Phase II Environmental Site Assessment Report

368 & 402 PETALUMA BOULEVARD NORTH PROPERTIES

Petaluma, California

WKA No. 10410.04

December 16, 2016

Prepared for:

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Phase II Environmental Site Assessment Report

368 & 402 PETALUMA BOULEVARD NORTH PROPERTIES

Petaluma, California

WKA No. 10410.04

December 16, 2016

Wallace-Kuhl & Associates (WKA), on behalf of A.G. Spanos Companies, prepared this *Phase II Environmental Site Assessment Report* for the 368 & 402 Petaluma Boulevard North Properties located in Petaluma, Solano County, California. The report was prepared in a manner consistent with the level of care and skill ordinarily exercised by professional geologists and environmental scientists. This report was prepared under the supervision of a California Professional Geologist.

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Phase II Environmental Site Assessment Report

368 & 402 PETALUMA BOULEVARD NORTH PROPERTIES

Petaluma, California

WKA No. 10410.04

TABLE OF CONTENTS

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368 & 402 PETALUMA BOULEVARD NORTH PROPERTIES

Petaluma, California

WKA No. 10410.04

December 16, 2016

1.0 INTRODUCTION

Wallace-Kuhl and Associates (WKA) has prepared this report to describe activities performed to evaluate shallow soil at the 368 & 402 Petaluma Boulevard North Properties (Site) located in Petaluma, Sonoma County, California (Figures 1 and 2). The Site is comprised of 3.8 acres of land identified by Sonoma County Assessor's Parcel Numbers (APNs) 006-163-040 and 006-163-041

2.0 BACKGROUND

WKA's March 4, 2016, Phase I Environmental Assessment (ESA) report included recommendations to complete a Phase II ESA to evaluate Site soil conditions in the areas currently occupied and previously occupied by buildings, in the vicinity of the railroad tracks transecting the center of the Site, and in the area of a removed 500-gallon underground unleaded gasoline storage tank (UST). Figure 3 illustrates the locations of structures present at the Site and Table A provides a summary of the features associated with the Site.

Table A – Site Feature Summary

Location	**Area Type**	**Foundation**
Structure 1	Existing Structure	Present
Structure 2	Post-demolition	Removed
Structure 3	Post-demolition	Removed
Structures 4, 5, 6, 7, 8, and 9	Post-demolition	Removed
Structure 10	Post-demolition	Present
Structure 11	Post-demolition	Removed
Structure 12	Post-demolition	Removed
Structures 13, 14, 15, 16, and 17	Post-demolition	Removed
Structure 18	Post-demolition	Removed
Structure 19	Post-demolition	Present
Structure 20	Post-demolition	Removed
333333Structure 21 and 22	Post-demolition	Removed
Structures 23, 24, 25, 26	Post-demolition	Removed
Structure 27/28/29/30	Post-demolition	Present
Structure 31/32	Existing Structure	Present

Table A – Site Feature Summary

Location	Area Type	Foundation
Structure 33	Post-demolition	Removed
Structure 34	Post-demolition	Removed
Railroad Tracks	Railroad Tracks	--
Removed 500-gallon UST	UST	--

Notes: UST – Underground Storage Tank

The areas of the structures have the potential to contain residue from lead-based paint and organochlorine pesticides (OCPs) applied as termiticides. Petroleum fuel products may have been introduced to soil where automotive maintenance activities were previously conducted. Areas previously occupied by structures utilized by blacksmiths have the potential to contain polynuclear aromatic hydrocarbons (PAHs) from ash and metals related to the fabrication of carriage and wagon parts. The surface soil in the area occupied by the railroad tracks also has the potential to contain metals, petroleum fuel products, and herbicides related to railway maintenance and train operations. The previous assessment of soil surrounding the UST did not include the analysis of methyl tertiary butyl ether (MTBE), which was assessed as part of this study. Table B shows each location, the previous use, and the accompanying chemicals of concern.

Table B – Chemicals of Concern

Location	Previous Use	Chemicals of Concern
Structure 1	General Use	Lead and OCPs
Structure 2	General Use	Lead*
Structure 3	Oil Storage	Lead and Petroleum Hydrocarbons
Structures 4 and 5	General Use	Lead*
Structures 6, 7, 8, and 9	General Use	Lead and OCPs
Structure 10	General Use	Lead and OCPs
Structure 11	Blacksmith	Lead, PAHs, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc
Structure 12	General Use	Lead*
Structures 13, 14, 15, and 16	General Use	Lead*
Structure 17	General Use	Lead and OCPs
Structure 18	General Use	Lead and OCPs
Structure 19	Blacksmith	Lead, PAHs, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc
Structure 20 and 21	General Use	Lead*

Table B – Chemicals of Concern

Location	Previous Use	Chemicals of Concern
Structure 22 and 23		Lead and OCPs
Structures 24, 25, 26	General Use	Lead*
Structure 27/28/29/30	General Use	Lead and OCPs
Structure 31/32	General Use	Lead and OCPs
Structure 33	General Use	Lead and OCPs
Structure 34	Detached Garage	Lead, OCPs, Petroleum Hydrocarbons and Fuel Products
Railroad Tracks	Railroad	Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Mercury, Molybdenum, Lead, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc, Petroleum Hydrocarbons, PAHs, and Chlorinated Herbicides
Removed UST	500-gallon UST	MTBE

Notes: OCPs – Organochlorine Pesticides
MTBE – Methyl Tertiary Butyl Ether
PAHs – Polynuclear Aromatic Hydrocarbons
*Structure removed prior to a period when the use of OCPs as a termiticide started

The Phase II ESA does not address potential impacts to groundwater from off-site facilities located adjacent to the Site.

3.0 OBJECTIVE

The purpose of this Phase II assessment was to determine if chemicals associated with historical land uses are present in shallow Site soil at concentrations that would pose a threat to human health based on a residential land use scenario.

WKA staff utilized the State of California, Department of Toxics Substances Control's (DTSC's) *Interim Guidance for Sampling Agricultural Properties (Third Revision)*, dated August 7, 2008, and DTSC's *Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers Revised June 9, 2006* to guide selection of the number of sample locations and potential contaminants appropriate for evaluating shallow soil at the Site.

4.0 FIELD ACTIVITIES

WKA marked each selected sample location using white paint/flagging and contacted Underground Service Alert (USA) a minimum of 48 hours before beginning field activities.

WKA utilized Global Information System software to locate former Structure areas and identify sample locations as shown in Figure 4. Sample location coordinates were loaded into a high precision Global Positioning System receiver (GPSr). WKA used the GPSr to navigate to each sample location as summarized in Table C.

Table C – Sample Location Summary

Location	Sample Depth	Number of Samples	Sample IDs
Structure 1	0 – 6 inches	7	S1 through S7
Structure 2	0 – 6 inches	1	S8
Structure 3	0 – 6 inches	4	S9 through S12
Structure 4 and 5	0 – 6 inches	4	S13 through S16
Structure 6, 7, 8, and 9	0 – 6 inches	6	S17 through S22
Structure 10	0 – 6 inches	8	S23 through S30
Structure 11	0 – 6 inches	4	S31 through S34
Structure 12	0 – 6 inches	1	S35
Structure 13, 14, 15, and 16	0 – 6 inches	8	S36 through S43
Structure 17	0 – 6 inches	6	S44 through S49
Structure 18	0 – 6 inches	8	S50 through S57
Structure 19	0 – 6 inches	4	S58 through S61
Structure 20 and 21	0 – 6 inches	4	S62 through S65
Structure 22 and 23	0 – 6 inches	4	S66 through S69
Structure 24, 25, and 26	0 – 6 inches	4	S70 through S73
Structure 27/28/29/30	0 – 6 inches	4	S74 through S77
Structure 31/32	0 – 6 inches	5	S78 through S82
Structure 33	0 – 6 inches	1	S83
Structure 34	0 – 6 inches	6	S84 through S89
Railroad Tracks	0 – 6 inches	4	S90 through S93
Removed 500-gallon UST	30 – 36 inches	1	S94

Samples were collected using hand sampling methods. Gravel was removed to expose native soil where necessary. WKA collected each soil sample into laboratory provided clean; glass jars sealed using a Teflon™-lined cap. WKA labeled each container to indicate a unique sample identification and the date and time collected. WKA preserved samples in a chilled, thermally insulated container during transport to the analytical laboratory with completed chain-of-custody forms. Sample locations are illustrated in Figures 5 and 6.

Existing Structures (Structures 1 and 31/32)

Three surface soil samples were collected at a depth between zero and six inches below ground surface (bgs) from locations along the north, east, and south side of Structure 1 within two feet of the structure. The northern and southern sides of Structure 1 are paved with asphalt a portion of the asphalt was removed to expose native soil and a soil sample was collected beneath the asphalt. The west side of Structure 1 is paved with concrete and was not sampled.

