

*Prepared for:*

**Northridge Properties, LLC**

15505 Roscoe Boulevard  
North Hills, California 91343

# **SOIL ASSESSMENT REPORT ADDITIONAL BORING SS-4A**

**777 NORTH FRONT STREET  
BURBANK, CALIFORNIA**

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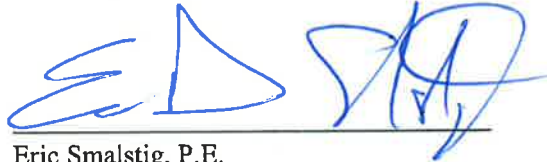
## SOIL ASSESSMENT REPORT

777 North Front Street

Burbank, California

July 2016

Supervision of fieldwork activities related to implementing the approved work plan was performed by the staff of Geosyntec Consultants, Inc., (Geosyntec) under the direction of the licensed professional with sufficient hydrogeologic experience whose signature appears hereon. The Soil Assessment Report (the "Report") was prepared under the supervision of the same. Consistent with applicable professional standards of care, our opinions and recommendations are based, in part, on data furnished by others as noted in this Report where applicable. Geosyntec is not able to independently verify data provided by others. Geosyntec services were performed, and this Report has been prepared, in accordance with generally accepted professional standards of care applicable to the scope of services authorized by Northridge Properties, LLC, consistent with direction from the Los Angeles Regional Water Quality Control Board, and no other warranty is provided in connection therewith.



Eric Smalstig, P.E.

Senior Principal, Geosyntec Consultants, Inc.

License No. C56128

I, Herbert F. Boeckmann, II, do hereby declare under penalty of perjury under the laws of the State of California that I am a Member of Northridge Properties, LLC, a California limited liability company (the "Company"); that I am authorized to attest to the veracity of the information contained in the report described herein; that the information contained in Geosyntec Consultants, Inc.'s "Soil Assessment Report, Additional Boring SS-4A, 777 North Front Street, Burbank, California," dated July 8, 2016 (the "Report"), is true and correct; that I have no personal knowledge or expertise with respect to the findings and information contained in the Report and I am relying on the professionals who prepared it; that the issuance of the Report and this Declaration is not an admission that the Company was or is a discharger within the meaning of Water Code Section 13267, which the Company expressly denies; and that this Declaration was executed at North Hills, California, on July 22, 2016.



Herbert F. Boeckmann, II, Member  
Northridge Properties, LLC

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## 1. INTRODUCTION

### 1.1 Project Overview

This Soil Assessment Report (Report) contains a summary of the soil sampling activities performed in June 2016 at the former industrial site located at 777 North Front Street, in Burbank, California (the Site), and an assessment of the analytical results. The Report was prepared by Brian Penserini of Geosyntec Consultants, Inc. (Geosyntec), and was reviewed by Matt Thomas, Ph.D., and Eric Smalstig, P.E., also of Geosyntec, in accordance with the peer review policy of the firm. Geosyntec has prepared this Report on behalf of its client Northridge Properties, LLC, for submission to the Los Angeles Regional Water Quality Control Board (LARWQCB) per the requirements of the approved Work Plan (Appendix A) [Geosyntec, 2015] that was prepared in response to the June 3, 2015 Order No. R4-2015-0065 [LARWQCB, 2015a]. The Work Plan was approved, with conditions, in a letter from the LARWQCB dated March 18, 2016 [LARWQCB, 2016].

Based on the results and conclusions of this Report presented in Sections 4 and 5: (1) that hexavalent chromium ( $\text{Cr}^{6+}$ ) was not detected in the deepest soil horizon (i.e., 40 feet below ground surface (ft bgs)); (2) that the vertical distribution of detections of  $\text{Cr}^{6+}$  encountered during this and previous Site investigations continue to be inconsistent with a historical Site release of  $\text{Cr}^{6+}$  at concentrations that could have impacted groundwater in the past; and (3) that  $\text{Cr}^{6+}$  concentrations in Site soils do not pose a threat to groundwater at the Site in the future, Geosyntec concludes that no further  $\text{Cr}^{6+}$ -specific investigations are warranted.

### 1.2 Report Organization

The remainder of this Report is organized into the following sections:

- Section 2, *Background*;
- Section 3, *Soil Sampling*;
- Section 4, *Results*; and
- Section 5, *Conclusions*.

References, a table, figures, and appendices are included at the end of the text.

## **2. BACKGROUND**

### **2.1 Property Description**

The Site located at 777 North Front Street (LARWQCB File No. 109.6162) consists of an approximately 8-acre lot in the City of Burbank, approximately 13 miles north-northwest of downtown Los Angeles (Figure 1). It is bordered by Interstate 5, Burbank Boulevard, and Front Street. From 1920 to 1961, the Site was occupied by General Water Heater Company, and then was purchased by Zero Corporation (Zero) for use by a division of the company called Zero Enclosures, whose primary business was fabrication of metal enclosures. In addition to Zero Enclosures' operations, from 1964 to 1973, a part of the Site was leased to Ocean Technology Inc., a subsidiary of Zero, which used the space to manufacture and assemble electronic products.

Zero's manufacturing operations were discontinued in December 1991. From then until 2002, the Site was used for storage (a 1995 city directory shows the occupant as Western Moving & Storage, Inc.) and later as temporary filming locations for the entertainment industry [Mactech 2005, p. 14; Law/Crandall 1997, p. 1]. The Site was sold to the Ford Leasing Development Company in 1998. Since 2002, the Site has been unoccupied, with on-site buildings having been demolished in 2004, leaving concrete pads and foundations currently remaining on the Site. The Site was periodically used for traveling circus operations (e.g., most recently Circus Vargas in 2016).

Recent activities associated with California Department of Transportation (Caltrans') widening of I-5 adjacent to the Site have resulted in some alterations to Site features, including in the area around the former clarifier near the SS-4 and SS-4A sampling locations (Figure 2). The activities were primarily related to stockpile soil storage and miscellaneous materials storage (e.g., large steel I-beams).

### **2.2 Regional Cr6+ Contamination and Recent Regulatory Context**

This section summarizes the environmental context of the Site, both in terms of regional contamination, as well as regulatory actions. Previous Site reports provide additional details related to these topics. The Site is located within the San Fernando Valley Groundwater Basin (SFVGB). In 1980, the California Department of Health Services (DHS) requested that all major groundwater users conduct tests for the presence of certain industrial chemicals in the water they were serving. The results of testing indicated elevated concentrations of a number of volatile organic compounds (VOCs) in groundwater under large portions of the San Fernando Valley, which led to the designation of four separate areas that together comprise the San Fernando Valley Superfund Sites.

In 1998, during the United States Environmental Protection Agency (USEPA) Superfund investigation, information provided to LARWQCB from the Upper Los Angeles River Area Watermaster (ULARA) indicated that some of the groundwater supply wells in the SFVGB had been contaminated by hexavalent chromium ( $\text{Cr}^{6+}$ ) [LARWQCB, 2011b]. Subsequently, the LARWQCB re-evaluated Chemical Use Questionnaires (CUQs) provided by each facility during the Superfund investigation and identified 112 sites, presumably the most suspect sites, and required that they conduct further investigations to determine whether  $\text{Cr}^{6+}$  concentrations in the soil at these sites indicated past release that may have contributed to the regional  $\text{Cr}^{6+}$  contamination or that might pose a threat to public drinking water supply wells in the future. It is significant to note that the subject Site was not among the 112 sites identified by the LARWQCB at that time.

