required to the				
	ne ne esta				Page 1 of
(949) 297-5020 🗖 w	ww.sunstarlabs.com 🗖 257	12 Commercentre	Drive 🗖 I	Lake Fore	est, CA 92630

WORK ORDER

			1213003	]
	g & Science, IncTor		Project Manager:	Mike Jaroudi
Project: 3774 & 3780 Fifth A	Ave		Project Number:	328625.2
<u>Report To:</u>				
Partner Engineering & Science	e, IncTor			
Hunter White				
2154 Torrance Blvd., Suite 20	0			
Torrance, CA 90501				
Date Due: 10/13/21	17:00 (2 day TAT)			
Received By: Travis Ber	rner		Date Received:	10/08/21 17:25
Logged In By: Jennifer B	Berger		Date Logged In:	10/08/21 18:27
Samples Received at: 5.3°C				
Custody Seals No Receive	ed On Ice Yes			
Containers Intact Yes				
COC/Labels Agree Yes Preservation Confirme Yes				
Analysis	Due	TAT	Expires	Comments
& [NO ANALYSES]				
T213065-02 B3-2 [Soil] San	npled 10/07/21 10:00 (GMT-	-08:00) Pacifi	c Time (US	
& 6010 Title 22	10/13/21 15:00	2	04/05/22 10:00	
8015 Carbon Chain	10/13/21 15:00	2	10/21/21 10:00	
8260 5035	10/13/21 15:00	2	10/21/21 10:00	
8270C	10/13/21 15:00	2	10/21/21 10:00	
T213065-03 B3-5 [Soil] San	npled 10/07/21 10:05 (GMT	-08:00) Pacifi	c Time (US	HOLD
[NO ANALYSES]				
T213065-04 B4-1 [Soil] San	npled 10/07/21 10:23 (GMT	-08:00) Pacifi	c Time (US	HOLD
&				
[NO ANALYSES]				
[NO ANALYSES] T213065-05 B4-2 [Soil] San	npled 10/07/21 10:25 (GMT	-08:00) Pacifi	c Time (US	HOLD
	npled 10/07/21 10:25 (GMT-	-08:00) Pacifi	c Time (US	HOLD



WORK ORDER

# T213065

			1213005	
Client: Partner Engineer Project: 3774 & 3780 Fifth	ing & Science, IncTor Ave		Project Manager: Project Number:	Mike Jaroudi 328625.2
Analysis	Due	ТАТ	Expires	Comments
T213065-06 B4-5 [Soil] Sa &	ampled 10/07/21 10:30 (GMT	-08:00) Pacifi	c Time (US	
6010 Title 22	10/13/21 15:00	2	04/05/22 10:30	
8015 Carbon Chain	10/13/21 15:00	2	10/21/21 10:30	
8260 5035	10/13/21 15:00	2	10/21/21 10:30	
8270C	10/13/21 15:00	2	10/21/21 10:30	
<b>T213065-07 B5-1 [Soil] Sa</b> & [NO ANALYSES]	ampled 10/07/21 11:30 (GMT	-08:00) Pacifi	c Time (US	HOLD
T213065-08 B5-2 [Soil] S: &	ampled 10/07/21 11:33 (GMT	-08:00) Pacifi	c Time (US	
6010 Title 22	10/13/21 15:00	2	04/05/22 11:33	
8015 Carbon Chain	10/13/21 15:00	2	10/21/21 11:33	
8260 5035	10/13/21 15:00	2	10/21/21 11:33	
8270C	10/13/21 15:00	2	10/21/21 11:33	
<b>T213065-09 B5-5 [Soil] Sa</b> & [NO ANALYSES]	ampled 10/07/21 11:40 (GMT	-08:00) Pacifi	c Time (US	HOLD
<b>T213065-10 B6-1 [Soil] Sa</b> & [NO ANALYSES]	ampled 10/07/21 12:15 (GMT	-08:00) Pacifi	c Time (US	HOLD
<b>T213065-11 B6-2 [Soil] Sa</b> & [NO ANALYSES]	umpled 10/07/21 12:18 (GMT	-08:00) Pacifi	c Time (US	HOLD
T213065-12 B6-5 [Soil] Sa &	mpled 10/07/21 12:20 (GMT	-08:00) Pacifi	c Time (US	
&	ampled 10/07/21 12:20 (GMT 10/13/21 15:00	<b>-08:00) Pacif</b> i 2	<b>c Time (US</b> 04/05/22 12:20	
&		·		
<b>&amp;</b> 6010 Title 22	10/13/21 15:00	2	04/05/22 12:20	

Analysis groups included in this work order											
6010 Title 22											
subgroup 6010B T22	7470/71 Hg										



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13 October 2021

Hunter White Partner Engineering & Science, Inc.--Tor 2154 Torrance Blvd., Suite 200 Torrance, CA 90501 RE: 3774 & 3780 Fifth Ave

Enclosed are the results of analyses for samples received by the laboratory on 10/08/21 17:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ħ

Mike Jaroudi Project Manager

# SunStar Laboratories, Inc.

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Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:10

# ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-1	T213066-01	Air	10/07/21 12:40	10/08/21 17:25
SS-2	T213066-02	Air	10/07/21 13:33	10/08/21 17:25
SS-3	T213066-03	Air	10/07/21 13:34	10/08/21 17:25
B1-SV5	T213066-04	Air	10/07/21 13:15	10/08/21 17:25
B2-SV5	T213066-05	Air	10/07/21 13:15	10/08/21 17:25

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Partner Engineering & Science, Inc Tor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:10

# **DETECTIONS SUMMARY**

ample ID: SS-1	Labora	tory ID:	T213066-01		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Acetone	330	12	ug/m³ Air	TO-15	
1,3-Butadiene	57	4.5	ug/m³ Air	TO-15	
Carbon Disulfide	8.7	3.2	ug/m³ Air	TO-15	
Isopropyl alcohol	9.3	13	ug/m³ Air	TO-15	J
Chloroform	14	5.0	ug/m³ Air	TO-15	
Styrene	100	4.3	ug/m³ Air	TO-15	
Tetrachloroethene	110	6.9	ug/m³ Air	TO-15	
Trichloroethene	8.3	5.5	ug/m³ Air	TO-15	
2-Butanone (MEK)	16	15	ug/m³ Air	TO-15	
Benzene	5.3	3.3	ug/m³ Air	TO-15	
Toluene	13	3.8	ug/m³ Air	TO-15	
Ethylbenzene	5.9	4.4	ug/m³ Air	TO-15	
1,1-Difluoroethane (Freon 152)	54	27	ug/m³ Air	TO-15	