One surface soil sample was collected at a depth between zero and six inches bgs from locations along the east side of Structures 31/32 within two feet of the structure. The northern side of Structures 31/32 was previously a shared wall. The south side of Structures 31/32 falls outside of Site boundaries and the west sides of Structures 31/32 is paved with concrete. The north, south, and west sides of Structures 31/32 were not sampled.

WKA also collected four soil samples beneath the raised foundations of Structure 1 and four soil samples beneath the raised foundations of Structures 31/32. Samples were in areas of exposed soil. The building footprint for each structure was divided into four equally sized areas and a surface soil sample was collected at a depth between zero and six inches bgs at the approximate center of each quadrant.

Post-Demolition Structures with Foundation Present (Structures 10, 18, and 27/28/29/30)

WKA collected four soil samples from locations along the perimeter of the previous location of Structures 10 and 18, as denoted by the remaining stem wall on-site. Four surface soil samples were collected at a depth between zero and six inches bgs along the north and east sides of the area previously occupied by Structure 10. WKA also collected four surface soil samples at a depth between zero and six inches bgs along the east and south sides of the area previously occupied by Structure 18.

WKA also collected eight soil samples within the footprint of Structures 10 and 18. The building footprint for each structure was divided into four approximately equal sized areas and a surface soil sample was collected at a depth between zero and six inches bgs at the approximate center of each quadrant.

WKA collected four soil samples along the perimeter of the foundation for Structures 27/28/29/30. Samples were collected at a depth between zero and six inches bgs along the north, east, south, and west sides of the foundation.

Post-Demolition Structures with no Foundation Present
(Structures 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 23, 24, 25, 26, 33, and 34)

The area previously occupied by Structure 3 was used as an oil storage area. The footprint of Structure 3 was divided into four equally sized areas and a surface soil sample was collected at a depth between zero and six inches bgs at the approximate center of each quadrant.

WKA also collected six surface soil samples within the area previously occupied by Structure 34. This location was used as a detached garage where automotive maintenance activities may have taken place. WKA divided the footprint of Structure HH into six equally sized areas. A surface soil sample was collected at a depth between zero and six inches bgs at the approximate center of each section.

WKA collected eight surface soil samples within the area previously occupied by Structures 11 and 19. These locations were used as blacksmith for carriage and wagon parts. WKA divided the footprint of Structures 11 and 19 into four equally sized areas. A surface soil sample was collected at a depth between zero and six inches bgs at the approximate center of each area.

The remaining sampling protocol for the structures previously located on-site is as follows:

Table D – Post Demolition Structure Sampling

Location	**Sample Location**	**Sample Depth**
Structure B	One sample within footprint	Zero to six inches
Structure D	Two samples within footprint	Zero to six inches
Structure E	Two samples within footprint	Zero to six inches
Structures F, G, H, and I	Six samples within combined footprint	Zero to six inches
Structure L	One sample within footprint	Zero to six inches
Structures M, O, P, and Q	Eight samples within combined footprint	Zero to six inches
Structure N	Two samples within footprint	Zero to six inches
Structure R	Six samples within footprint	Zero to six inches
Structure U and V	Four samples within combined footprint	Zero to six inches
Structure W, X, and Y	Four samples within combined footprint	Zero to six inches
Structure Z	Two samples within footprint	Zero to six inches
Structure EE	One sample within footprint	Zero to six inches

Railroad Track Area

The approximately 340 feet length of the railroad track area was divided into four 85-foot sections. WKA collected four soil samples on in the vicinity of the railroad tracks at the approximate center of each section length at a depth between zero and six inches bgs. The collected soil was a dry to slightly moist, brown, clayey silt.

Underground Storage Tank Area

A UST located on the eastern side of Structure 1 was removed in 1987. A previous assessment of the soil beneath the tank was limited to TPHg. WKA hand augered to a depth of three feet bgs at the approximate location of the removed UST. Groundwater was encountered at three feet bgs and a soil sample was collected above the groundwater table in the unsaturated zone at a depth between 30 and 36 inches bgs. The collected soil was slightly moist, dark brown to brown, clayey silt.

5.0 LABORATORY ANALYSES

California Laboratory Services, a California State Water Resources Control Board certified laboratory, conducted the requested soil laboratory analyses.

Table E – Summary of Laboratory Analyses

Location	Sample IDs	Compositing Schedule and Analysis
Structure 1	S1 through S3	3:1 Composite OCPs Discrete Lead
	S4 through S8	4:1 Composite OCPs Discrete Lead
Structure 2	S8	Discrete Lead
Structure 3	S9 through S12	4:1 Composite Petroleum Hydrocarbons Discrete Lead
Structures 4 and 5	S13 through S16	Discrete Lead
Structures 6, 7, 8, and 9	S17 through S22	3:1 Composite OCPs Discrete Lead
Structure 10	S23 through S30	4:1 Composite OCPs Discrete Lead
Structure 11	S31 through S34	Discrete PAHs Discrete CAM 17 Metals
Structure 12	S35	Discrete Lead
Structures 13, 14, 15, and 16	S36 through S43	Discrete Lead
Structure 17	S44 through S49	3:1 Composite OCPs Discrete Lead
Structure 18	S50 through S57	4:1 Composite OCPs Discrete Lead
Structure 19	S58 through S61	Discrete PAHs Discrete CAM 17 Metals
Structure 20 and 21	S62 through S65	Discrete Lead

Table E – Summary of Laboratory Analyses

Location	Sample IDs	Compositing Schedule and Analysis
Structure 22 and 23	S66 through S69	2:1 Composite OCPs Discrete Lead
Structures 24, 25, 26	S70 through S73	Discrete Lead
Structure 27/28/29/30	S74 through S77	4:1 Composite OCPs Discrete Lead
Structure 31/32	S78	Discrete OCPs Discrete Lead
	S79 through S82	4:1 Composite OCPs Discrete Lead
Structure 33	S83	Discrete OCPs Discrete Lead
Structure 34	S84 through S89	3:1 Composite Five Waste Oil Metals 3:1 Composite OCPs 3:1 Composite Petroleum Hydrocarbons and Fuel Products
Railroad Tracks	S90 through S93	4:1 Composite CAM 17 Metals 4:1 Composite Petroleum Hydrocarbons 4:1 Composite PAHs 4:1 Composite Chlorinated Herbicides
Removed UST	S94	Discrete MTBE

The specific test methods for each analyte mentioned above are summarized below.

- OCPs using EPA Method 8081A;
- Total lead using EPA Method 6010B;
- TPHmo and TPHd using modified EPA Method 8015;
- TPHg using EPA Method 8260B;
- BTEX using EPA Method 8260B;
- MTBE using EPA 8260B;
- Five waste oil metals: cadmium, chromium, lead, nickel, and zinc using EPA Methods 6000/7000 series;
- CAM 17 Metals: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, mercury, molybdenum, lead, nickel, selenium, silver, thallium, vanadium, and zinc using EPA Methods 6010/6020/7000;
- PAHs using EPA Method 8310 and,
- Chlorinated herbicides using EPA 8151A.

Laboratory reports and chain-of-custody documents can be found in Appendix A.

6.0 FINDINGS

6.1 Organochlorine Pesticides

Table 1 presents laboratory results for the analysis of OCPs. DDT was detected in composite samples from the areas of Structure 1 (S4-7 (Composite)) and Structures 6, 7, 8, and 9 (S20-22 (Composite)) at concentrations of 0.11 milligrams per kilogram (mg/kg) and 0.019 mg/kg, respectively. Chlordane was detected in sample S78 from the area of Structure 31/32 at a concentration of 0.018 mg/kg. No other OCPs were detected above their laboratory reporting limit. The detected concentrations of DDT and Chlordane are below the San Francisco Bay Regional Water Quality Control Boards Environmental Screening Levels (ESLs) under a residential land use scenario.

6.2 Metals

Table 2 presents laboratory analytical results for the discrete analysis of lead. Lead was detected in 77 of the 81 samples analyzed discretely at concentrations ranging between 2.5 mg/kg and 420 mg/kg. Concentrations exceeding the residential ESL for lead (80 mg/kg) were detected in 19 of the 81 samples analyzed. Higher concentrations of lead can be correlated to the areas of Structure 1, Structure 2, and Structure 18.

Table 3 presents laboratory analytical results for CAM 17 metals and the five waste oil metals. With the exception of arsenic and the lead discussed above, all CAM 17 metals and the five waste oil metals were detected at concentrations below their respective residential ESLs.