The former responsible party for the Site had been issued a Certificate of Completion by Cal/EPA in 2002. The Site remained closed until it was reopened by the LARWQCB Order titled “*Requirement to Provide Technical Report – Work Plan*” [LARWQCB, 2011b]. The primary reasons for issuance of the Order given in the accompanying letter [LARWQCB, 2011a] were: (1) the records of historical use of  $\text{Cr}^{6+}$  at the facility; and (2) the results of a Caltrans soil investigation that indicated there exist a limited number of detections of  $\text{Cr}^{6+}$  at the Site [Ninyo & Moore, 2009] at concentrations that, according to the LARWQCB, are in exceedance of normal background concentrations of  $\text{Cr}^{6+}$  in the San Fernando Valley [LARWQCB, 2011a]. A detailed summary of the results of the Caltrans report were provided in the original approved investigation Work Plan for  $\text{Cr}^{6+}$  sampling at the Site.

The aforementioned Order was issued by LARWQCB to Northridge Properties, LLC, on May 10, 2011. Northridge Properties, LLC, worked with LARWQCB to target locations at the Site where impacts, if any, would be anticipated should any unauthorized releases of  $\text{Cr}^{6+}$  have occurred in the past. The five former clarifier locations shown on Figure 2 were selected. On behalf of Northridge Properties, LLC, Geosyntec submitted the Soil Assessment Work Plan – Hexavalent Chromium [Geosyntec, 2011], which was approved by the LARWQCB in a letter dated December 20, 2011. Work was completed in June 2012. After the LARWQCB review of the Site Assessment Report [Geosyntec, 2012] and the coordinated discussions between Northridge Properties and the LARWQCB that followed, the LARWQCB issued the June 3, 2015 Order No. R4-2015-0065 requiring additional soil assessment at the Site. A Work Plan was prepared responding to the order which was subsequently approved, with conditions, in a letter from the LARWQCB dated March 18, 2016 [LARWQCB, 2016]. Sampling activities in the approved Work Plan were implemented on June 2, 2016, and Geosyntec has prepared this Report to present and provide an assessment of the analytical results obtained.

### **3. SOIL SAMPLING**

#### **3.1 General**

The Soil Assessment activities described in this Report were conducted in accordance with the Site-specific Health and Safety Plan (HASP) and the approved Work Plan (Appendix A) prepared in accordance with the LARWQCB request. To supplement the previous assessments of the Site, specifically with respect to vertical delineation of hexavalent chromium ( $\text{Cr}^{6+}$ ) in the vicinity of one of the former clarifiers, and in accordance with the approved Work Plan, an additional soil boring (SS-4A) was drilled to a depth of 40 ft bgs and soil samples were collected at various depths. The location of SS-4A is shown on Figure 2, along with the locations where Geosyntec collected previous soil samples in June 2012.

SS-4A was drilled to a depth of 40 ft bgs and soil samples were collected at 10, 20, 25, 30, 35, and 40 ft bgs. Duplicate samples were collected at 10 ft and 20 ft bgs. The shallowest two depths were also intended to compare and/or confirm the results from the previous soil testing at SS-4, and the subsequent samples were collected at 5-foot intervals to the termination depth of the boring. The results from this sampling event are documented and summarized in this Report, along with Geosyntec's previous assessment results.

#### **3.2 Field Work Preparation**

The location of SS-4A was selected pursuant to conversations with the LARWQCB related to the detection of  $\text{Cr}^{6+}$  at a concentration above the laboratory reporting limit in sample SS-4 (at 20 ft bgs). SS-4 was located in an area originally identified as a potential area of concern based on discussions with LARWQCB and review of facility maps, which indicated the former presence of a clarifier (now closed and filled with concrete). LARWQCB agreed that for this supplemental investigation, one additional boring would be drilled adjacent to the former clarifier and in the vicinity of the previous location SS-4 (June 2012); LARWQCB representatives also attended a field walk with Geosyntec to confirm the location of SS-4A.

Underground Service Alert (USA) was notified more than 48 hours prior to beginning drilling activities to identify underground utilities in the vicinity of the proposed borehole location and to reduce the potential for accidentally encountering buried utility lines (USA ticket number A61341104). Once utilities were cleared, drilling of the borehole was scheduled. Geosyntec also contracted with Goldak Geophysics to conduct a subsurface geophysical survey to identify locations of potential underground utilities. Goldak identified a subsurface anomaly in the approximate location of the former clarifier

and marked the outline of the anomaly with high-visibility paint. SS-4A was then positioned approximately 5 ft north of the anomaly.

### **3.3 Soil Sampling**

On June 2, 2016, under the direction of Geosyntec, Gregg Drilling advanced a single boring (labeled SS-4A; Figure 2) using a hollow-stem auger rig to a depth of approximately 40 ft bgs and several depth discrete soil cores were collected using a 18-inch split-spoon sampler. Borings were visually logged for geologic lithology in accordance with the Unified Soil Classification System (USCS). The first 5 ft of the boring was completed by hand auger to reduce the potential for impairing unidentified underground utilities or pipes. Soil samples were collected from the cores at 10, 20, 25, 30, 35, and 40 ft bgs in accordance with the approved Work Plan (Appendix A) using disposable sampling equipment in order to avoid cross contamination of samples. A photographic log showing the Site soil assessment field procedures is provided in Appendix D. A total of six primary soil samples and two duplicate soil samples (labeled SS-4A-10DUP and SS-4A-20DUP) were collected in this manner.

The soil samples were collected in 4-oz. glass jars sealed with Teflon®-lined plastic caps for Cr<sup>6+</sup> analysis (EPA Method 7199). Individual soil samples were labeled with unique identifiers, logged on laboratory chain of custody forms, placed in an ice-filled cooler, and transported to Eurofins-Calscience Environmental Laboratories, Inc. (Eurofins-Calscience), a local National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory. The boring was backfilled with bentonite from the borehole terminus to ground surface. Remaining soil cores were stored in a 55-gallon DOT-approved drum during drilling and sampling activities and were removed from the Site. Upon receipt of laboratory results and waste profiling, the remaining soil cores were properly disposed of by the driller as non-hazardous waste.

The non-dedicated soil sampling equipment (e.g., coring bits and hand augers) was washed prior to each sample collection by the “three-bucket-wash” method; sampling equipment was first washed in a solution of Alconox and potable water, then rinsed with potable water, and finally rinsed with distilled water and allowed to air-dry.

### **3.4 Laboratory Analysis**

Samples were transported with proper chain of custody forms to Eurofins-Calscience, located at 7440 Lincoln Way, in Garden Grove, California, and were analyzed for Cr<sup>6+</sup> using EPA Method 7199. The laboratory analytical results for the soil samples are discussed in Section 4. The laboratory analytical report is provided in Appendix B.