Sample ID: SS-2	Labora	tory ID:	T213066-02		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Acetone	180	12	ug/m³ Air	TO-15	
Isopropyl alcohol	9.3	13	ug/m³ Air	TO-15	J
Chloroform	19	5.0	ug/m³ Air	TO-15	
Dichlorodifluoromethane	4.4	5.0	ug/m³ Air	TO-15	J
Styrene	4.0	4.3	ug/m³ Air	TO-15	J
Tetrachloroethene	230	6.9	ug/m³ Air	TO-15	
Trichloroethene	17	5.5	ug/m³ Air	TO-15	
1,2,4-Trimethylbenzene	4.2	5.0	ug/m³ Air	TO-15	J
2-Butanone (MEK)	20	15	ug/m³ Air	TO-15	
Methyl isobutyl ketone	4.8	42	ug/m³ Air	TO-15	J
Benzene	3.3	3.3	ug/m³ Air	TO-15	
Toluene	4.2	3.8	ug/m³ Air	TO-15	
m,p-Xylene	5.8	8.8	ug/m³ Air	TO-15	J

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Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:10

mple ID: SS-3	Labora	Laboratory ID: T213066-03			
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Chloroform	82	250	ug/m³ Air	TO-15	J
Tetrachloroethene	2400	350	ug/m³ Air	TO-15	
Trichloroethene	99	270	ug/m³ Air	TO-15	J
m,p-Xylene	24	220	ug/m³ Air	TO-15	J

mple ID: B1-SV5	Labora	tory ID:	T213066-04		
Analyte	Result	Limit	Units	Method	Notes
Acetone	62	12	ug/m³ Air	TO-15	
1,3-Butadiene	71	4.5	ug/m³ Air	TO-15	
Carbon Disulfide	17	3.2	ug/m³ Air	TO-15	
Isopropyl alcohol	4.6	13	ug/m³ Air	TO-15	J
Chloroform	10	5.0	ug/m³ Air	TO-15	
Cyclohexane	14	3.5	ug/m³ Air	TO-15	
Heptane	33	4.2	ug/m³ Air	TO-15	
Hexane	47	3.6	ug/m³ Air	TO-15	
Dichlorodifluoromethane	73	5.0	ug/m³ Air	TO-15	
Styrene	6.8	4.3	ug/m³ Air	TO-15	
Tetrahydrofuran	4.4	3.0	ug/m³ Air	TO-15	
Tetrachloroethene	650	6.9	ug/m³ Air	TO-15	
Trichloroethene	54	5.5	ug/m³ Air	TO-15	
1,2,4-Trimethylbenzene	4.5	5.0	ug/m³ Air	TO-15	J
2-Butanone (MEK)	18	15	ug/m³ Air	TO-15	
Methyl isobutyl ketone	11	42	ug/m³ Air	TO-15	J
Benzene	84	3.3	ug/m³ Air	TO-15	
Toluene	74	3.8	ug/m³ Air	TO-15	
Ethylbenzene	9.2	4.4	ug/m³ Air	TO-15	
m,p-Xylene	18	8.8	ug/m³ Air	TO-15	
o-Xylene	6.5	4.4	ug/m³ Air	TO-15	

Sample ID:	B2-SV5	Labor	atory ID:	T213066-05		
Analyte		Result	Limit	Units	Method	Notes
Acetone		330	12	ug/m³ Air	TO-15	
1,3-Butadie	ne	35	4.5	ug/m³ Air	TO-15	

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Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:10

Sample ID: B2-SV5	Labora	tory ID:	T213066-05		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Carbon Disulfide	10	3.2	ug/m³ Air	TO-15	
Isopropyl alcohol	28	13	ug/m³ Air	TO-15	
Chloroform	44	5.0	ug/m³ Air	TO-15	
Cyclohexane	9.7	3.5	ug/m³ Air	TO-15	
Heptane	21	4.2	ug/m³ Air	TO-15	
Hexane	36	3.6	ug/m³ Air	TO-15	
Styrene	3.5	4.3	ug/m³ Air	TO-15	J
Tetrachloroethene	70	6.9	ug/m³ Air	TO-15	
Trichloroethene	6.5	5.5	ug/m³ Air	TO-15	
1,2,4-Trimethylbenzene	6.8	5.0	ug/m³ Air	TO-15	
2-Butanone (MEK)	73	15	ug/m³ Air	TO-15	
Methyl isobutyl ketone	11	42	ug/m³ Air	TO-15	J
Benzene	27	3.3	ug/m³ Air	TO-15	
Toluene	39	3.8	ug/m³ Air	TO-15	
Ethylbenzene	7.6	4.4	ug/m³ Air	TO-15	
m,p-Xylene	16	8.8	ug/m³ Air	TO-15	
o-Xylene	7.8	4.4	ug/m³ Air	TO-15	

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Partner Engineering & Science, Inc 2154 Torrance Blvd., Suite 200 Torrance CA, 90501	cTor		roject Num	ect: 3774 & ber: 328625 ger: Hunter	.2	Ave			<b>Report</b> 10/13/21	
SS-1 T213066-01(Air)										
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			<u>SunStar I</u>	aboratorie	s <u>, Inc.</u>					
TO-15										
Acetone	330	0.49	12	ug/m³ Air	1.91	1101141	10/11/21	10/12/21	TO-15	
1,3-Butadiene	57	0.29	4.5	"	"	"	"	"	"	
Carbon Disulfide	8.7	0.22	3.2	"	"	"	"	"	"	
1,1,2-trichloro-1,2,2-trifluoroeth ane (CFC 113)	ND	0.26	7.7	"	"	"	"	"	"	
Isopropyl alcohol	9.3	0.55	13	"	"	"	"	"	"	
Bromodichloromethane	ND	0.16	6.8	"	"	"	"	"	"	
Bromoform	ND	0.23	11	"	"	"	"	"	"	
Bromomethane	ND	0.55	20	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.055	6.4	"	"	"	"	"	"	
Chlorobenzene	ND	0.098	4.7	"	"	"	"	"	"	
Chloroethane	ND	0.35	2.7	"	"	"	"	"	"	
Chloroform	14	0.15	5.0	"	"	"	"	"	"	
Chloromethane	ND	0.46	11	"	"	"	"	"	"	
Cyclohexane	ND	0.16	3.5	"	"	"	"	"	"	
Heptane	ND	0.15	4.2	"	"	"	"	"	"	
Hexane	ND	0.43	3.6	"	"	"	"	"	"	
Dibromochloromethane	ND	0.26	8.7	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.18	7.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.36	31	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.43	31	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.44	31	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.18	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.23	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.16	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.28	4.0	"			"	"	"	
cis-1,2-Dichloroethene	ND	0.25	4.0	"			"	"	"	
trans-1,2-Dichloroethene	ND	0.22	4.0	"			"	"	"	
1,2-Dichloropropane	ND	0.13	4.7	"			"	"	"	
cis-1,3-Dichloropropene	ND	0.21	4.6	"			"	"	"	
trans-1,3-Dichloropropene	ND	0.21	4.6	"	"		"	"	"	
4-Ethyltoluene	ND	0.25	5.0	"	"		"	"	"	
Methylene chloride	ND	0.079	27	"	"		"	"	"	