Arsenic was detected at concentrations of 3.2 mg/kg in the composite sample (S90-93 (Composite)) collected near the Railroad Tracks. The detected concentration of arsenic falls above the residential ESL of 0.067 mg/kg. However, ESLs are risk based screening values, which are derived from equations that combine exposure assumptions with toxicity data and are not related to background levels of arsenic in the environment. The detected concentration of arsenic at the Site is likely representative of background conditions from naturally occurring sources. Background levels of arsenic is generally accepted as an appropriate screening criteria. The concentrations detected are typical of background conditions (7.0 to 8.3 mg/kg) for arsenic as determined by the United States Geological Survey's (USGS) *Geochemical and Mineralogical Maps for the Conterminous United States*.

6.3 Petroleum Hydrocarbon Related Products

Table 4 presents laboratory results for the analysis of petroleum hydrocarbon related products.

TPH as motor oil was detected at concentrations ranging between 4.7 mg/kg and 300 mg/kg. The detected concentrations of TPH as motor oil fall below the ESL for a residential land use scenario. The remaining petroleum hydrocarbon related analytes, TPH as diesel, TPH as gasoline, benzene, toluene, ethylbenzene, xylenes, and MTBE were not detected above laboratory reporting limits.

6.4 Chlorinated Herbicides

Table 5 presents laboratory results for the analyses of chlorinated herbicides. No chlorinated herbicides were detected at concentrations above the laboratory reporting limit.

6.5 Polynuclear Aromatic Hydrocarbons

Table 6 presents laboratory results for the analyses of PAHs. Eight of the 16 PAHs analyzed were detected above laboratory reporting limits. Benzo (a) anthracene, Benzo (a) pyrene, and Indeno (1,2,3-cd) pyrene were detected above their respective residential ESLs in sample S34.

7.0 CONCLUSIONS

WKA understands that the study area west of the rail line will be developed with a three-story apartment complex supported by a raised concrete podium with paved parking beneath the structures. WKA also understands that the extension of Oak Street will encompass a portion of the Site including the area of Structures 1 and 2.

WKA's Phase II assessment shows that the detected concentrations of organochlorine pesticides, petroleum hydrocarbon related products, and chlorinated herbicides all fall below their respective residential ESLs. Arsenic exceeded the residential ESLs. However, levels observed in samples from the site are consistent with naturally occurring arsenic in Bay Area soils as demonstrated by USGS' *Geochemical and Mineralogical Maps for the Conterminous United States* for the Petaluma area. Other metals, with the exception of lead, were also detected at concentrations below their respective residential ESLs.

WKA identified Site soil having concentrations of lead exceeding the residential ESL of 80 mg/kg. The highest concentrations of lead were identified in the area of Structures 1 and 2. A statistical analysis of the entire lead data set results in a 95% upper confidence limit (UCL) of 105.4 mg/kg. This result indicates that a degree of risk to human health is present under a residential land use scenario. The screening level of 160 mg/kg for a construction worker

scenario is also exceeded in the area of Structure 1 and 2 as well as the locations of soil samples S46, S50, S52, and S76.

Select PAHs (benzo (a) anthracene and benzo (a) pyrene) were also detected at concentrations exceeding their respective residential ESLs. Exposure to these soils will be restricted based on the proposed paved parking area beneath the structures. Based on the limited exposure routes, PAHs will not pose a significant risk to human health for a residential land use scenario and the concentrations detected fall below construction worker screening levels.

8.0 RECOMMENDATIONS

WKA recommends the removal of lead impacted soil in the area of Structures 1 and 2 and areas near the locations of soil samples S46, S50, S52, and S76. WKA also recommends the removal of soil impacted with elevated concentrations PAHs (Benzo (a) anthracene, Benzo (a) pyrene, and Indeno (1,2,3-cd) pyrene) in the areas near the locations of soil samples S32 and S34. With the removal of lead impacted soil in these areas, it is anticipated that the 95% UCL will be reduced to 53.97 mg/kg, a concentration which falls below the residential ESL for lead. The removal of lead and PAH impacted soil in these areas will reduce the exposure to elevated concentrations of lead to construction workers. All other exposures to Site soil by future occupants will be limited, based on the proposed paved parking configuration and limited exposure routes.

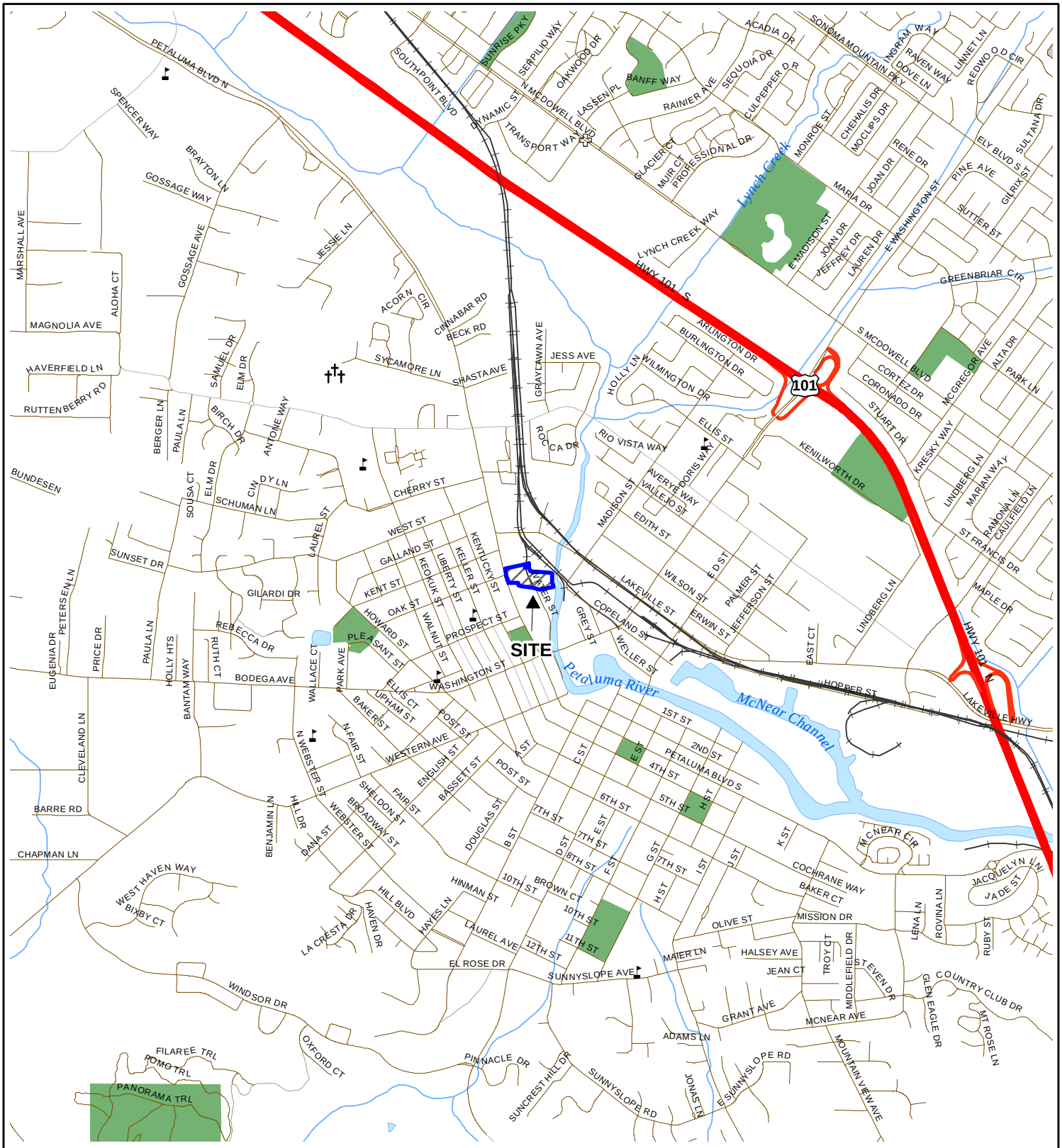
Any soil excavation activities will need to take place following the completion of a lead and asbestos survey of the existing Site structures and the demolition of the structures. It is estimated that the excavation to remove lead and PAH impacted soil in the area of Structures 1 and 2 and in the areas of soil samples S32, S34, S46, S50, S52, and S76 will generate approximately 310 cubic yards of soil based on an 18-inch excavation depth. This roughly equates to 19 tractor-trailer loads. Excavated soil will need to be stockpiled on and covered with plastic sheeting. Subsequent to stockpiling activities, the soil will need to be re-characterized for waste profiling and waste disposal acceptance.

9.0 LIMITATIONS

The statements and results presented in this report are based upon the scope of services performed as described above and on observations made on the dates of WKA's applicable fieldwork. The summary report was prepared in a manner consistent with the level of care and skill ordinarily exercised by Professional Geologists. Work was performed using a degree of skill

consistent with that of competent environmental consulting firms performing similar work in the area. No recommendation is made as to the suitability of the property for any purpose. The result of the investigation does not preclude the possibility that materials currently, or in the future, defined as hazardous are present on the site. This report is applicable only to the investigated site and should not be used for any other site. No warranty, either express or implied, is provided.