## 4. RESULTS

### 4.1 Introduction

The laboratory analytical results for the soil samples arranged by boring location and depth for both the samples collected in June 2012 and in June 2016 are summarized in Table 1. In order to have a basis of comparison, Table 1 also includes the USEPA Region 9 Soil Screening Levels for  $\text{Cr}^{6+}$  in Soil (SSLs) for both residential and commercial/industrial land use [USEPA, 2016, and subsequent revisions to tables]. Soil lithology and analytical results are described in the following sections, and the laboratory analytical report is included in Appendix B.

### 4.2 Soil Lithology

The soil boring (SS-4A) advanced at the Site was logged for soil lithology in accordance with the Unified Soil Classification System (USCS) and screened visually for evidence of contamination. No visually evidence of metals staining was observed in the primarily sandy alluvial soils to 40 ft bgs. The boring log showing the soil lithology at the boring location is provided in Appendix C. Soil lithology was consistent with previous borings described in the 2012 Site assessment report [Geosyntec, 2012].

### 4.3 Soil Sample $\text{Cr}^{6+}$ Analytical Results

A total of six primary and two duplicate soil samples were collected from SS-4A and were analyzed for  $\text{Cr}^{6+}$  using EPA Method 7199. Table 1 summarizes the analytical results and provides commercial/industrial SSLs (i.e., chemical-specific soil health screening levels for commercial/industrial land use) for comparison. A plan view of boring locations from June 2012 and June 2016 is provided in Figure 3 that includes tables with soil sample depths and concentrations of  $\text{Cr}^{6+}$ . Per the request of the LARWQCB in the conditional approval letter [LARWQCB, 2016], the vertical distribution of  $\text{Cr}^{6+}$  results is also shown on Figure 4 along with a general lithologic profile.

$\text{Cr}^{6+}$ , which was the primary constituent of concern for this Site soil assessment, was detected in only one of the six primary soil samples collected. This detection was in a sample collected at a depth of 35 ft bgs in boring SS-4A. The measured concentration was less than 10 times below the industrial USEPA SSL, (see Table 1) and was 0.09 mg/kg greater than the laboratory method quantitative reporting limit of 0.4 mg/kg, slightly above the residential SSL at 35 ft bgs (where no exposure would occur). Moreover,  $\text{Cr}^{6+}$  was not detected in the sample collected at a depth of 40 ft bgs in boring SS-4A.

## 5. CONCLUSIONS

### 5.1 Summary

Based on the soil sampling data collected as part of this Soil Assessment as presented in the preceding section of this Report (see Table 1 and Figure 3) and the analyses presented in the following sections, several conclusions related to chemical impacts at the Site can be drawn:

- The single low-level detection of  $\text{Cr}^{6+}$  in the soil samples collected from the SS-4A location where impacts, if any, would be anticipated (i.e., near the former clarifier location detected at a concentration significantly less than 10 times below the USEPA SSL) confirm the previous report [Geosyntec, 2012] finding that the limited number and low concentrations of  $\text{Cr}^{6+}$  detections at the Site are not significant; and
- The single detection of  $\text{Cr}^{6+}$  in SS-4A at 35 ft bgs, with no detection at 40 ft bgs, is inconsistent with historical releases of  $\text{Cr}^{6+}$  at concentrations that could have impacted groundwater and do not provide evidence to suggest that historical Site activities contributed to the San Fernando Valley Groundwater Basin (SFVGB)  $\text{Cr}^{6+}$  contamination that is currently under investigation by LARWQCB and USEPA.

The conclusions summarized above in bulleted format are described in more detail in the following sections.

### 5.2 Hexavalent Chromium

Hexavalent chromium, the chief focus of the LARWQCB Orders [LARWQCB, 2011b and 2015a] and of this Soil Assessment, was detected in one of the six primary soil samples collected (one of eight samples, if the duplicates are counted) from the sample location SS-4A that was specifically selected for this field program and approved by LARWQCB. Furthermore, the detection of  $\text{Cr}^{6+}$  was at a low concentration (below the industrial SSL as shown in Table 1). When combined with the previous results in 2012, these results provide further indication that the limited  $\text{Cr}^{6+}$  detections at the Site are not significant.

In terms of vertical distribution, the one detection at 35 ft bgs was at a low concentration, just 0.09 mg/kg above the detection limit. These results are inconsistent with historical releases of  $\text{Cr}^{6+}$  at concentrations that could have impacted groundwater and do not provide evidence to suggest that historical Site activities contributed to the San Fernando

Valley Groundwater Basin (SFVGB)  $\text{Cr}^{6+}$  contamination that is currently under investigation by LARWQCB and USEPA. In addition, because  $\text{Cr}^{6+}$  was not detected in the sample collected at the base of the soil boring (40 ft bgs), the vertical distribution of  $\text{Cr}^{6+}$  detections in boring SS-4A, as well as the previous soil sampling results, makes it unlikely that the groundwater table would come into contact with these soils. Furthermore, the low concentrations of  $\text{Cr}^{6+}$  are orders of magnitude below the Total Threshold Limit Concentration (TTLC = 500 mg/kg) and the more conservative value of 10 times the Soluble Threshold Limit Concentration (STLC; i.e., the comparable threshold value for STLC leachability testing = 50 mg/kg) which is an indication of a contaminant's potential to impact (i.e., leach into and/or migrate downward to) groundwater. These results demonstrate that  $\text{Cr}^{6+}$  concentrations in Site soils do not pose a threat to groundwater at the Site in the future. Finally, the LARWQCB committed to add  $\text{Cr}^{6+}$  to the Certificate of Completion for the Site and to reissue it if the additional boring documented in this Report yields a non-detect finding at depth for  $\text{Cr}^{6+}$ , which it has yielded [LARWQCB, 2015b].

### **5.3 Conclusion**

Given the conclusions of this and the previous Soil Assessment and their consistency with past soil sampling findings provided by previous technical investigations, Geosyntec concludes that no further hexavalent chromium-specific investigations are warranted.

## REFERENCES

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## TABLE

**Table 1**  
**Soil Sample Cr<sup>6+</sup> Analytical Results**  
**Soil Assessment**  
**777 North Front Street**  
**Burbank, California**

Sample Location ID	Depth of Sample (feet bgs)	June 2012 Cr <sup>6+</sup> Results (mg/kg)	June 2016 Cr <sup>6+</sup> Results (mg/kg)
EPA Region 9 Residential RSL*		0.30	0.30
EPA Region 9 Commercial/Industrial RSL*		6.3	6.3
SS-1	5	ND<0.40	-
	10	ND<0.40	-
	15	ND<0.40	-
	20	ND<0.40	-
SS-2	5	1.10	-
	10	0.96	-
	15	ND<0.40	-
	20	ND<0.40	-
SS-3	5	ND<0.40	-
	10 <sup>(1)</sup>	ND<0.40/ND<0.40	-
	15	ND<0.40	-
	20	ND<0.40	-
SS-4 / SS-4A	5	ND<0.40	-
	10 <sup>(1)</sup>	ND<0.40	ND<0.40/ND<0.40
	15	ND<0.40	-
	20 <sup>(1)</sup>	0.41	ND<0.40/ND<0.40
	25	-	ND<0.40
	30	-	ND<0.40
	35	-	0.49
	40	-	ND<0.40
SS-5	5	1.30	-
	10	ND<0.40	-
	15	ND<0.40	-
	20 <sup>(1)</sup>	ND<0.40/ND<0.40	-

bgs = below ground surface

Cr<sup>6+</sup> = Hexavalent chromium

\* = May 2016 screening values for soil; for comparison, California Human Health Screening Levels (CHHSLs), used less frequently since the RSLs were issued, are 17 mg/kg (residential) and 37 mg/kg (industrial)