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Partner Engineering & Science, Inc 2154 Torrance Blvd., Suite 200 Torrance CA, 90501	Tor		roject Num	ject: 3774 & ber: 328625 ger: Hunter	5.2	Ave			<b>Reported:</b> 10/13/21 16:10	
			T213	SS-1 3066-01(Ai	r)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			SunStar I	Laboratorie	s, Inc.					
ГО-15					<u>.</u>					
Styrene	100	0.19	4.3	ug/m³ Air	1.91	1101141	10/11/21	10/12/21	TO-15	
,1,2,2-Tetrachloroethane	ND	0.54	7.0	"	"	"	"	"	"	
etrahydrofuran	ND	0.25	3.0	"	"	"	"	"	"	
etrachloroethene	110	0.21	6.9	"	"	"	"	"	"	
,1,2-Trichloroethane	ND	0.19	5.6	"	"	"	"	"	"	
,1,1-Trichloroethane	ND	0.24	5.6	"	"	"	"	"	"	
richloroethene	8.3	0.21	5.5	"	"	"	"	"	"	
richlorofluoromethane	ND	0.24	5.7	"	"	"	"	"	"	
,3,5-Trimethylbenzene	ND	0.49	5.0	"	"	"	"	"	"	
,2,4-Trimethylbenzene	ND	0.33	5.0	"	"	"	"	"	"	
/inyl acetate	ND	0.18	3.6	"	"	"	"	"	"	
/inyl chloride	ND	0.052	2.6	"	"	"	"	"	"	
,4-Dioxane	ND	0.97	18	"	"	"	"	"	"	
-Butanone (MEK)	16	0.45	15	"	"	"	"	"	"	
fethyl isobutyl ketone	ND	0.14	42	"	"	"	"	"	"	
enzene	5.3	0.14	3.3	"	"	"	"	"	"	
oluene	13	0.14	3.8	"	"		"	"	"	
thylbenzene	5.9	0.14	4.4	"	"	"	"	"	"	
n,p-Xylene	ND	0.20	8.8	"	"	"	"	"	"	
-Xylene	ND	0.085	4.4	"	"	"	"	"	"	
,1-Difluoroethane (Freon 152)	54	3.3	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	77	5.5	98.8 %	59.2-		"	"	"	"	

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Partner Engineering & Science, In 2154 Torrance Blvd., Suite 200 Torrance CA, 90501	cTor		oject Num	ect: 3774 & ber: 328625 ger: Hunter	.2	Ave			<b>Report</b> 10/13/21	
			T213	SS-2 066-02(Air	r)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			SunStar I	Laboratorie	s Inc					
TO-15			<u>Sunstar</u> 1	2000100110	<u>, 1110.</u>					
Acetone	180	0.49	12	ug/m³ Air	1.57	1101141	10/11/21	10/12/21	TO-15	
1,3-Butadiene	ND	0.29	4.5	"	"	"	"	"	"	
Carbon Disulfide	ND	0.22	3.2	"	"	"	"		"	
1,1,2-trichloro-1,2,2-trifluoroeth ane (CFC 113)	ND	0.26	7.7	"	"	"	"	"	"	
Isopropyl alcohol	9.3	0.55	13	"	"	"	"	"	"	
Bromodichloromethane	ND	0.16	6.8	"	"	"	"	"	"	
Bromoform	ND	0.23	11	"	"	"	"	"	"	
Bromomethane	ND	0.55	20	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.055	6.4	"	"	"	"	"	"	
Chlorobenzene	ND	0.098	4.7	"	"	"	"	"	"	
Chloroethane	ND	0.35	2.7	"	"	"	"	"	"	
Chloroform	19	0.15	5.0	"	"	"	"	"	"	
Chloromethane	ND	0.46	11	"	"	"	"	"	"	
Cyclohexane	ND	0.16	3.5	"	"	"	"	"	"	
Heptane	ND	0.15	4.2	"	"	"	"	"	"	
Hexane	ND	0.43	3.6	"	"	"	"	"	"	
Dibromochloromethane	ND	0.26	8.7	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.18	7.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.36	31	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.43	31	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.44	31	"	"	"	"	"	"	
Dichlorodifluoromethane	4.4	0.18	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.23	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.16	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.28	4.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.25	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.22	4.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.13	4.7	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.21	4.6	"	"	"	"	"	"	
rrans-1,3-Dichloropropene	ND	0.21	4.6	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.25	5.0	"	"	"	"	"	"	
Methylene chloride	ND	0.079	27	"	"	"	"	"	"	

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Partner Engineering & Science, Inc 2154 Torrance Blvd., Suite 200 Torrance CA, 90501	Tor		Project Num	ject: 3774 & ber: 328625 ger: Hunter	5.2	Ave			<b>Report</b> 10/13/21	
			T213	SS-2 3066-02(Ai	r)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			<u>SunStar I</u>	Laboratorie	s, Inc.					
TO-15										
Styrene	4.0	0.19	4.3	ug/m³ Air	1.57	1101141	10/11/21	10/12/21	TO-15	J
1,1,2,2-Tetrachloroethane	ND	0.54	7.0	"	"	"	"	"	"	
Tetrahydrofuran	ND	0.25	3.0	"	"	"	"	"	"	
Tetrachloroethene	230	0.21	6.9	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.19	5.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.24	5.6	"	"	"	"	"	"	
Trichloroethene	17	0.21	5.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.24	5.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.49	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	4.2	0.33	5.0	"	"	"	"	"	"	J
Vinyl acetate	ND	0.18	3.6	"	"	"	"	"	"	
Vinyl chloride	ND	0.052	2.6	"	"	"	"	"	"	
1,4-Dioxane	ND	0.97	18	"	"	"	"	"	"	
2-Butanone (MEK)	20	0.45	15	"	"	"	"	"	"	
Methyl isobutyl ketone	4.8	0.14	42	"	"	"	"	"	"	J
Benzene	3.3	0.14	3.3	"	"	"	"	"	"	
Toluene	4.2	0.14	3.8	"	"	"	"	"	"	
Ethylbenzene	ND	0.14	4.4	"	"	"	"	"	"	
m,p-Xylene	5.8	0.20	8.8	"	"	"	"	"	"	J
o-Xylene	ND	0.085	4.4	"	"	"	"	"	"	
1,1-Difluoroethane (Freon 152)	ND	3.3	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene			99.8 %	59.2-	130	"	"	"	"	