FIGURES



Street data courtesy of Sonoma County.
Hydrography courtesy of the U.S. Geological Survey acquired from the GIS Data Depot, December, 2007.
Projection: NAD 83, California State Plane, Zone II

WallaceKuhl & ASSOCIATES

VICINITY MAP

368 & 402 PETALUMA BOULEVARD NORTH

Petaluma, California

FIGURE	1
DRAWN BY	RWO
CHECKED BY	ML
PROJECT MGR	KMB
DATE	12/16
WKA NO. 10410.04	

Aerial imagery courtesy of ESRI.
Projection: NAD 83, California State Plane, Zone II

Legend

Approximate Site Boundary

N

0 50 100

Feet

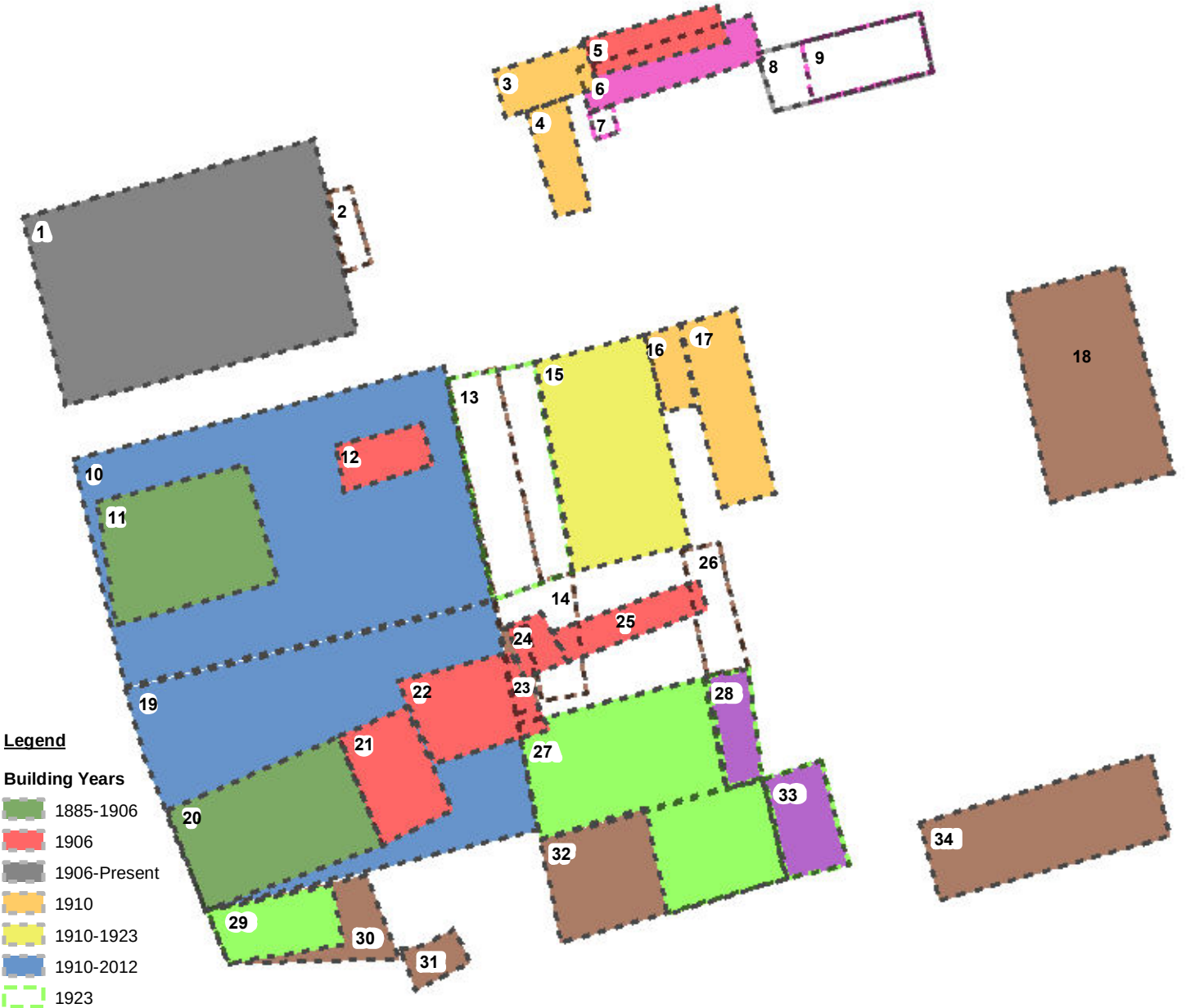
WallaceKuhl & ASSOCIATES

AERIAL SITE MAP

368 & 402 PETALUMA BOULEVARD NORTH

Petaluma, California

FIGURE	2
DRAWN BY	RWO
CHECKED BY	ML
PROJECT MGR	KMB
DATE	12/16
WKA NO. 10410.02	



Adapted from Sanborn Map Reports provided by
The Sanborn Map Library January 14, 2015.
Projection: NAD 83, California State Plane, Zone II

N

0 20 40
Feet

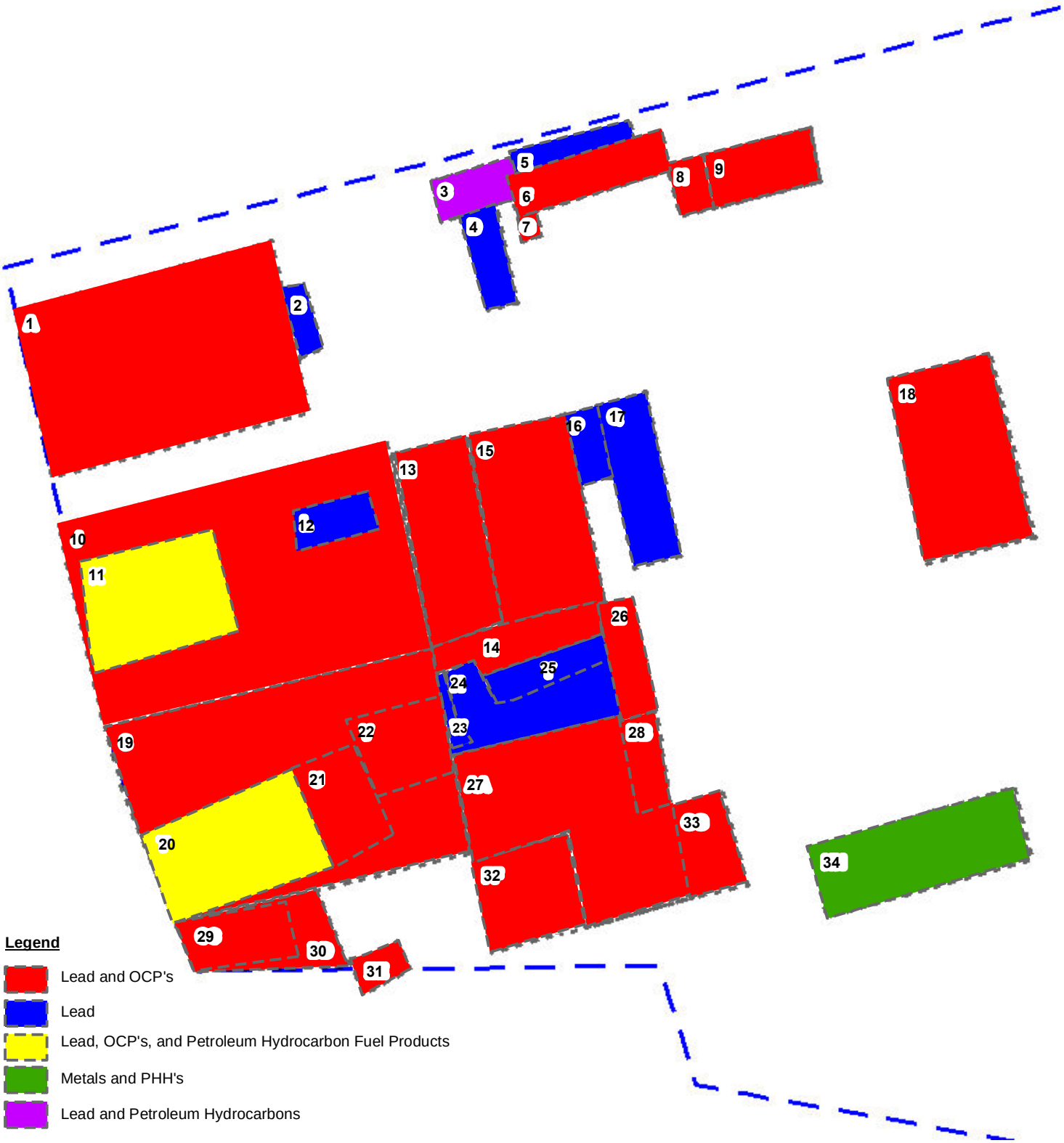
WallaceKuhl & ASSOCIATES

HISTORICAL BUILDING LOCATION MAP

368 & 402 PETALUMA BOULEVARD NORTH

Petaluma, California

FIGURE	3
DRAWN BY	RWO
CHECKED BY	NSP
PROJECT MGR	KMB
DATE	12/16
WKA NO.	10410.03



Adapted from Sanborn Map Reports provided by
The Sanborn Map Library January 14, 2015.
Projection: NAD 83, California State Plane, Zone II