ND<0.40 = Not detected above laboratory Detection Limits (i.e., 0.20 mg/kg); quantitative

Quantitative Reporting Limit = 0.40 mg/kg

- = Samples not collected at referenced depth

<sup>(1)</sup> = Duplicate sample collected and analyzed

ND<0.40/ND<0.40 = Primary sample results/duplicate sample results

## **FIGURES**





**Legend**

SS-4A

Geosyntec Soil Boring (June 2016)

SS-3

Geosyntec Soil Boring (June 2012)

Former Clarifier (Based on Site Plan  
Provided by Northridge Properties, LLC  
and Field Observations)

Former Building Location

Site Boundary

Source: Esri, Digital  
AEX, Getmapping, A

Soil Boring Locations  
Former Zero Corporation  
777 North Front Street  
Burbank, California

2001000200

Feet

Geosyntec

consultants

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Figure  
2

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Sample Location ID	Depth of Sample (feet bgs)	June 2012 Cr <sup>6+</sup> Results (mg/kg)
SS-1	5	ND<0.40
	10	ND<0.40
	15	ND<0.40
	20	ND<0.40

SS-1

Building 11

Sample Location ID	Depth of Sample (feet bgs)	June 2012 Cr <sup>6+</sup> Results (mg/kg)
SS-2	5	1.10
	10	0.96
	15	ND<0.40
	20	ND<0.40

SS-2

Sample Location ID	Depth of Sample (feet bgs)	June 2012 Cr <sup>6+</sup> Results (mg/kg)
SS-4	5	ND<0.40
	10 <sup>(1)</sup>	ND<0.40
	15	ND<0.40
	20 <sup>(1)</sup>	0.41

Sample Location ID	Depth of Sample (feet bgs)	June 2016 Cr <sup>6+</sup> Results (mg/kg)
SS-4A	5	-
	10 <sup>(1)</sup>	ND<0.40/ND<0.40
	15	-
	20 <sup>(1)</sup>	ND<0.40/ND<0.40
	25	ND<0.40
	30	ND<0.40
	35	0.49
	40	ND<0.40

SS-4A

SS-4

SS-3

Sample Location ID	Depth of Sample (feet bgs)	June 2012 Cr <sup>6+</sup> Results (mg/kg)
SS-3	5	ND<0.40
	10 <sup>(1)</sup>	ND<0.40/ND<0.40
	15	ND<0.40
	20	ND<0.40

Building 14

SS-5

Sample Location ID	Depth of Sample (feet bgs)	June 2012 Cr <sup>6+</sup> Results (mg/kg)
SS-5	5	1.30
	10	ND<0.40
	15	ND<0.40
	20 <sup>(1)</sup>	ND<0.40/ND<0.40

Notes:

bgs = below ground surface

Cr<sup>6+</sup> = Hexavalent chromium

ND<0.40 = Not detected above laboratory reporting limits (i.e., 0.40 mg/kg)

- = Samples not collected at referenced depth

<sup>(1)</sup> = Duplicate sample collected and analyzed; results as primary sample results/duplicate sample results

Legend

SS-4A ● Geosyntec Soil Boring (June 2016)

SS-3 ● Geosyntec Soil Boring (June 2012)



Former Clarifier (Based on Site Plan Provided by Northridge Properties, LLC and Field Observations)

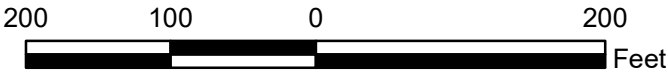


Former Building Location



Site Boundary

Soil Sample Cr<sub>6</sub>+ Analytical Results  
Former Zero Corporation  
777 North Front Street  
Burbank, California



Geosyntec  
consultants

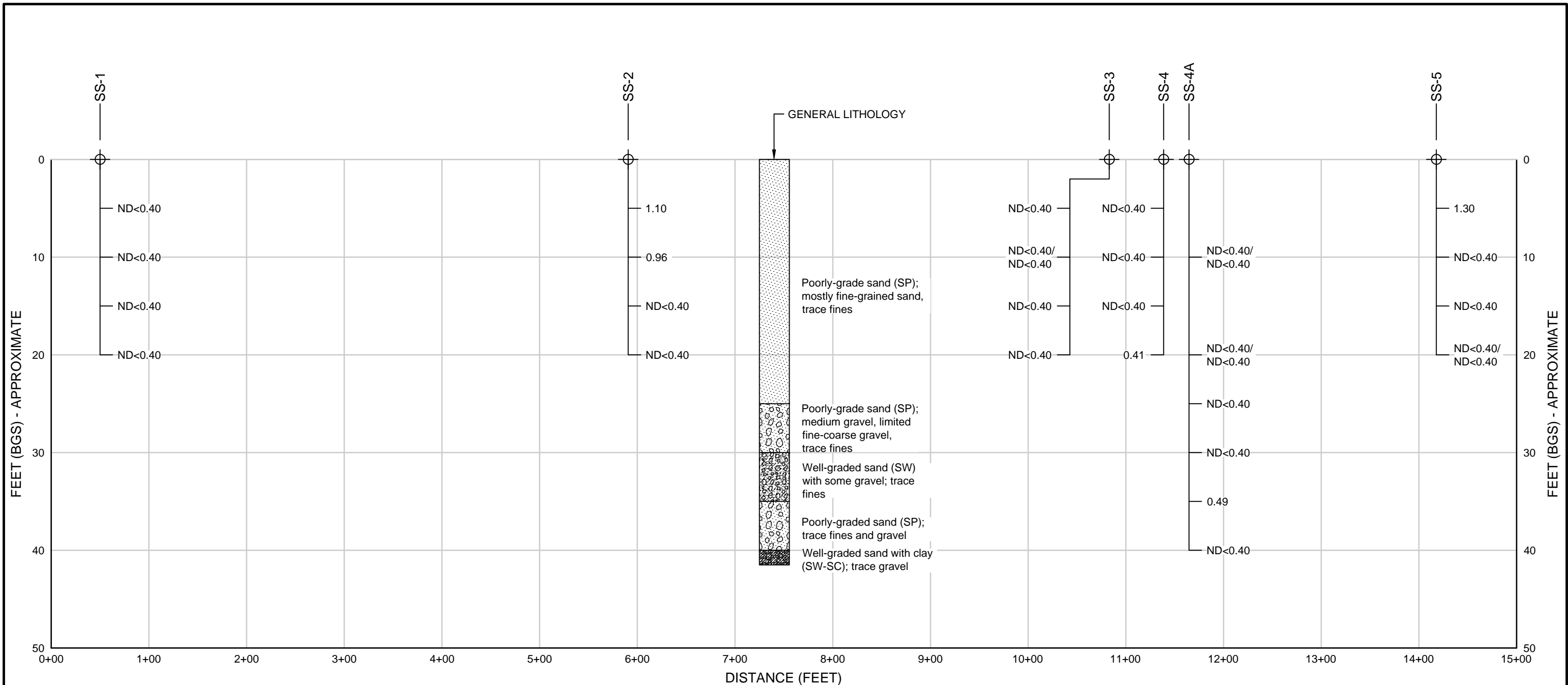
Figure  
3

HR1305C

July 2016

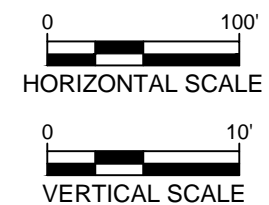
Source: Esri, Digital  
AEX, Getmapping, A