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Partner Engineering & Science, In 2154 Torrance Blvd., Suite 200 Torrance CA, 90501	cTor		roject Num	ect: 3774 & ber: 328625 ger: Hunter	.2	Ave			<b>Repo</b> 10/13/21	
			T213	SS-3 8066-03(Aii	r)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			<u>SunStar I</u>	Laboratorie	s, Inc.					
TO-15										TO-15 High
Acetone	ND	17	120	ug/m³ Air	1.47	1101141	10/11/21	10/11/21	TO-15	
1,3-Butadiene	ND	8.3	110	"	"	"	"	"	"	
Carbon Disulfide	ND	11	160	"	"	"	"	"	"	
1,1,2-trichloro-1,2,2-trifluoroeth ane (CFC 113)	ND	20	390	"	"	"	"	"	"	
Isopropyl alcohol	ND	22	130		"	"	"	"	"	
Bromodichloromethane	ND	15	340	"	"	"	"	"	"	
Bromoform	ND	26	530	"	"	"	"	"	"	
Bromomethane	ND	15	200	"	"	"	"	"	"	
Carbon tetrachloride	ND	12	320	"	"	"	"	"	"	
Chlorobenzene	ND	5.6	230	"	"	"	"	"	"	
Chloroethane	ND	11	130	"	"	"	"	"	"	
Chloroform	82	9.4	250	"	"	"	"	"	"	
Chloromethane	ND	7.4	110	"	"	"	"	"	"	
Cyclohexane	ND	12	170	"	"	"	"	"	"	
Heptane	ND	21	210	"	"	"	"	"	"	
Hexane	ND	10	180	"	"	"	"	"	"	
Dibromochloromethane	ND	24	430	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	13	390	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	18	310	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	24	310	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	22	310	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	15	250	"	"	"	"	"	"	
1,1-Dichloroethane	ND	10	210	"	"	"	"	"	"	
1,2-Dichloroethane	ND	14	210	"	"	"	"	"	"	
1,1-Dichloroethene	ND	6.5	200	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	9.7	200	"	"	"	"	"	"	
rans-1,2-Dichloroethene	ND	13	200	"	"	"	"	"	"	
1,2-Dichloropropane	ND	24	240	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	13	230	"	"	"	"	"	"	
rans-1,3-Dichloropropene	ND	8.3	230	"	"	"	"	"	"	
4-Ethyltoluene	ND	15	250	"	"	"	"	"	"	
Methylene chloride	ND	17	180	"	"	"	"	"	"	

SunStar Laboratories, Inc.

# SunStar — Laboratories, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Partner Engineering & Science, Inc 2154 Torrance Blvd., Suite 200 Torrance CA, 90501	Tor		roject Num	ect: 3774 & ber: 328625 ger: Hunter	5.2	Ave			<b>Repor</b> 10/13/21	
				SS-3						
			T213	3066-03(Ai	r)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			<u>SunStar I</u>	Laboratorie	s, Inc.					
TO-15										TO-15 High
Styrene	ND	13	220	ug/m³ Air	1.47	1101141	10/11/21	10/11/21	TO-15	
1,1,2,2-Tetrachloroethane	ND	19	350	"	"	"	"	"	"	
Tetrahydrofuran	ND	15	150	"	"	"	"	"	"	
Tetrachloroethene	2400	19	350	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	12	280	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	11	280	"	"	"	"	"	"	
Trichloroethene	99	8.7	270	"	"	"	"	"	"	J
Trichlorofluoromethane	ND	13	290	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	15	250	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	15	250	"	"	"	"	"	"	
Vinyl acetate	ND	9.7	180	"	"	"	"	"	"	
Vinyl chloride	ND	9.6	130	"	"	"	"	"	"	
1,4-Dioxane	ND	59	180	"	"	"	"	"	"	
2-Butanone (MEK)	ND	11	150	"	"	"	"	"	"	
Methyl isobutyl ketone	ND	50	210	"	"	"	"	"	"	
Benzene	ND	4.9	160	"		"	"	"	"	
Toluene	ND	11	190	"		"	"	"	"	
Ethylbenzene	ND	10	220	"		"	"	"	"	
m,p-Xylene	24	15	220	"		"	"	"	"	J
o-Xylene	ND	9.3	220	"		"	"	"	"	
1,1-Difluoroethane (Freon 152)	ND	91	270	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene			107 %	59.2-	130	"	"	"	"	

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			Project Num Project Mana	ber: 328625 ger: Hunter					<b>Report</b> 10/13/21	
				B1-SV5 3066-04(Ai	r)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			<u>SunStar I</u>	Laboratorie	<u>s, Inc.</u>					
ГО-15										
Acetone	62	0.49	12	ug/m³ Air	1.56	1101141	10/11/21	10/12/21	TO-15	
1,3-Butadiene	71	0.29	4.5	"	"	"	"	"	"	
Carbon Disulfide	17	0.22	3.2	"	"	"	"	"	"	
1,1,2-trichloro-1,2,2-trifluoroeth ane (CFC 113)	ND	0.26	7.7	"	"	"	"	"	"	
lsopropyl alcohol	4.6	0.55	13	"	"	"	"	"	"	
Bromodichloromethane	ND	0.16	6.8	"	"	"	"	"	"	
Bromoform	ND	0.23	11	"	"	"	"	"	"	
Bromomethane	ND	0.55	20	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.055	6.4	"	"	"	"	"	"	
Chlorobenzene	ND	0.098	4.7	"	"	"	"	"	"	
Chloroethane	ND	0.35	2.7	"	"	"	"	"	"	
Chloroform	10	0.15	5.0	"	"	"	"	"	"	
Chloromethane	ND	0.46	11	"	"	"	"	"	"	
Cyclohexane	14	0.16	3.5	"	"	"	"	"	"	
Heptane	33	0.15	4.2	"	"	"	"	"	"	
Hexane	47	0.43	3.6	"	"	"	"	"	"	
Dibromochloromethane	ND	0.26	8.7	"				"	"	
,2-Dibromoethane (EDB)	ND	0.18	7.8	"				"	"	
,2-Dichlorobenzene	ND	0.36	31	"						
1,3-Dichlorobenzene	ND	0.43	31	"				"		
,4-Dichlorobenzene	ND	0.44	31	"	"	"	"	"	"	
Dichlorodifluoromethane	73	0.18	5.0	"	"		"	"		
,1-Dichloroethane	ND	0.23	4.1							
,2-Dichloroethane	ND	0.16	4.1							
,1-Dichloroethene	ND ND	0.28	4.0							
vis-1,2-Dichloroethene	ND ND	0.25	4.0							
rans-1,2-Dichloroethene		0.22	4.0						"	
,2-Dichloropropane	ND	0.13	4.7						"	
cis-1,3-Dichloropropene	ND	0.21	4.6							
rans-1,3-Dichloropropene	ND	0.21	4.6						"	
4-Ethyltoluene	ND	0.25	5.0					"		
Methylene chloride Styrene	ND 6.8	0.079 0.19	27 4.3							