WallaceKuhl & ASSOCIATES

CHEMICALS OF CONCERN

368 & 402 PETALUMA BOULEVARD NORTH

Petaluma, California

FIGURE	4
DRAWN BY	RWO
CHECKED BY	NSP
PROJECT MGR	NSP
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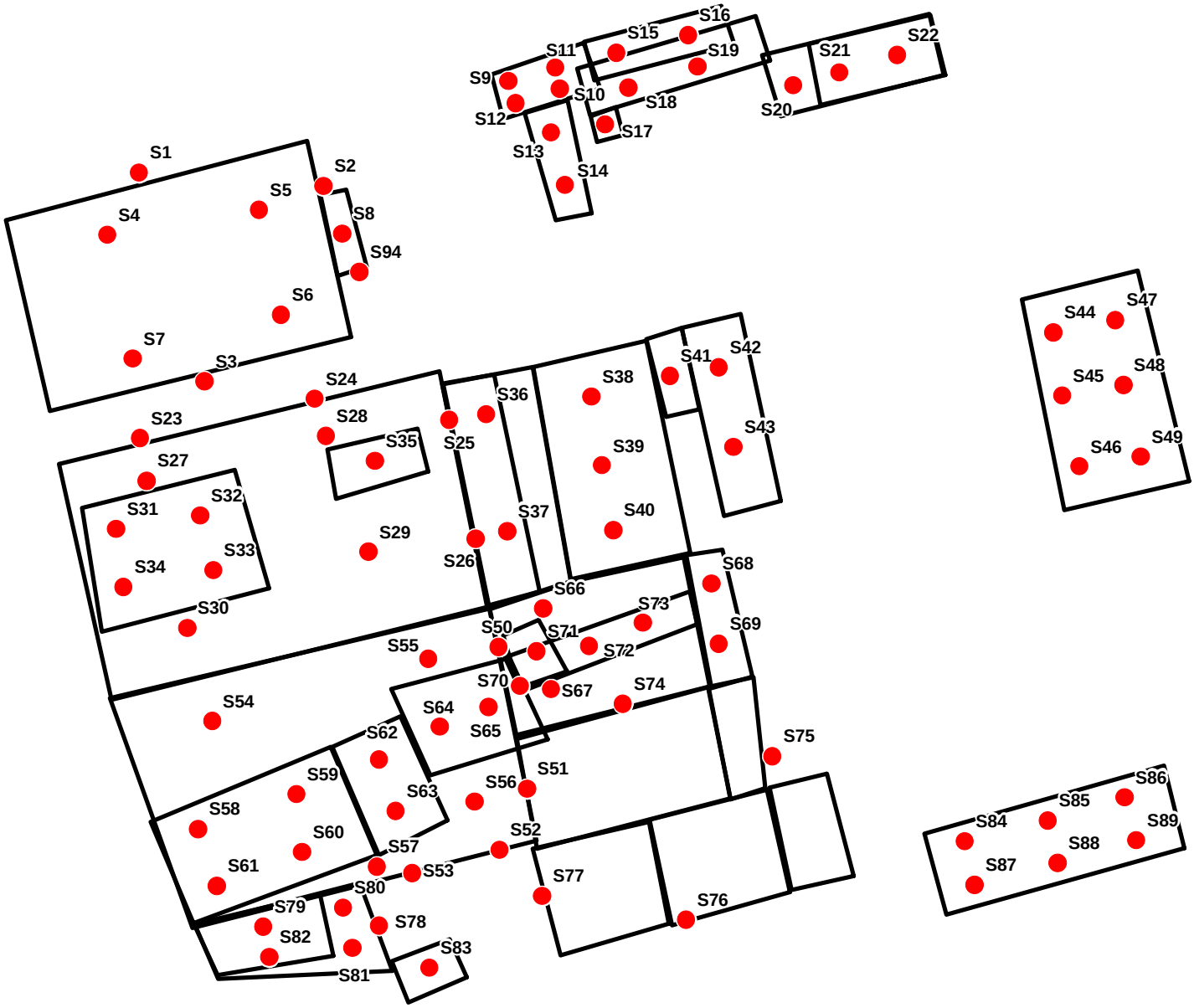
WKA NO. 3PR15091	



Adapted from Sanborn Map Reports provided by
The Sanborn Map Library January 14, 2015.
Projection: NAD 83, California State Plane, Zone II

Legend

Previous Structure Location

Approximate Soil Sample Location

N

0 20 40

Feet

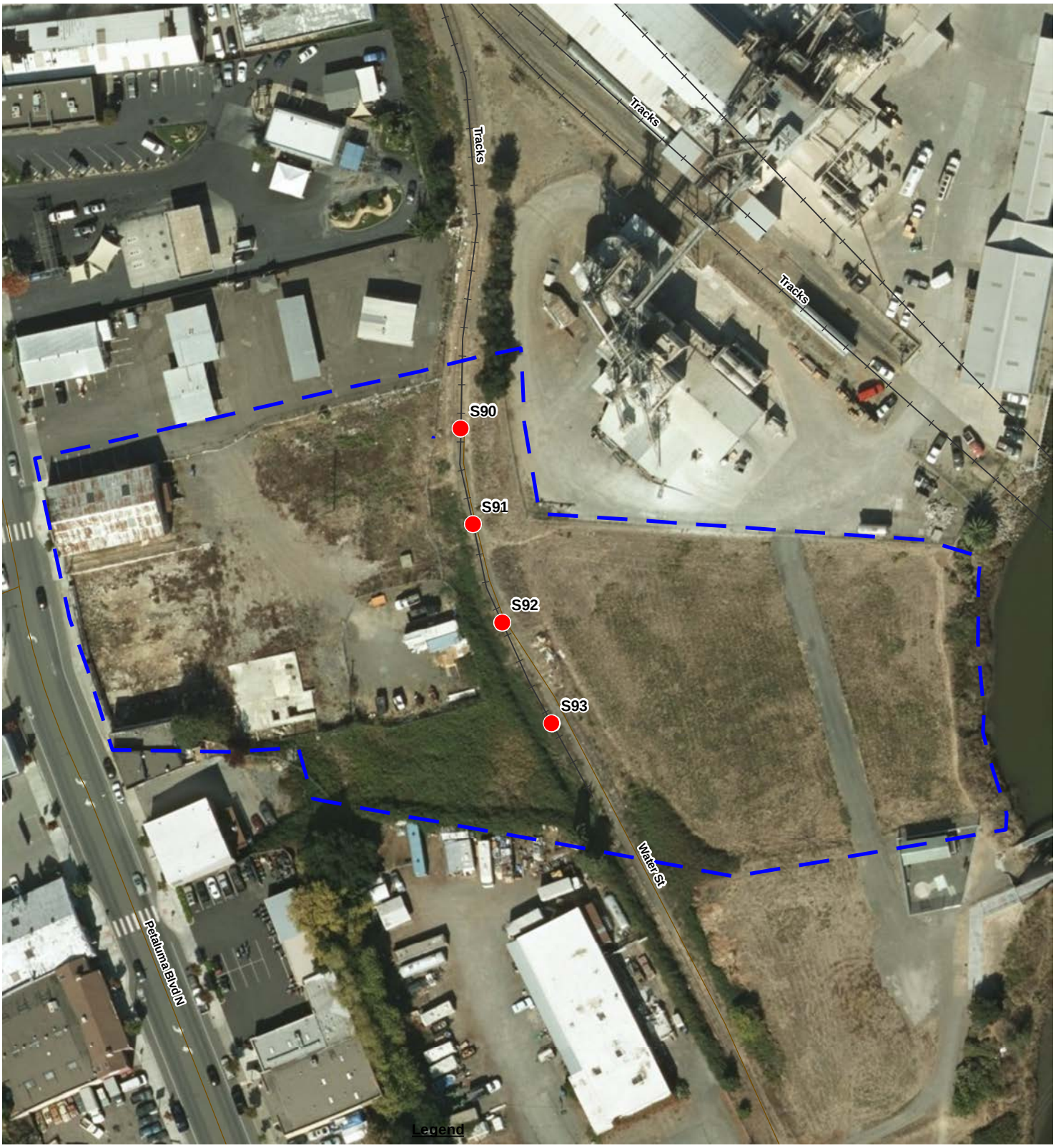
WallaceKuhl & ASSOCIATES

SAMPLE LOCATION MAP

368 & 402 PETALUMA BOULEVARD NORTH

Petaluma, California

FIGURE	5
DRAWN BY	RWO
CHECKED BY	ML
PROJECT MGR	KMB
DATE	12/16
WKA NO. 10410.04	



Aerial provided by ESRI.
Projection: NAD 83, California State Plane, Zone II

Approximate Site Boundary

Approximate Soil Sample Location

N

0 50 100

Feet

WallaceKuhl & ASSOCIATES

SAMPLE LOCATION MAP (RAILROAD)