N:\CADD\FORMER ZERO CORP\FORMER ZERO CORP - HR1305\Figures\1305F001.dwg 7/11/16 16:13 sberdy



NOTES:

1. HORIZONTAL AND VERTICAL MEASUREMENTS ARE APPROXIMATE.
2. Cr6+ RESULTS ARE MG/KG.



**FENCE DIAGRAM - Cr6+ RESULTS**  
FORMER ZERO CORPORATION  
777 NORTH FRONT STREET  
BURBANK, CALIFORNIA

**Geosyntec**  
consultants

Project No: HR1305C

July 2016

Figure  
**4**

# **APPENDIX A**

## **APPROVED WORK PLAN**

October 1, 2015

Samuel Unger  
Executive Officer  
Regional Water Quality Control Board, Los Angeles Region  
320 West Fourth Street, Suite 200  
Los Angeles, CA 90013

**Subject: Supplemental Investigation Work Plan – Hexavalent Chromium  
777 North Front Street, Burbank, California**

Dear Mr. Unger:

## **INTRODUCTION**

This document consists of a Work Plan for supplemental soil assessment to be conducted at the 777 North Front Street property, located in Burbank, California (the Site). This Work Plan was prepared by Geosyntec Consultants, Inc. (Geosyntec) at the request of Gilchrist & Rutter Professional Corp. (Gilchrist) on behalf of Northridge Properties, LLC, the owner of the property, for submittal to the Los Angeles Regional Water Quality Control Board (LARWQCB). The soil assessment is being conducted in response to a LARWQCB letter addressed to Northridge Properties, LLC, dated June 3, 2015 (LARWQCB Case File No. 109.6162). The letter required that Northridge Properties, LLC, complete a supplemental soil investigation in the vicinity of one of the previous investigation boring locations, and submit a technical report documenting the results of the supplemental investigation.

## **SAMPLING AND ANALYSIS PLAN**

### ***General***

To supplement the previous assessments of the Site, specifically with respect to vertical extent of hexavalent chromium in the vicinity of a former clarifier, an additional soil boring will be drilled in the location to a depth of 40 feet below ground surface (bgs) in the area identified in the attached Figure 1. The proposed sample location SS-4A was selected pursuant to conversations with the LARWQCB related to the detection of hexavalent chromium at a concentration above the laboratory reporting limit in sample

SS-4 (at 20 ft bgs). The locations where Geosyntec collected previous soil samples are also shown on Figure 1. While the LARWQCB requires in their June 3, 2015, letter that the boring shall be advanced to 50 ft bgs, subsequent conversations with Mr. Larry Moore of the LARWQCB, case representative for this site, allowed for the depth of the new boring at the SS-4 location to be 40 ft bgs, doubling the depth achieved during the previous soil investigation. Northridge Properties, LLC, understands that, if hexavalent chromium is detected in soils at 40 ft bgs, additional supplemental soil investigation may be required to the originally specified depth of 50 ft bgs<sup>1</sup>.

The proposed boring location SS-4A will be drilled to 40 ft bgs, with soil samples to be collected at the following depths below ground surface: 10 ft, 20 ft, 25 ft, 30 ft, 35 ft, and 40 ft. The shallowest two depths are intended to confirm results from the previous soil testing at SS-4, and the subsequent samples collected at 5 ft intervals to the termination depth of the boring. The results from this sampling event will be documented and summarized along with Geosyntec's previous assessment results.

### ***Fieldwork Preparation and Borehole Installation***

The soil boring location will be determined in the field during a site walk with representatives of Northridge Properties, LLC, and the LARWQCB.

The soil boring will be installed using hollow stem drilling technology. The boring will be drilled to a depth of up to a maximum of 40 ft bgs or until refusal; if drilling refusal is encountered prior to reaching 40 ft bgs, then the location will be relocated in the immediate vicinity of SS-4A and drilling resumed. As the Site is vacant without knowledgeable Site personnel, borehole locations will be cleared of underground utilities by performing a geophysical survey in advance of field work, and notification of Underground Service Alert (USA) prior to commencing field work. Concrete coring will be performed prior to drilling in areas currently covered with a concrete foundation.

### ***Sample Collection***

Samples of the subsurface soil will be recovered at approximately the intervals noted above over the entire borehole depth using an approximately 2-inch diameter California split spoon sampler. The boring will be overseen by a registered Professional Engineer

---

<sup>1</sup> Based on field drilling conditions, Geosyntec may opt to continue the boring to 50 ft bgs as specified in the RWQCB June 3, 2015, letter, and to hold soil samples collected from 45 ft bgs and 50 ft bgs for analysis only if the presence of a detectible level of hexavalent chromium is confirmed in the soil sample collected from 40 ft bgs.

or Geologist, with visually logging for geologic lithology in accordance with the Unified Soil Classification System (USCS) through evaluation of drill cuttings and soil samples by the field representative. The soil core will be visually evaluated for evidence of impacts. Select soil samples will be retained for laboratory analytical testing at the intervals identified above. Soil sampling intervals may be adjusted based on the results of observations of visual impacts, or the identification of low permeable layers. Soil samples will be stored in a cooler on ice pending shipment to Eurofins/Calscience Laboratories under chain of custody protocol. Samples will be analyzed for hexavalent chromium speciation. Similar to the previous soil investigation, the laboratory reporting limit for hexavalent chromium is 0.40 milligram per kilogram (mg/kg).

#### ***Decontamination and Investigation-Derived Waste Disposal***

The borehole will be abandoned with hydrated bentonite pellets. Augers will be decontaminated with a three-stage rinse; waste cuttings and decontamination water that are generated are referred to as investigation-derived waste. Investigation-derived wastes will be stored in drums for off-site disposal.

#### ***Quality Assurance/Quality Control***

Duplicate samples will be collected from each sampling depth as a contingency. Trip blanks will be stored with analytical samples during transport to the analytical lab. Quality control procedures of Eurofins/Calscience Laboratories will be included in an appendix to the final report along with lab reports.

### **DATA ANALYSIS AND REPORTING**

A data summary report will be prepared to document field activities and present the findings of the investigation. This report will be submitted to the LARWQCB within six weeks of receipt of the laboratory analytical results. The report will include figures illustrating sampling locations and copies of laboratory analytical data. The investigation analytical results will be evaluated based on a comparison with historical hexavalent chromium data, as well as EPA-established screening levels. If appropriate, the report will include recommendations for further analysis or investigation/delineation; pursuant to discussions with the LARWQCB, the recommendations may include a request for soil closure if the soil sample hexavalent chromium concentrations are below screening limits and the deepest (i.e., 40 ft bgs) sample is below laboratory reporting limit of 0.40 mg/kg. Per the requirements of the LARWQCB, the boring log will also be prepared and included in the report.