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Partner Engineering & Science, Inc 2154 Torrance Blvd., Suite 200 Torrance CA, 90501	Tor	P Pr		<b>Reported:</b> 10/13/21 16:10						
				B1-SV5 3066-04(Ai	r)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			<u>SunStar I</u>	Laboratorie	<u>s, Inc.</u>					
TO-15										
1,1,2,2-Tetrachloroethane	ND	0.54	7.0	ug/m³ Air	1.56	1101141	10/11/21	10/12/21	TO-15	
Tetrahydrofuran	4.4	0.25	3.0	"	"	"	"	"	"	
Fetrachloroethene	650	0.21	6.9	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.19	5.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.24	5.6	"	"	"	"	"	"	
Trichloroethene	54	0.21	5.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.24	5.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.49	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	4.5	0.33	5.0	"	"	"	"	"	"	
Vinyl acetate	ND	0.18	3.6	"	"	"	"	"	"	
Vinyl chloride	ND	0.052	2.6	"	"	"	"	"	"	
1,4-Dioxane	ND	0.97	18	"	"	"	"	"	"	
2-Butanone (MEK)	18	0.45	15	"	"	"	"	"		
Methyl isobutyl ketone	11	0.14	42	"	"	"	"	"	"	
Benzene	84	0.14	3.3	"	"	"	"	"		
Toluene	74	0.14	3.8	"	"	"	"	"		
Ethylbenzene	9.2	0.14	4.4	"	"	"	"	"	"	
m,p-Xylene	18	0.20	8.8	"	"	"	"	"	"	
p-Xylene	6.5	0.085	4.4	"	"	"	"	"	"	
1,1-Difluoroethane (Freon 152)	ND	3.3	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene			101 %	59.2-	130	"	"	"	"	

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Partner Engineering & Science, Inc 2154 Torrance Blvd., Suite 200 Torrance CA, 90501	eTor		Proj Project Num Project Mana		.2	Ave			<b>Report</b> 10/13/21	
				B2-SV5 8066-05(Ai	r)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			<u>SunStar I</u>	Laboratorie	<u>s, Inc.</u>					
ro-15										
Acetone	330	0.49	12	ug/m³ Air	1.59	1101141	10/11/21	10/12/21	TO-15	
,3-Butadiene	35	0.29	4.5	"	"	"	"	"	"	
Carbon Disulfide	10	0.22	3.2		"	"	"	"	"	
,1,2-trichloro-1,2,2-trifluoroeth ne (CFC 113)	ND	0.26	7.7	"	"	"	"	"	"	
sopropyl alcohol	28	0.55	13		"	"	"	"	"	
Bromodichloromethane	ND	0.16	6.8	"	"	"	"	"	"	
Bromoform	ND	0.23	11	"	"	"	"	"	"	
Bromomethane	ND	0.55	20	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.055	6.4		"	"	"	"	"	
Chlorobenzene	ND	0.098	4.7	"	"		"	"	"	
Chloroethane	ND	0.35	2.7	"	"	"	"	"	"	
Chloroform	44	0.15	5.0		"	"	"	"	"	
Chloromethane	ND	0.46	11	"	"	"	"	"	"	
Cyclohexane	9.7	0.16	3.5	"	"	"	"	"	"	
leptane	21	0.15	4.2	"	"	"	"	"	"	
lexane	36	0.43	3.6	"	"	"	"	"	"	
Dibromochloromethane	ND	0.26	8.7	"	"	"	"	"	"	
,2-Dibromoethane (EDB)	ND	0.18	7.8	"	"	"	"	"	"	
,2-Dichlorobenzene	ND	0.36	31	"	"	"	"	"	"	
,3-Dichlorobenzene	ND	0.43	31	"	"	"	"	"	"	
,4-Dichlorobenzene	ND	0.44	31	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.18	5.0	"	"	"	"	"	"	
,1-Dichloroethane	ND	0.23	4.1	"	"	"	"	"	"	
,2-Dichloroethane	ND	0.16	4.1		"	"	"	"	"	
,1-Dichloroethene	ND	0.28	4.0		"	"	"	"	"	
sis-1,2-Dichloroethene	ND	0.25	4.0		"	"	"	"	"	
rans-1,2-Dichloroethene	ND	0.22	4.0		"	"	"	"	"	
,2-Dichloropropane	ND	0.13	4.7		"	"	"	"	"	
vis-1,3-Dichloropropene	ND	0.21	4.6		"	"	"	"	"	
rans-1,3-Dichloropropene	ND	0.21	4.6		"	"	"	"	"	
l-Ethyltoluene	ND	0.25	5.0	"	"	"	"	"	"	
Methylene chloride	ND	0.079	27		"		"	"	"	
Styrene	3.5	0.19	4.3	"	"	"	"	"	"	

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F

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Partner Engineering & Science, Inc 2154 Torrance Blvd., Suite 200 Torrance CA, 90501	Tor	P Pr		<b>Report</b> 10/13/21						
				B2-SV5 3066-05(Ai	r)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			<u>SunStar I</u>	Laboratorie	<u>s, Inc.</u>					
ТО-15										
1,1,2,2-Tetrachloroethane	ND	0.54	7.0	ug/m³ Air	1.59	1101141	10/11/21	10/12/21	TO-15	
Tetrahydrofuran	ND	0.25	3.0	"	"	"	"	"	"	
fetrachloroethene	70	0.21	6.9	"	"	"	"	"	"	
,1,2-Trichloroethane	ND	0.19	5.6	"	"	"	"	"	"	
,1,1-Trichloroethane	ND	0.24	5.6	"	"	"	"	"	"	
<b>Frichloroethene</b>	6.5	0.21	5.5	"	"		"	"	"	
Trichlorofluoromethane	ND	0.24	5.7	"	"	"	"	"	"	
,3,5-Trimethylbenzene	ND	0.49	5.0	"	"	"	"	"	"	
,2,4-Trimethylbenzene	6.8	0.33	5.0	"	"	"	"	"	"	
Vinyl acetate	ND	0.18	3.6	"	"	"	"	"	"	
Vinyl chloride	ND	0.052	2.6	"	"	"	"	"	"	
,4-Dioxane	ND	0.97	18	"	"	"	"	"	"	
2-Butanone (MEK)	73	0.45	15	"	"		"	"	"	
Methyl isobutyl ketone	11	0.14	42	"	"		"	"	"	
Benzene	27	0.14	3.3	"	"	"	"	"	"	
Toluene	39	0.14	3.8	"	"		"	"	"	
Ethylbenzene	7.6	0.14	4.4	"	"		"	"	"	
n,p-Xylene	16	0.20	8.8	"	"		"	"	"	
o-Xylene	7.8	0.085	4.4	"	"	"	"	"	"	
1,1-Difluoroethane (Freon 152)	ND	3.3	27	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene			91.9 %	59.2-	130	"	"	"	"	

SunStar Laboratories, Inc.