368 & 402 PETALUMA BOULEVARD NORTH

Petaluma, California

FIGURE	6
DRAWN BY	RWO
CHECKED BY	ML
PROJECT MGR	KMB
DATE	12/16

WKA NO. 10410.04

TABLES

Table 1
Summary of Soil Analytical Results - Organochlorine Pesticides
368 402 PETALUMA BOULEVARD NORTH PROPERTY
WKA No. 10410.04

	Sample ID	Sample Date	Sample Depth (in)	EPA Method 8081A																			
				4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	alpha-BHC	beta-BHC	Chlordane-technical	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Andehyde	gamma-BHC (Lindane)	Heptachlor	Heptachlor Epoxide	Methoxychlor	Mirex	Toxaphene
Concentrations reported in milligrams per kilogram (mg/kg)																							
Structure 1	S1-3 (Composite)	11/29/2016	0 - 6	<0.033	<0.033	<0.033	<0.010	<0.017	<0.017	<0.033	<0.017	<0.010	<0.017	<0.033	<0.033	<0.033	<0.033	<0.017	<0.017	<0.017	<0.170	<0.033	<0.200
	S4-7 (Composite)	11/29/2016	0 - 6	<0.033	<0.033	0.11	<0.010	<0.017	<0.017	<0.033	<0.017	<0.010	<0.017	<0.033	<0.033	<0.033	<0.033	<0.017	<0.017	<0.017	<0.170	<0.033	<0.200
Structure 6, 7, 8, and 9	S17-19 (Composite)	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.005	<0.0085	<0.0085	<0.017	<0.0085	<0.005	<0.0085	<0.017	<0.017	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.085	<0.017	<0.100
	S20-22 (Composite)	11/29/2016	0 - 6	<0.017	<0.017	0.019	<0.005	<0.0085	<0.0085	<0.017	<0.0085	<0.005	<0.0085	<0.017	<0.017	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.085	<0.017	<0.100
Structure 10	S23-26 (Composite)	11/29/2016	0 - 6	<0.033	<0.033	<0.033	<0.010	<0.017	<0.017	<0.033	<0.017	<0.010	<0.017	<0.033	<0.033	<0.033	<0.033	<0.017	<0.017	<0.017	<0.170	<0.033	<0.200
	S27-30 (Composite)	11/29/2016	0 - 6	<0.0033	<0.0033	<0.0033	<0.001	<0.0017	<0.0017	<0.0033	<0.0017	<0.001	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0017	<0.017	<0.0033	<0.020
Structure 17	S44-46 (Composite)	11/29/2016	0 - 6	<0.033	<0.033	<0.033	<0.010	<0.017	<0.017	<0.033	<0.017	<0.010	<0.017	<0.033	<0.033	<0.033	<0.033	<0.017	<0.017	<0.017	<0.170	<0.033	<0.200
	S47-49 (Composite)	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.005	<0.0085	<0.0085	<0.017	<0.0085	<0.005	<0.0085	<0.017	<0.017	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.085	<0.017	<0.100
Structure 18	S50-53 (Composite)	11/29/2016	0 - 6	<0.033	<0.033	<0.033	<0.010	<0.017	<0.017	<0.033	<0.017	<0.010	<0.017	<0.033	<0.033	<0.033	<0.033	<0.017	<0.017	<0.017	<0.170	<0.033	<0.200
	S54-57 (Composite)	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.005	<0.0085	<0.0085	<0.017	<0.0085	<0.005	<0.0085	<0.017	<0.017	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.085	<0.017	<0.100
Structure 22 and 23	S66-67 (Composite)	11/29/2016	0 - 6	<0.0033	<0.0033	<0.0033	<0.001	<0.0017	<0.0017	<0.0033	<0.0017	<0.001	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0017	<0.017	<0.0033	<0.020
	S68-69 (Composite)	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.005	<0.0085	<0.0085	<0.017	<0.0085	<0.005	<0.0085	<0.017	<0.017	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.085	<0.017	<0.100
Structure 27/28/29/30	S74-77 (Composite)	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.005	<0.0085	<0.0085	<0.017	<0.0085	<0.005	<0.0085	<0.017	<0.017	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.085	<0.017	<0.100
Structure 31/32	S78	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.005	<0.0085	<0.0085	0.018	<0.0085	<0.005	<0.0085	<0.017	<0.017	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.085	<0.017	<0.100
Structure 31/32	S79-82 (Composite)	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.005	<0.0085	<0.0085	<0.017	<0.0085	<0.005	<0.0085	<0.017	<0.017	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.085	<0.017	<0.100
Structure 33	S83	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.005	<0.0085	<0.0085	<0.017	<0.0085	<0.005	<0.0085	<0.017	<0.017	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.085	<0.017	<0.100
Structure 34	S84-86 (Composite)	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.005	<0.0085	<0.0085	<0.017	<0.0085	<0.005	<0.0085	<0.017	<0.017	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.085	<0.017	<0.100
	S87-89 (Composite)	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.005	<0.0085	<0.0085	<0.017	<0.0085	<0.005	<0.0085	<0.017	<0.017	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.085	<0.017	<0.100

Notes:
< less than laboratory reporting limit(s)

Table 2
Summary of Soil Analytical Results - Lead
368 402 PETALUMA BOULEVARD NORTH PROPERTY
WKA No. 10410.04

	Sample ID	Sample Date	Sample Depth (in)	Lead
Concentrations reported in milligrams per kilogram (mg/kg)				
Structure 1	S1	11/29/2016	0 - 6	18
	S2	11/29/2016	0 - 6	220
	S3	11/29/2016	0 - 6	60
	S4	11/29/2016	0 - 6	340
	S5	11/29/2016	0 - 6	250
	S6	11/29/2016	0 - 6	410
	S7	11/29/2016	0 - 6	420
Structure 2	S8	11/29/2016	0 - 6	410
Structure 3	S9	11/29/2016	0 - 6	9.5
	S10	11/29/2016	0 - 6	38
	S11	11/29/2016	0 - 6	13
	S12	11/29/2016	0 - 6	57
Structure 4 and 5	S13	11/29/2016	0 - 6	61
	S14	11/29/2016	0 - 6	37
	S15	11/29/2016	0 - 6	33
	S16	11/29/2016	0 - 6	32
Structure 6, 7, 8, and 9	S17	11/29/2016	0 - 6	41
	S18	11/29/2016	0 - 6	35
	S19	11/29/2016	0 - 6	34
	S20	11/29/2016	0 - 6	78
	S21	11/29/2016	0 - 6	31
	S22	11/29/2016	0 - 6	48
Structure 11	S23	11/29/2016	0 - 6	37
	S24	11/29/2016	0 - 6	48
	S25	11/29/2016	0 - 6	99
	S26	11/29/2016	0 - 6	39
	S27	11/29/2016	0 - 6	<2.5
	S28	11/29/2016	0 - 6	7.6
	S29	11/29/2016	0 - 6	<2.5
	S30	11/29/2016	0 - 6	<2.5
Structure 12	S35	11/29/2016	0 - 6	3.7
Structure 13, 14, 15, and 16	S36	11/29/2016	0 - 6	84
	S37	11/29/2016	0 - 6	87
	S38	11/29/2016	0 - 6	14
	S39	11/29/2016	0 - 6	58
	S40	11/29/2016	0 - 6	17
	S41	11/29/2016	0 - 6	28
	S42	11/29/2016	0 - 6	70
	S43	11/29/2016	0 - 6	23
Structure 17	S44	11/29/2016	0 - 6	22
	S45	11/29/2016	0 - 6	61
	S46	11/29/2016	0 - 6	190
	S47	11/29/2016	0 - 6	24
	S48	11/29/2016	0 - 6	140
	S49	11/29/2016	0 - 6	66
Structure 18	S50	11/29/2016	0 - 6	300
	S51	11/29/2016	0 - 6	84
	S52	11/29/2016	0 - 6	160
	S53	11/29/2016	0 - 6	140
	S54	11/29/2016	0 - 6	2.5
	S55	11/29/2016	0 - 6	26
	S56	11/29/2016	0 - 6	51
	S57	11/29/2016	0 - 6	3
Structur 20 and 21	S62	11/29/2016	0 - 6	<2.5
	S63	11/29/2016	0 - 6	3.3
	S64	11/29/2016	0 - 6	43
	S65	11/29/2016	0 - 6	62
Structure 22 and 23	S66	11/29/2016	0 - 6	2.7
	S67	11/29/2016	0 - 6	5.4
	S68	11/29/2016	0 - 6	21
	S69	11/29/2016	0 - 6	19
Structure 24, 25, and 26	S70	11/29/2016	0 - 6	29
	S71	11/29/2016	0 - 6	41
	S72	11/29/2016	0 - 6	33
	S73	11/29/2016	0 - 6	29
Structure 27/28/29/30	S74	11/29/2016	0 - 6	130
	S75	11/29/2016	0 - 6	50
	S76	11/29/2016	0 - 6	170
	S77	11/29/2016	0 - 6	52
Structure 31/32	S78	11/29/2016	0 - 6	150
	S79	11/29/2016	0 - 6	16
	S80	11/29/2016	0 - 6	40
	S81	11/29/2016	0 - 6	16
	S82	11/29/2016	0 - 6	61
Structure 33	S83	11/29/2016	0 - 6	120
Structure 34	S84	11/29/2016	0 - 6	11
	S85	11/29/2016	0 - 6	10
	S86	11/29/2016	0 - 6	44
	S87	11/29/2016	0 - 6	22
	S88	11/29/2016	0 - 6	12
	S89	11/29/2016	0 - 6	7.9