Samuel Unger  
October 1, 2015  
Page 4 -- 777 N. Front St.

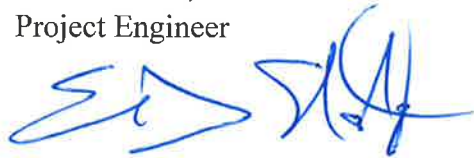
## CLOSING

We are seeking your concurrence with and approval of this Work Plan. If you have any questions or comments on the contents of this letter, please do not hesitate to contact Eric Smalstig of Geosyntec at 714-969-0800.

Sincerely,



Matt Thomas, Ph.D.  
Project Engineer



Eric Smalstig, P.E.  
Principal

Samuel Unger  
October 1, 2015  
Page 5 – 777 N. Front St.

Copies to:

Alan Skobin, Northridge Properties (via electronic mail)  
Larry Moore, LARWQCB (via electronic mail)  
Don Nanney, Gilchrist & Rutter, PC (via electronic mail)

## **FIGURE 1**



# **APPENDIX B**

## **LABORATORY ANALYTICAL REPORT**

**WORK ORDER NUMBER: 16-06-0179***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For****Client:** Geosyntec Consultants**Client Project Name:** 777 N. Front Street / HR1305C**Attention:** Matt Thomas  
2100 Main Street  
Suite 150  
Huntington Beach, CA 92648-2460

A handwritten signature in black ink, appearing to read "S. Nowak".

---

Approved for release on 06/08/2016 by:  
Stephen Nowak  
Project Manager

ResultLink ▶

Email your PM ▶



Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: 777 N. Front Street / HR1305C  
 Work Order Number: 16-06-0179

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Work Order: 16-06-0179Page 1 of 1

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 06/02/16. They were assigned to Work Order 16-06-0179.

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

**Holding Times:**

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

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

**Quality Control:**

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

**Subcontractor Information:**

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

**Additional Comments:**

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

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



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## Sample Summary

---

Client: Geosyntec Consultants	Work Order: 16-06-0179
2100 Main Street, Suite 150	Project Name: 777 N. Front Street / HR1305C
Huntington Beach, CA 92648-2460	PO Number:
	Date/Time Received: 06/02/16 13:45
	Number of Containers: 8

---

Attn: Matt Thomas

---

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SS-4A-10	16-06-0179-1	06/02/16 09:10	1	Solid
SS-4A-10(DUP)	16-06-0179-2	06/02/16 09:10	1	Solid
SS-4A-20	16-06-0179-3	06/02/16 09:18	1	Solid
SS-4A-20(DUP)	16-06-0179-4	06/02/16 09:18	1	Solid
SS-4A-25	16-06-0179-5	06/02/16 09:24	1	Solid
SS-4A-30	16-06-0179-6	06/02/16 09:30	1	Solid
SS-4A-35	16-06-0179-7	06/02/16 09:39	1	Solid
SS-4A-40	16-06-0179-8	06/02/16 09:57	1	Solid

  
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**Detections Summary**

Client: Geosyntec Consultants  
2100 Main Street, Suite 150  
Huntington Beach, CA 92648-2460

Work Order: 16-06-0179  
Project Name: 777 N. Front Street / HR1305C  
Received: 06/02/16

Attn: Matt Thomas

Page 1 of 1

**Client SampleID**

<b><u>Analyte</u></b>	<b><u>Result</u></b>	<b><u>Qualifiers</u></b>	<b><u>RL</u></b>	<b><u>Units</u></b>	<b><u>Method</u></b>	<b><u>Extraction</u></b>
SS-4A-35 (16-06-0179-7) Chromium, Hexavalent	490		400	ug/kg	EPA 7199	EPA 3060A

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

  
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\* MDL is shown



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## Analytical Report

Geosyntec Consultants  
2100 Main Street, Suite 150  
Huntington Beach, CA 92648-2460

Date Received: 06/02/16  
Work Order: 16-06-0179  
Preparation: EPA 3060A  
Method: EPA 7199  
Units: ug/kg

Project: 777 N. Front Street / HR1305C

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>SS-4A-10</b>	<b>16-06-0179-1-A</b>	<b>06/02/16 09:10</b>	<b>Solid</b>	<b>IC 11</b>	<b>06/03/16</b>	<b>06/03/16 16:20</b>	<b>160603L01P</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Chromium, Hexavalent		ND	400		1.00		
<b>SS-4A-10(DUP)</b>	<b>16-06-0179-2-A</b>	<b>06/02/16 09:10</b>	<b>Solid</b>	<b>IC 11</b>	<b>06/03/16</b>	<b>06/03/16 16:29</b>	<b>160603L01P</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Chromium, Hexavalent		ND	400		1.00		
<b>SS-4A-20</b>	<b>16-06-0179-3-A</b>	<b>06/02/16 09:18</b>	<b>Solid</b>	<b>IC 11</b>	<b>06/03/16</b>	<b>06/03/16 16:38</b>	<b>160603L01P</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Chromium, Hexavalent		ND	400		1.00		
<b>SS-4A-20(DUP)</b>	<b>16-06-0179-4-A</b>	<b>06/02/16 09:18</b>	<b>Solid</b>	<b>IC 11</b>	<b>06/03/16</b>	<b>06/03/16 16:47</b>	<b>160603L01P</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Chromium, Hexavalent		ND	400		1.00		
<b>SS-4A-25</b>	<b>16-06-0179-5-A</b>	<b>06/02/16 09:24</b>	<b>Solid</b>	<b>IC 11</b>	<b>06/03/16</b>	<b>06/03/16 16:56</b>	<b>160603L01P</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Chromium, Hexavalent		ND	400		1.00		
<b>SS-4A-30</b>	<b>16-06-0179-6-A</b>	<b>06/02/16 09:30</b>	<b>Solid</b>	<b>IC 11</b>	<b>06/03/16</b>	<b>06/03/16 17:05</b>	<b>160603L01P</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Chromium, Hexavalent		ND	400		1.00		
<b>SS-4A-35</b>	<b>16-06-0179-7-A</b>	<b>06/02/16 09:39</b>	<b>Solid</b>	<b>IC 11</b>	<b>06/03/16</b>	<b>06/03/16 17:14</b>	<b>160603L01P</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Chromium, Hexavalent		490	400		1.00		
<b>SS-4A-40</b>	<b>16-06-0179-8-A</b>	<b>06/02/16 09:57</b>	<b>Solid</b>	<b>IC 11</b>	<b>06/03/16</b>	<b>06/03/16 17:23</b>	<b>160603L01P</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Chromium, Hexavalent		ND	400		1.00		

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



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## Analytical Report

Geosyntec Consultants	Date Received:	06/02/16
2100 Main Street, Suite 150	Work Order:	16-06-0179
Huntington Beach, CA 92648-2460	Preparation:	EPA 3060A
	Method:	EPA 7199
	Units:	ug/kg
Project: 777 N. Front Street / HR1305C		Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-05-125-2924	N/A	Solid	IC 11	06/03/16	06/03/16 15:53	160603L01P

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Chromium, Hexavalent	ND	400	1.00	

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



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## Quality Control - Spike/Spike Duplicate