F

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

Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501			Proj Project Num roject Mana		25.2	fth Ave				<b>Reporte</b> 10/13/21	
			TO-15 -	Quality	Control						
		S	unStar L	aborato	ories, In	c.					
Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101141 - Canister Analysis											
Blank (1101141-BLK1)				]	Prepared: 1	10/11/21 A	nalyzed: 10	)/12/21			
Surrogate: 4-Bromofluorobenzene	364			ug/m³ Air	362		101	59.2-130			
Acetone	ND	0.49	12	"							
1,3-Butadiene	ND	0.29	4.5	"							
Carbon Disulfide	ND	0.22	3.2	"							
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	0.26	7.7	"							
Isopropyl alcohol	ND	0.55	13	"							
Bromodichloromethane	ND	0.16	6.8	"							
Bromoform	ND	0.23	11	"							
Bromomethane	ND	0.55	20	"							
Carbon tetrachloride	ND	0.055	6.4	"							
Chlorobenzene	ND	0.098	4.7	"							
Chloroethane	ND	0.35	2.7	"							
Chloroform	ND	0.15	5.0	"							
Chloromethane	ND	0.46	11	"							
Cyclohexane	ND	0.16	3.5	"							
Heptane	ND	0.15	4.2	"							
Hexane	ND	0.43	3.6	"							
Dibromochloromethane	ND	0.26	8.7	"							
1,2-Dibromoethane (EDB)	ND	0.18	7.8	"							
1,2-Dichlorobenzene	ND	0.36	31								
1,3-Dichlorobenzene	ND	0.43	31	"							
1,4-Dichlorobenzene	ND	0.44	31	"							
Dichlorodifluoromethane	ND	0.18	5.0	"							
1,1-Dichloroethane	ND	0.23	4.1	"							
1,2-Dichloroethane	ND	0.16	4.1	"							
1,1-Dichloroethene	ND	0.28	4.0								

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501			Proj roject Numl oject Manaş	per: 3286		fth Ave				<b>Reporte</b> 10/13/21 1	
			TO-15 - (	-							
		Sı	ınStar L	aborat	ories, In	IC.					
Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101141 - Canister Analysis											
Blank (1101141-BLK1)					Prepared:	10/11/21 Ai	nalyzed: 10	/12/21			
cis-1,2-Dichloroethene	ND	0.25	4.0	ug/m³ Air							
trans-1,2-Dichloroethene	ND	0.22	4.0	"							
1,2-Dichloropropane	ND	0.13	4.7	"							
cis-1,3-Dichloropropene	ND	0.21	4.6	"							
trans-1,3-Dichloropropene	ND	0.21	4.6	"							
4-Ethyltoluene	ND	0.25	5.0	"							
Methylene chloride	ND	0.079	27	"							
Styrene	ND	0.19	4.3	"							
1,1,2,2-Tetrachloroethane	ND	0.54	7.0	"							
Tetrahydrofuran	ND	0.25	3.0	"							
Tetrachloroethene	ND	0.21	6.9	"							
1,1,2-Trichloroethane	ND	0.19	5.6	"							
1,1,1-Trichloroethane	ND	0.24	5.6	"							
Trichloroethene	ND	0.21	5.5	"							
Trichlorofluoromethane	ND	0.24	5.7	"							
1,3,5-Trimethylbenzene	ND	0.49	5.0	"							
1,2,4-Trimethylbenzene	ND	0.33	5.0	"							
Vinyl acetate	ND	0.18	3.6	"							
Vinyl chloride	ND	0.052	2.6	"							
1,4-Dioxane	ND	0.97	18	"							
2-Butanone (MEK)	ND	0.45	15	"							
Methyl isobutyl ketone	ND	0.14	42	"							
Benzene	ND	0.14	3.3	"							
Toluene	ND	0.14	3.8	"							
Ethylbenzene	ND	0.14	4.4	"							
m,p-Xylene	ND	0.20	8.8	"							
p-Xylene	ND	0.085	4.4	"							

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Partner Engineering & Science, IncTor 2154 Torrance Blvd., Suite 200 Torrance CA, 90501			Proje Project Numb roject Manag	er: 328		fth Ave				<b>Reporte</b> 10/13/21 1	
			TO-15 - 0	Quality	Control						
		S	unStar L	abora	tories, In	с.					
Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101141 - Canister Analysis											
Blank (1101141-BLK1)					Prepared: 1	0/11/21 A1	nalyzed: 10	/12/21			
1,1-Difluoroethane (Freon 152)	ND	3.3	27	ıg/m³ Air							
Duplicate (1101141-DUP1)		Source:	T213066-01		Prepared: 1	0/11/21 A1	nalyzed: 10	/12/21			
Surrogate: 4-Bromofluorobenzene	360		1	ıg/m³ Air	362		99.4	59.2-130			
Acetone	347	0.49	12	"		327			5.66	30	
1,3-Butadiene	59.5	0.29	4.5	"		57.0			4.13	30	
Carbon Disulfide	8.39	0.22	3.2	"		8.69			3.53	30	
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	0.26	7.7			ND				30	
Isopropyl alcohol	8.93	0.55	13	"		9.32			4.19	30	
Bromodichloromethane	ND	0.16	6.8	"		ND				30	
Bromoform	ND	0.23	11	"		ND				30	
Bromomethane	ND	0.55	20	"		ND				30	
Carbon tetrachloride	ND	0.055	6.4	"		ND				30	
Chlorobenzene	ND	0.098	4.7	"		ND				30	
Chloroethane	ND	0.35	2.7	"		ND				30	
Chloroform	13.6	0.15	5.0	"		14.1			4.11	30	
Chloromethane	ND	0.46	11	"		ND				30	
Cyclohexane	ND	0.16	3.5	"		ND				30	
Heptane	ND	0.15	4.2	"		ND				30	
Hexane	ND	0.43	3.6	"		ND				30	
Dibromochloromethane	ND	0.26	8.7	"		ND				30	
1,2-Dibromoethane (EDB)	ND	0.18	7.8	"		ND				30	
1,2-Dichlorobenzene	ND	0.36	31	"		ND				30	
1,3-Dichlorobenzene	ND	0.43	31	"		ND				30	
1,4-Dichlorobenzene	ND	0.44	31	"		ND				30	
Dichlorodifluoromethane	ND	0.18	5.0	"		ND				30	
1,1-Dichloroethane	ND	0.23	4.1	"		ND				30	

SunStar Laboratories, Inc.

# SunStar — Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Partner Engineering & Science, IncTor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:10

# TO-15 - Quality Control

# SunStar Laboratories, Inc.

			Reporting		Spike	Source		%REC		RPD	
Analyte	Result	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

# Batch 1101141 - Canister Analysis

Duplicate (1101141-DUP1)		Source: T2	213066-01	Prepared: 10/11/21	Analyzed: 10/12/21		
1,2-Dichloroethane	ND	0.16	4.1 ug/m <sup>3</sup>	A			30
1,1-Dichloroethene	ND	0.28	4.0 "	ND			30
cis-1,2-Dichloroethene	ND	0.25	4.0 "	ND			30
trans-1,2-Dichloroethene	ND	0.22	4.0 "	ND			30
1,2-Dichloropropane	ND	0.13	4.7 "	ND			30
cis-1,3-Dichloropropene	ND	0.21	4.6 "	ND			30
trans-1,3-Dichloropropene	ND	0.21	4.6 "	ND			30
4-Ethyltoluene	ND	0.25	5.0 "	ND			30
Methylene chloride	ND	0.079	27 "	ND			30
Styrene	115	0.19	4.3 "	104		9.97	30
1,1,2,2-Tetrachloroethane	ND	0.54	7.0 "	ND			30
Tetrahydrofuran	ND	0.25	3.0 "	ND			30
Tetrachloroethene	97.0	0.21	6.9 "	106		8.71	30
1,1,2-Trichloroethane	ND	0.19	5.6 "	ND			30
1,1,1-Trichloroethane	ND	0.24	5.6 "	ND			30
Trichloroethene	8.46	0.21	5.5 "	8.25		2.50	30
Trichlorofluoromethane	ND	0.24	5.7 "	ND			30
1,3,5-Trimethylbenzene	ND	0.49	5.0 "	ND			30
1,2,4-Trimethylbenzene	ND	0.33	5.0 "	ND			30
Vinyl acetate	ND	0.18	3.6 "	ND			30
Vinyl chloride	ND	0.052	2.6 "	ND			30
1,4-Dioxane	ND	0.97	18 "	ND			30
2-Butanone (MEK)	15.7	0.45	15 "	16.0		1.44	30
Methyl isobutyl ketone	ND	0.14	42 "	ND			30
Benzene	4.78	0.14	3.3 "	5.28		9.88	30
Toluene	13.5	0.14	3.8 "	13.3		2.19	30
Ethylbenzene	5.82	0.14	4.4 "	5.91		1.44	30

SunStar Laboratories, Inc.

# SunStar Laboratories, Inc.

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

Partner Engineering & Science, Inc Tor	Project: 3774 & 3780 Fifth Ave				
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:			
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:10			
TO-15 - Quality Control					
SunStar Laboratories, Inc.					

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1101141 - Canister Analysis											

Duplicate (1101141-DUP1)		Source: T2	13066-01	Prepared: 10/11/21 Analyzed: 10/12/21		
m,p-Xylene	ND	0.20	8.8 ug/m <sup>3</sup> A	ir ND		30
o-Xylene	ND	0.085	4.4 "	ND		30
1,1-Difluoroethane (Freon 152)	54.7	3.3	27 "	54.4	0.385	30

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Partner Engineering & Science, Inc Tor	Project: 3774 & 3780 Fifth Ave	
2154 Torrance Blvd., Suite 200	Project Number: 328625.2	Reported:
Torrance CA, 90501	Project Manager: Hunter White	10/13/21 16:10

### **Notes and Definitions**

TO-15 High TO-15 analysis of sample was analyzed using an elevated calibration range due to high analyte and/or background concentrations. The reporting limit has been adjusted accordingly.

DET Analyte DETECTED

- ND Analyte NOT DETECTED at or above the Method Detection Limit (MDL)
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

SunStar Laboratories, Inc.

0		
* TO-	Laboratory ID #	Client: Address Phone:
Relinquished by: (signature)       Date / Time       Received by: (signature)         Relinquished by: (signature)       IO-8-2.1       I/6.15       BS       IO-9         Relinquished by: (signature)       Date / Time       Received by: (signature)       IO-8-7         Relinquished by: (signature)       Date / Time       Received by: (signature)       IO-8-7         Relinquished by: (signature)       Date / Time       Received by: (signature)       IO-8-7         Relinquished by: (signature)       Date / Time       Received by: (signature)       IO-8-7         Relinquished by: (signature)       Date / Time       Received by: (signature)       IO-8-7         * TO-15 SIM analysis available upon prior notification. (Precertified Summa cans needed)       ************************************	Sample ID SS - 1 SS - 1 SS - 2 SS - 1 SS - 1 SS - 1 SS - 1 SS - 1 SS - 1 SS - 2 SS - 2 SSS - 2 SS - 3 SS - 3 SSS - 3 SS - 3 SS - 3 SSS - 3 SSSS - 3 SSS - 3 SSSS - 3 SSSS - 3 SSSS - 3 SSS - 3 SSS - 3 SSS - 3 SSS - 3 SSSS - 3 SSSSS - 3 SSSS - 3 SSSSSS - 3 SSSSSS - 3 SSSSS - 3 SSSSS - 3 SSSSSSS - 3 SSSSSS - 3 SSSSS - 3 SSSSSS - 3 SSSSSSSSSS	hain of Chain of Chai
upon prior notification.	Date Sampled	BORAT( Custody Reco EST Torrance (b) 13-8732 Fa Hunter while
Time	Time 13/5 13/5	Fax:
Receive Receive Receive Receive	Finish Time 1249 1342 1324	
Received by: (signature)	Sample Type : Soil Gas / Indoor Air	200
nature) D nature) D nature) D nature) D nature) D	Container Type: Summa Can / Tedlar	
Date / Time $\frac{Q \cdot \mathcal{U}}{Date / Time}$ $\frac{\mathcal{U}}{1/2}$ Date / Time Date / Time	Initial Pressure -25 -25 -25 -25 -25	SunSt PROVIDING QU 25712 Commerc 949-297-5020 Date: $10/7/2021$ Project Name: Exception & Collector: Sean Han Cahan Batch #: T. (3000
	Final Final	Sean Hay 17/2021
Total # of containers Chain of Custody seals YWNA Seals intact? Y/NWA Received good condition/cold	TO-3 TO-14	SunSt PROVIDING QU PROVIDING QU 25712 Commerce 949-297-5020 2021 2
Total # of containers ustody seals YWNA Seals intact? Y/NWA I good condition/cold good condition/cold	×××× TO-15	SunStar Labo PROVIDING QUALITY, 2 Commercentry 297-5020
lls YNN t? Y/NN dition/cc	Methane by GC - FID           Fixed Gases by TCD	entre I
	RSK - 175	Drive,
Emil Results to Hwhite @ Partneress.com Shannahan @ Partneress.com	Summa Can, Manifold #/Comments 652, 2015 0168, 3018 024, 8267, 2067 0451, 2050 0467, 2057 492	SunStar Laboratories, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE 25712 Commercentre Drive, Lake Forest, CA 92630 949-297-5020 August Hanston Bays Hile 3774 & 3780 Fifth, Ave an Hanston Bays Hile 3774 & 3780 Fifth, Ave Client Project #: 328625.2 EDF #:

Rev. 02	Date 07/19
Receivin	g Form 001

# SAMPLE RECEIVING REVIEW SHEET

SunStar

- Laboratories, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Batch/Work Order #: T213066	
Client Name: Partner	Project: 3774+3780 Fifth Ave.
Delivered by:	
If Courier, Received by:	Date/Time Courier Received: <u>(0.8.2)</u> Date/Time Lab
T mis	Received: 18.2. 1725
Total number of coolers received: Thermometer ID	D: SC-1 Calibration due :8/24/22
Temperature: Cooler #1 $^{\circ}C +/$ the CF (+0.1 $^{\circ}C$ )	= N/A °C corrected temperature
Temperature: Cooler #2 $^{\circ}C$ +/- the CF ( $^{\circ}C$ )	= °C corrected temperature
Temperature:Cooler #3°C +/- the CF ( °C)	
<b>Temperature criteria</b> $= \le 6^{\circ}C$ Within cr (no frozen containers)	riteria? <b>Yes No N/A</b>
If NO:	$\square$ No $\rightarrow$
Samples received on ice? ☐Yes If on ice, samples received same day ☐Yes →	Acceptable $\bigcirc$ Acceptable $\bigcirc$
Custody seals intact on cooler/sample	Complete Non-Conformance Sheet       Yes     No*
Sample containers intact	
Sample labels match Chain of Custody IDs	$\square$ Yes $\square$ No*
Total number of containers received match COC	∑Yes □No*
Proper containers received for analyses requested on COC	
the constraint and the second	Yes No*
Proper preservative indicated on COC/containers for analyses	a requested Vac DNak VALA
Complete shipment received in good condition with correct te containers, labels, volumes preservatives and within method s holding times	emperatures,
containers, labels, volumes preservatives and within method s holding times	emperatures, specified <b>Yes No*</b>
containers, labels, volumes preservatives and within method s holding times	emperatures, specified <b>Yes No*</b>
containers, labels, volumes preservatives and within method s holding times * Complete Non-Conformance Receiving Sheet if checked Con-	emperatures, specified <b>Yes No*</b>
containers, labels, volumes preservatives and within method s holding times * Complete Non-Conformance Receiving Sheet if checked Con-	emperatures, specified <b>Yes No*</b>
containers, labels, volumes preservatives and within method s holding times * Complete Non-Conformance Receiving Sheet if checked Con Comments:	emperatures, specified <b>Yes No*</b>
containers, labels, volumes preservatives and within method sholding times * Complete Non-Conformance Receiving Sheet if checked Concernents:	emperatures, specified <b>Yes No*</b>

i ad an date f

# SunStar <u>Laboratories</u>, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Project Name: 32862	25.2				Rebecca
Company: PARTNER	2				db
Name: SEAN HANR	AHAN				db
Item		Quantity		Unit	
2 oz Jars 24/CS					
4 oz Jars 24/CS					
8 oz Jars 12/CS			and the second		
40 ml unpreserved VC	<b>DAs</b> 100/box				
40 ml HCL-preserved					
250 ml Poly 24/CS					
500 ml Poly 16/CS					
1 Liter Poly 12/CS					
500 ml Amber Bottle \	Nide 12/CS				
1 Liter Amber Bottle 1	12/CS				
1 Gallon Poly 4/box					
5035 kits:(2)Sodium E	Bisulfate VOAs 72/box				
	(1) Methanol VOA 72/box				
	(1) TERRACORE				
Lock-N-Load Handle	1/ea				
Tedlar Bags 10/pack					
Sub Slab Insert w/ wa	sher & N/F	1			
Soil Gas SS 16" Drop					
Gas Extraction Fitting					
Soil Gas Filters		1			
	Volume of Summa	# Sent	Used	Unused	Unreturned
	400cc		1		
Batch Certified	1L	6	charge 5	1	0
Summa Canisters	3L		- only go o		
	6L				
Purge cans			1		
Nitrogen cans	1L				
Nitrogen cans	1L		+		
Ind. Cerified	3L				
Summa Cannisters	6L				
63/153 Manifolds	, Var. Sampler, etc. Calibr	ated Correctly	Gauga Pa	ade at 0	DB
the second	oler, Variable Sampler, Shu	and the second	and the second states in the second		
	50ml/mn, 63ml/mn		5(150)	charge 3	0
Swagelok Fittings: No	NAMES OF TAXABLE PARTY AND ADDRESS OF TAXABLE PARTY.	5 N/Fs		abarra F	
Cooler (Sm, Med, Lrg		5 N/FS		charge 5	
the second se	the second s				
Other: Poly Tube, Valv	PB		Deter	4014/04	
Prepared By:	РВ		Date:	10/4/21	
Reviewed By:			Date:		
Comments:					
Cooler Policy: Failu	ire to return cooler(s) with	in 30 days of	receipt or if	the returned	
cooler(s) are in unus	able condition, will result i	n a \$50 per c	ooler fee for	replacemen	t costs.

T213066

0180

1000cc Summa

10/8/2021 05:35 PM

Partner-Sean

SunStar Labs South

# Check In Repo

-1
L
06
6

Bin Qty

Status

	ort
To Storage	7743066

	Barcode	Description	Due Date	In Date	Condition	From Emp/Loc	To Storage Location
	3018	Vapor Manifold		10/8/2021 05:33 PM	Good	Partner-Sean	SunStar Labs South
	0168	1000cc Summa		10/8/2021 05:33 PM		Partner-Sean	SunStar Labs South
	0029	1000cc Summa		10/8/2021 05:33 PM		Partner-Sean	SunStar Labs South
	0652	1000cc Summa		10/8/2021 05:33 PM	Excellent	Partner-Sean	SunStar Labs South
	0451	1000cc Summa		10/8/2021 05:33 PM		Partner-Sean	SunStar Labs South
	0467	1000cc Summa		10/8/2021 05:34 PM		Partner-Sean	SunStar Labs South
	2050	Vapor Manifold		10/8/2021 05:34 PM	Excellent	Partner-Sean	SunStar Labs South
	2057	Vapor Manifold		10/8/2021 05:34 PM	Excellent	Partner-Sean	SunStar Labs South
-	2067	Vapor Manifold		10/8/2021 05:35 PM	Excellent	Partner-Sean	SunStar Labs South
	2015	Vapor Manifold		10/8/2021 05:35 PM	Excellent	Partner-Sean	SunStar Labs South

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gigatrak.

Laboratories, Inc. WORK ORDER PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE T213066 **Client: Project Manager:** Partner Engineering & Science, Inc.--Tor **Mike Jaroudi Project:** 3774 & 3780 Fifth Ave **Project Number:** 328625.2 **Report To:** Partner Engineering & Science, Inc .-- Tor Hunter White 2154 Torrance Blvd., Suite 200 Torrance, CA 90501 Date Due: 10/13/21 17:00 (2 day TAT) Received By: Date Received: Travis Berner 10/08/21 17:25 Date Logged In: Logged In By: Jennifer Berger 10/08/21 18:34 Samples Received at: Custody Seals No Received On Ice No Containers Intact Yes COC/Labels Agree Yes Preservation Confirme No TAT Analysis Due Expires Comments T213066-01 SS-1 [Air] Sampled 10/07/21 12:40 (GMT-08:00) Pacific Time (US & TO-15 10/13/21 15:00 2 11/06/21 12:40 + 1,1-DFA T213066-02 SS-2 [Air] Sampled 10/07/21 13:33 (GMT-08:00) Pacific Time (US & TO-15 10/13/21 15:00 11/06/21 13:33 + 1,1-DFA 2 T213066-03 SS-3 [Air] Sampled 10/07/21 13:34 (GMT-08:00) Pacific Time (US & TO-15 10/13/21 15:00 2 11/06/21 13:34 + 1,1-DFA T213066-04 B1-SV5 [Air] Sampled 10/07/21 13:15 (GMT-08:00) Pacific Time (US & TO-15 10/13/21 15:00 2 11/06/21 13:15 + 1,1-DFA T213066-05 B2-SV5 [Air] Sampled 10/07/21 13:15 (GMT-08:00) Pacific Time

(US & TO-15 10/13/21 15:00 2 11/06/21 13:15 + 1,1-DFA

SunStar