Geosyntec Consultants  
2100 Main Street, Suite 150  
Huntington Beach, CA 92648-2460

Date Received: 06/02/16  
Work Order: 16-06-0179  
Preparation: EPA 3060A  
Method: EPA 7199

Project: 777 N. Front Street / HR1305C

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
16-06-0196-2	Sample	Solid	IC 11	06/03/16	06/03/16 16:11	160603S01P
16-06-0196-2	Matrix Spike	Solid	IC 11	06/03/16	06/03/16 17:32	160603S01P
16-06-0196-2	Matrix Spike Duplicate	Solid	IC 11	06/03/16	06/03/16 17:41	160603S01P

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	ND	40000	5890	15	6548	16	75-125	11	0-25	3

  
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RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - LCS

Geosyntec Consultants  
2100 Main Street, Suite 150  
Huntington Beach, CA 92648-2460

Date Received: 06/02/16  
Work Order: 16-06-0179  
Preparation: EPA 3060A  
Method: EPA 7199

Project: 777 N. Front Street / HR1305C

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
<b>099-05-125-2924</b>	<b>LCS</b>	<b>Solid</b>	<b>IC 11</b>	<b>06/03/16</b>	<b>06/03/16 16:02</b>	<b>160603L01P</b>

<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Chromium, Hexavalent	20000	19270	96	80-120	

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## Glossary of Terms and Qualifiers

Work Order: 16-06-0179

Page 1 of 1

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

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

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



eurofins

Calscience

7440 Lincoln Way, Garden Grove, CA 92641-1427 • (714) 895-5494  
For courier service / sample drop off information, contact us26\_sales@eurofins.com or call us.

LABORATORY CLIENT:

GEOSYNTEC CONSULTANTS

ADDRESS:

2100 MAIN STREET, #150

CITY:

HUNTINGTON BEACH CA

TEL:

714-969-0800

STATE:

ZIP: 92648

E-MAIL:

mthomas@geosyntec.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):

☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ STANDARD

EDD

☐ COELT EDF ☐ OTHER

SPECIAL INSTRUCTIONS:

\* CHROMIUM 6 (HEX CHROME)

ONLY

\* MAINTAIN SUFFICIENT SAMPLE FOR 2<sup>ND</sup> ANALYSIS, IF REQUESTED (AFTER 3 MONTHS)

# CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY

16-06-0179

Date 2 June 2016

Page 1 of 1

LABORATORY CLIENT:		CLIENT PROJECT NAME / NO.:		P.O. NO.:	
ADDRESS:		777 N. FRONT STREET		H21305 C	
CITY:		PROJECT CONTACT:		LAB CONTACT OR QUOTE NO.:	
HUNTINGTON BEACH CA		MATT THOMAS			
TEL:		GLOBAL ID:		SAMPLER(S): (PRINT)	
714-969-0800				BRIAN PENSERINI	
TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):		LOG CODE:			
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD					
EDD					
<input type="checkbox"/> COELT EDF <input type="checkbox"/> OTHER					

## REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	Cr(VI) <input type="checkbox"/> 7196 <input checked="" type="checkbox"/> 7199 <input type="checkbox"/> 218.6	RL=0.40 mg/kg
		DATE	TIME																				
1	SS-4A-10	6/2/16	09:10	Soil	1	X																	
2	SS-4A-10(DUP)	"	09:10	Soil	1	X																	
3	SS-4A-20	"	09:18	Soil	1	X																	
4	SS-4A-20(DUP)	"	09:18	Soil	1	X																	
5	SS-4A-25	"	09:24	Soil	1	X																	
6	SS-4A-30	"	09:30	Soil	1	X																	
7	SS-4A-35	"	09:39	Soil	1	X																	
8	SS-4A-40	"	09:57	Soil	1	X																	

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date: 6/2/16	Time: 13:45
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

## SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1CLIENT: GeosyntecDATE: 06/02/2016

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

Thermometer ID: SC2A (CF: 0.0°C); Temperature (w/o CF): 3.7 °C (w/ CF): 3.7 °C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: 836

## CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 836Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 802

## SAMPLE CONDITION:

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

## CONTAINER TYPE:

(Trip Blank Lot Number: \_\_\_\_\_)

Aqueous: ☐ VOA ☐ VOA<sub>h</sub> ☐ VOA<sub>na2</sub> ☐ 100PJ ☐ 100PJ<sub>na2</sub> ☐ 125AGB ☐ 125AGB<sub>h</sub> ☐ 125AGB<sub>p</sub> ☐ 125PB☐ 125PB<sub>znna</sub> ☐ 250AGB ☐ 250CGB ☐ 250CGB<sub>s</sub> ☐ 250PB ☐ 250PB<sub>n</sub> ☐ 500AGB ☐ 500AGJ ☐ 500AGJ<sub>s</sub>☐ 500PB ☐ 1AGB ☐ 1AGB<sub>na2</sub> ☐ 1AGB<sub>s</sub> ☐ 1PB ☐ 1PB<sub>na</sub> ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_Solid: ☒ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (\_\_\_\_\_) ☐ EnCores® (\_\_\_\_\_) ☐ TerraCores® (\_\_\_\_\_) ☐ \_\_\_\_\_Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ \_\_\_\_\_ Other Matrix (\_\_\_\_\_) ☐ \_\_\_\_\_ ☐ \_\_\_\_\_

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

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 802s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, znna = Zn(CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOHReviewed by: 836

# **APPENDIX C**

## **BORING LOG**



2100 Main St  
Suite 150  
Huntington Beach, CA 92648  
Tel: (714) 969-0800  
Fax: (714) 969-0820

**BORING**  
**START DRILL DATE** Jun 2, 16  
**FINISH DRILL DATE** Jun 2, 16  
**LOCATION** 777 Front St., Burbank  
**PROJECT** FORMER ZERO CORP  
**NUMBER** HR1305

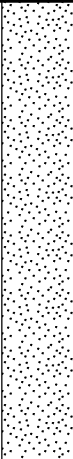
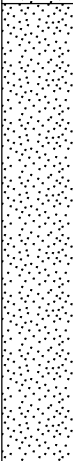
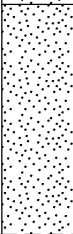
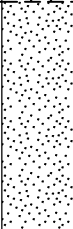
**SS-4A**

**SHEET 1 OF 2**

**ELEVATION DATA:**  
**GROUND SURF. (Ft)** NA  
**TOP OF CASING (Ft)** NA  
**DATUM** Ground Surface

GS FORM:  
WELL BORE 01/04

## BOREHOLE LOG

DEPTH (ft-bgs)	DESCRIPTION  1) Unit/Formation, Mem. 2) USCS Name 3) Color 4) Moisture 5) Percent Grain Size 6) Plasticity 7) Density/Consistency 8) Structure 9) Other (Mineralization, Discoloration, Odor, etc.)	GRAPHIC LOG	WELL LOG	GROUNDWATER OR STRUCTURE	ELEVATION (ft)	SAMPLE					COMMENTS  1) Rig Behavior 2) Air Monitoring	
						SAMPLE NO.	TYPE	BLOW COUNT	RECOVERY (%)	PID/FID (ppm)		TIME (00:00)
5	Poorly-graded sand (SP); grayish-brown (5YR 3/2); moist; mostly fine-grained sand, trace silt; (5, 95, 0); homogenous.											From drill cuttings. No sample taken from 0-10' bgs
10	Poorly-graded sand (SP) as above; trace clay; (5, 95,0); homogeneous.					SS-4A-10		8/ 18/ 21	66	0	09:10	Duplicate sample taken (SS-4A-10DUP). 12"/18" recovery
15												
20	Poorly-graded sand (SP) as above (at 10' bgs).					SS-4A-20		10/ 19/ 16	100	0	09:18	Duplicate sample taken (SS-4A-20DUP). 18" recovery
25	Poorly-graded sand (SP); grayish-brown (5YR 3/2) sand, medium light gray (N6) gravel; moist; mostly sand, few fine-coarse gravel, trace fines; (5,85,10); unconsolidated.					SS-4A-25		28/ 50 (6")	100	0	09:24	Driller noted coarse gravel in cuttings. 15" recovery
30												

**CONTRACTOR** Gregg Drilling  
**EQUIPMENT**  
**DRILL MTHD** Hollow-Stem Auger  
**DIAMETER**  
**LOGGER** Brian Penserini

**NORTHING**  
**EASTING**  
**COORDINATE SYSTEM:**  
**REVIEWER**

**NOTES:** Samples collected using 2" diameter, 18" long split spoon, lined. Representative specimens sent for lab analyses or retained in 4 oz. glass jars. Samples taken from bottom sleeve except SS-4A-10 (10DUP) (taken from middle)

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

07-WELL BORE HR1305.GPJ GEOSYNTEC.GDT 6/17/16

GS FORM:  
WELL BORE 01/04

## BOREHOLE LOG

DEPTH (ft-bgs)	DESCRIPTION  1) Unit/Formation, Mem. 2) USCS Name 3) Color 4) Moisture 5) Percent Grain Size 6) Plasticity 7) Density/Consistency 8) Structure 9) Other (Mineralization, Discoloration, Odor, etc.)	GRAPHIC LOG	WELL LOG	GROUNDWATER OR STRUCTURE	ELEVATION (ft)	SAMPLE						COMMENTS  1) Rig Behavior 2) Air Monitoring
						SAMPLE NO.	TYPE	BLOW COUNT	RECOVERY (%)	PID/FID (ppm)	TIME (00:00)	
	Well-graded sand (SW); grayish-brown (5YR 3/2) sand, yellowish-gray (5YR 7/2) gravel; moist; trace fines, mostly medium-coarse sand, trace gravel; (5, 90, 5); unconsolidated.					SS-4A-30		21/ 40/ 36	100	0	09:30	18" recovery
35	Poorly-graded sand (SP); grayish-brown (5YR 3/2) sand; moist; trace fines, mostly fine sand, trace fine gravel; (5, 90, 5).					SS-4A-35		14/ 22/ 31	100	0	09:39	18" recovery
40	Well-graded sand with clay (SW-SC); grayish-brown (5YR 3/2) sand; moist; few fines, mostly sand, trace fine gravel; unconsolidated.					SS-4A-40		17/ 40/ 38	100	0	09:57	18" recovery
45												
50												
55												
60												

**CONTRACTOR** Gregg Drilling  
**EQUIPMENT**  
**DRILL MTHD** Hollow-Stem Auger  
**DIAMETER**  
**LOGGER** Brian Penserini

**NORTHING**  
**EASTING**  
**COORDINATE SYSTEM:**  
**REVIEWER**

**NOTES:** Samples collected using 2" diameter, 18" long split spoon, lined. Representative specimens sent for lab analyses or retained in 4 oz. glass jars. Samples taken from bottom sleeve except SS-4A-10 (10DUP) (taken from middle)

SEE KEY SHEET FOR SYMBOLS AND ABBREVIATIONS

# **APPENDIX D**

## **PHOTOGRAPHIC LOG**



<b>Photo No.:</b>	1	<b>Date:</b>	June 2, 2016
<b>Photographer:</b>	Brian Penserini		
<b>Subject:</b>	View of Proposed Site of SS-4A		
<b>Project:</b>	777 N. Front Street, Additional Boing Investigation - 2016	<b>City/State:</b>	Burbank, CA



<b>Photo No.:</b>	2	<b>Date:</b>	June 2, 2016
<b>Photographer:</b>	Brian Penserini		
<b>Subject:</b>	Goldak Geophysics Performing Subsurface Survey		
<b>Project:</b>	777 N. Front Street, Additional Boing Investigation - 2016	<b>City/State:</b>	Burbank, CA



<b>Photo No.:</b>	3	<b>Date:</b>	June 2, 2016
<b>Photographer:</b>	Brian Penserini		
<b>Subject:</b>	Location of SS-4A Prior to Drilling		
<b>Project:</b>	777 N. Front Street, Additional Boing Investigation - 2016	<b>City/State:</b>	Burbank, CA



<b>Photo No.:</b>	4	<b>Date:</b>	June 2, 2016
<b>Photographer:</b>	Brian Penserini		
<b>Subject:</b>	Gregg Drilling Hand Augering at SS-4A		
<b>Project:</b>	777 N. Front Street, Additional Boing Investigation - 2016	<b>City/State:</b>	Burbank, CA



<b>Photo No.:</b>	5	<b>Date:</b>	June 2, 2016
<b>Photographer:</b>	Brian Penserini		
<b>Subject:</b>	Overview of SS-4A Site Setup During Drilling		
<b>Project:</b>	777 N. Front Street, Additional Boing Investigation - 2016	<b>City/State:</b>	Burbank, CA



<b>Photo No.:</b>	6	<b>Date:</b>	June 2, 2016
<b>Photographer:</b>	Brian Penserini		
<b>Subject:</b>	Sampling Setup		
<b>Project:</b>	777 N. Front Street, Additional Boing Investigation - 2016	<b>City/State:</b>	Burbank, CA



<b>Photo No.:</b>	7	<b>Date:</b>	June 2, 2016
<b>Photographer:</b>	Brian Penserini		
<b>Subject:</b>	Sample SS-4A-30 After Sample Collection		
<b>Project:</b>	777 N. Front Street, Additional Boing Investigation - 2016	<b>City/State:</b>	Burbank, CA



<b>Photo No.:</b>	8	<b>Date:</b>	June 2, 2016
<b>Photographer:</b>	Brian Penserini		
<b>Subject:</b>	Sample SS-4A-40 Prior to Sample Collection		
<b>Project:</b>	777 N. Front Street, Additional Boing Investigation - 2016	<b>City/State:</b>	Burbank, CA



<b>Photo No.:</b>	9	<b>Date:</b>	June 2, 2016
<b>Photographer:</b>	Brian Penserini		
<b>Subject:</b>	Gregg Drilling Hydrating Bentonite Backfill		
<b>Project:</b>	777 N. Front Street, Additional Boing Investigation - 2016	<b>City/State:</b>	Burbank, CA



<b>Photo No.:</b>	10	<b>Date:</b>	June 2, 2016
<b>Photographer:</b>	Brian Penserini		
<b>Subject:</b>	SS-4A After Backfilling		
<b>Project:</b>	777 N. Front Street, Additional Boing Investigation - 2016	<b>City/State:</b>	Burbank, CA