Notes:
< less than laboratory reporting limit(s)
-- Not Analyzed

Table 3
Summary of Soil Analytical Results - CAM 17 Metals and Waste Oil Metals
368 402 PETALUMA BOULEVARD NORTH PROPERTY
WKA No. 10410.04

	Sample ID	Sample Date	Sample Depth (in)	EPA Methods 6010B/6020/7000/7471A															
				Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Concentrations reported in milligrams per kilogram (mg/kg)																				
Structure 11	S31	11/29/2016	0 - 6	<2.5	<1.0	51	<1.0	<1.0	17	2.1	2.9	3.4	<0.10	<1.0	12	<2.5	<1.0	<1.0	23	18
	S32	11/29/2016	0 - 6	<2.5	<1.0	36	<1.0	<1.0	16	2.4	2.8	3.5	<0.10	<1.0	11	<2.5	<1.0	<1.0	31	16
	S33	11/29/2016	0 - 6	<2.5	<1.0	41	<1.0	<1.0	12	2.1	2.8	<2.5	<0.10	<1.0	9.5	<2.5	<1.0	<1.0	22	15
	S34	11/29/2016	0 - 6	<2.5	<1.0	42	<1.0	<1.0	15	2.1	3.7	28	<0.10	<1.0	12	<2.5	<1.0	<1.0	27	31
Structure 19	S58	11/29/2016	0 - 6	<2.5	<1.0	50	<1.0	<1.0	16	3.2	3.6	2.8	<0.10	<1.0	16	<2.5	<1.0	<1.0	21	14
	S59	11/29/2016	0 - 6	<2.5	<1.0	39	<1.0	<1.0	18	2.4	3.5	2.5	<0.10	<1.0	11	<2.5	<1.0	<1.0	26	17
	S60	11/29/2016	0 - 6	<2.5	<1.0	42	<1.0	<1.0	21	2.3	3.1	3.3	<0.10	<1.0	10	<2.5	<1.0	<1.0	25	14
	S61	11/29/2016	0 - 6	<2.5	<1.0	110	<1.0	<1.0	19	4.5	3.8	2.7	<0.10	<1.0	19	<2.5	<1.0	<1.0	32	16
Railroad Tracks	S90-93 (Composite)	11/29/2016	0 - 6	<2.5	3.2	75	<1.0	<1.0	31	8.4	20	52	<0.10	<1.0	35	<2.5	<1.0	<1.0	37	120
Structure 34	S84-86 (Composite)	11/29/2016	0 - 6	--	--	--	--	<1.0	<5.0	--	--	<10	--	--	<10	--	--	--	--	15
	S87-89 (Composite)	11/29/2016	0 - 6	--	--	--	--	<1.0	<5.0	--	--	<10	--	--	<10	--	--	--	--	14

Notes:
< less than laboratory reporting limit(s)
-- Not Analyzed

Table 4
Summary of Soil Analytical Results - Petroleum Hydrocarbon Products
368 402 PETALUMA BOULEVARD NORTH PROPERTY
WKA No. 10410.04

	Sample ID	Sample Date	Sample Depth (in)	EPA 8015M		EPA 8260B/M					
				TPH as Diesel	TPH as Motor Oil	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes, Total	MTBE
Concentrations reported in milligrams per kilogram (mg/kg)											
Structure 3	S9-12 (Composite)	11/29/2016	0 - 6	<10	300	<0.20	--	--	--	--	--
Structure 34	S84-86 (Composite)	11/29/2016	0 - 6	<1.0	4.7	<0.20	<0.005	<0.005	<0.005	<0.010	<0.005
	S87-89 (Composite)	11/29/2016	0 - 6	<1.0	8.2	<0.20	<0.005	<0.005	<0.005	<0.010	<0.005
Railroad Tracks	S90-93 (Composite)	11/29/2016	0 - 6	<1.0	<1.0	--	--	--	--	--	--
Removed 500-Gallon UST	S94	11/29/2016	30 - 36	--	--	--	--	--	--	--	<0.005

Notes:
< less than reporting limit(s)

Table 5
Summary of Soil Analytical Results - Chlorinated Herbicides
368 402 PETALUMA BOULEVARD NORTH PROPERTY
WKA No. 10410.04

	Sample ID	Sample Date	Sample Depth (in)	EPA Method 8151A										
				2,4,5-T	2,4,5-TP (Silvex)	2,4-D	2,4-DB	Dalapon	Dicamba	Dichloroprop	Dinoseb	MCPA	MCPP	Pentachlorophenol
Concentrations reported in milligrams per kilogram (mg/kg)														
Railroad Tracks	S90-93 (Composite)	11/29/2016	0 - 6	<0.050	<0.050	<0.25	<0.50	<5.0	<0.050	<0.50	<0.050	<10	<10	<0.050

Notes:
< less than reporting limit(s)

Table 6
Summary of Soil Analytical Results - Polynuclear Aromatic Hydrocarbons
368 402 PETALUMA BOULEVARD NORTH PROPERTY
WKA No. 10410.04

	Sample ID	Sample Date	Sample Depth (in)	EPA Method 8310															
				Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthene	Pyrene
Concentrations reported in milligrams per kilogram (mg/kg)																			
Structure 11	S31	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
	S32	11/29/2016	0 - 6	<0.017	<0.017	<0.017	0.026	0.019	<0.017	<0.017	<0.017	0.034	<0.017	0.056	<0.017	<0.017	<0.017	0.086	0.064
	S33	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	0.018	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	0.019
	S34	11/29/2016	0 - 6	<0.085	<0.085	<0.085	0.27	0.27	<0.085	<0.085	0.22	0.43	<0.085	0.84	<0.085	0.18	<0.085	0.83	0.87
Structure 19	S58	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	0.024
	S59	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
	S60	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
	S61	11/29/2016	0 - 6	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Railroad Tracks	S90-93 (Composite)	11/29/2016	0 - 6	<0.085	<0.085	<0.085	<0.085	<0.085	<0.085	<0.085	<0.085	0.028	<0.085	0.06	<0.085	<0.085	<0.085	0.06	0.16

Notes:
< less than reporting limit(s)

APPENDIX A

Laboratory Analytical Reports
and
Chain-of-Custody Documentation

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

December 07, 2016

CLS Work Order #: CZK1152
COC #:

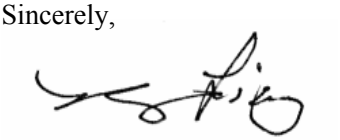
Matthew Taylor
Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project Name: 368 &402 Petaluma Boulevard North

Enclosed are the results of analyses for samples received by the laboratory on 11/30/16 13:49. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,



James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

CZK1152-1

3050 Industrial Blvd.
West Sacramento, CA 95691
Tel: 916.372.1434
Fax: 916.372.2565

Lab No. CLS Page 1 of 10

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matt Taylor
California EDF Report? ☐Yes ☑No
Company / Address: see above
Recommended but not mandatory to complete this section:
Sampling Company Log Code:
Phone No.: see above Fax No.: see above
Global ID:
Project Number: 10410.04 P.O. No.:
EDF Deliverable To (Email Address):
Project Name: 368 & 402 Petaluma Boulevard North
Sampler Signature:
Project Address:

Analysis Request

Sample Designation	Sampling Date	Sampling Time	Container: 4 oz. jar	Container: 8 oz. jar	Preservative: NONE	Preservative: HCl	Preservative: ICE	Matrix: WATER	Matrix: SOIL	DCPs (EPA 8081A)	Total Lead (EPA 6010B)	TPHmo and TPHd (EPA 8015)	TPHg (EPA 8260B)	BTEX (EPA 8260B)	MTBE (EPA 8260B)	Five Waste Oil Voids (EPA 8260/8270D SC	CAM 17 Metals (EPA 6000/7000 series)	Chlorinated Herbicides (EPA 8151A)	TAT
S1 } Comp.	11-29-16	730	1							C	D								12Hr ○
S2 } S1-S3		735	1								D								24 Hr ○
S3		740	1								D								48Hr ○
S4 } Comp.		740	1							C	D								72 Hr ○
S5 } S4-S7		7845	1								D								1 WK ○
S6		7850	1								D								2WK ○
S7		755	1								D								
S8		800	1								D								
S9 }		805	1	1							D	C	C						
S10 } Comp.		810	1	1							D								
S11 } S9-S12		815	1	1							D								
S12 }		820	1	1							D								

For Lab Use Only

Relinquished by:	Date	Time	Received by:
	11-29-16	1305	
Relinquished by:	Date	Time	Received by:
	11-30-16		
Relinquished by:	Date	Time	Received by Laboratory:

Remarks:
EMAIL to npl@wallace-kuhl.com and mtaylor@wallace-kuhl.com
C - Composite Analysis

Bill to: 11-30-16 1349 (019)

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

CZK1152-2

3050 Industrial Blvd.
West Sacramento, CA 95691
Tel: 916.372.1434
Fax: 916.372.2565

Lab No. _____ Page 2 of 10

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matt Taylor
Company / Address: see above
Phone No.: see above | Fax No.: see above
Project Number: 10410.04 | P.O. No.:
Project Name: 368 & 402 Petaluma Boulevard North
Project Address:

California EDF Report? ☐Yes ☑No
Recommended but not mandatory to complete this section:
Sampling Company Log Code:
Global ID:
EDF Deliverable To (Email Address):
Sampler Signature:

Analysis Request

TAT: ☐12Hr ☐24 Hr ☐48Hr ☐72 Hr ☐1 WK ☐2WK

For Lab Use Only

Sample Designation	Sampling: Date	Sampling: Time	Container: 4 oz. jar	Container: 8 oz. jar	Preservative: NONE	Preservative: HCl	Preservative: ICE	Matrix: WATER	Matrix: SOIL	OCPs (EPA 8081A)	Total Lead (EPA 6010C)	TPHmo and TPHd (EPA 8015)	TPHg (EPA 8260B)	BTEX (EPA 8260B)	MTBE (EPA 8260B)	Five Waste Oil Metals (EPA 6020/7000 series)	CAM 17 Metals (EPA 6020/7000 series)	Chlorinated Herbicides (EPA 8151A)
S13	11-29-16	825	1								D							
S14		830	1								D							
S15		855	1								D							
S16		840	1								D							
S17) Comp.		845	1							C	D							
S18 } S17-S19		850	1								D							
S19)		855	1							√	D							
S20)		910	1							C	D							
S21 } Comp.		905	1								D							
S22) S20-S22		910	1							√	D							

Relinquished by:	Date	Time	Received by:
[signature]	11-29-16	1305	[signature]
[signature]	11-30-16		

Remarks:
EMAIL to npl@wallace-kuhl.com and mtaylor@wallace-kuhl.com
C - Composite Analysis

Relinquished by:	Date	Time	Received by Laboratory:
			[signature]

Bill to: 11-30-16 1349 (DS)

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

CZK1152-3

3050 Industrial Blvd.
West Sacramento, CA 95691
Tel: 916.372.1434
Fax: 916.372.2565

Lab No. _____ Page 3 of 10

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matt Taylor	California EDF Report? ☐Yes ☑No
Company / Address: see above	Recommended but not mandatory to complete this section: Sampling Company Log Code:
Phone No.: see above / Fax No.: see above	Global ID:
Project Number: 10410.04 / P.O. No.:	EDF Deliverable To (Email Address):
Project Name: 368 & 402 Petaluma Boulevard North	Sampler Signature:
Project Address:	

Sample Designation	Sampling: Date	Sampling: Time	Container: 4 oz. Jar	Container: 8 oz. Jar	Preservative: NONE	Preservative: HCl	Preservative: ICE	Matrix: WATER	Matrix: SOIL	OCPs (EPA 8081A)	Total Lead (EPA 6010B)	TPHmo and TPHd (EPA 8015)	TPHg (EPA 8260B)	BTEX (EPA 8260B)	MTBE (EPA 8260B)	Five Waste Oil Metals (EPA 6000/7000 series)	CAM 17 Metals (EPA 6000/7000 series)	Chlorinated Herbicides (EPA 8151A)	PAHs (EPA 8310)	TAT
S23	11-29-16	915	1							C	D									
S24 (Comp. S23-S26)		920	1								D									
S25		925	1								D									
S26		930	1								D									
S27		935	1							C	D									
S28 (Comp S27-S30)		940	1								D									
S29		945	1								D									
S30		950	1								D									
S31		955	1	1													D		D	
S32		1000	1	1													D		D	
S33		1005	1	1													D		D	
S34	0	1010	1	1													D		D	

Relinquished by:	Date: 11-29-16	Time: 1305	Received by:	Remarks: EMAIL to npi@wallace-kuhl.com and mtaylor@wallace-kuhl.com C - Composite Analysis
Relinquished by:	Date: 11-30-16	Time:	Received by:	
Relinquished by:	Date:	Time:	Received by Laboratory:	Bill to: 11-30-16 1349 (OS)

For Lab Use Only

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

CZK1152-4

3050 Industrial Blvd.
West Sacramento, CA 95691
Tel: 916.372.1434
FAX: 916.372.2565

Lab No. _____ Page 4 of 10

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matt Taylor
Company / Address: see above
Phone No.: see above | Fax No.: see above
Project Number: 10410.04 | P.O. No.:
Project Name: 368 & 402 Petaluma Boulevard North
Project Address:

California EDF Report? ☐Yes ☑No
Recommended but not mandatory to complete this section:
Sampling Company Log Code:
Global ID:
EDF Deliverable To (Email Address):
Sampler Signature:

Analysis Request

TAT: 12Hr ○ | 24 Hr ○ | 48Hr ○ | 72 Hr ○ | 1 WK ○ | 2WK ○

For Lab Use Only

Sample Designation	Sampling: Date	Sampling: Time	Container: 4 oz. jar	Container: 8 oz. jar	Preservative: NONE	Preservative: HCl	Preservative: ICE	Matrix: WATER	Matrix: SOIL	OCPs (EPA 8081A)	Total Lead (EPA 6010B)	TPHmo and TPHd (EPA 8015)	TPHg (EPA 8260B)	BTEX (EPA 8260B)	MTBE (EPA 8260B)	Five Waste Oil Metals (EPA 6000/7000 se	CAM 17 Metals (EPA 6000/7000 series)	Chlorinated Herbicides (EPA 8151A)	PAHs (EPA 8310)
S35	11-29-16	1015	1							D									
S36		1020	1							D									
S37		1025	1							D									
S38		1030	1							D									
S39		1035	1							D									
S40		1040	1							D									
S41		1045	1							D									
S42		1050	1							D									
S43		1055	1							D									

	Date	Time	Received by:
Relinquished by:	11-29-16	1305	
Relinquished by:	11-30-16		Received by:
Relinquished by:	Date	Time	Received by Laboratory:

Remarks:
EMAIL to npi@wallace-kuhl.com and mtaylor@wallace-kuhl.com
C - Composite Analysis

Bill to: 11-30-16 1349 (DS)

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

CZK1152

3050 Industrial Blvd.
West Sacramento, CA 95691
Tel: 916.372.1434
Fax: 916.372.2565

Lab No. _____ Page 5 of 10

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matt Taylor	California EDF Report? ☐Yes ☑No
Company / Address: see above	Recommended but not mandatory to complete this section: Sampling Company Log Code:
Phone No.: see above / Fax No.: see above	Global ID:
Project Number: / P.O. No.:	EDF Deliverable To (Email Address):
Project Name: 368 & 402 Petaluma Boulevard North	Sampler Signature:
Project Address:	

Sample Designation	Sampling Date	Sampling Time	Container 4 oz. jar	Container 8 oz. jar	Preservative NONE	Preservative HCl	Preservative ICE	Matrix WATER	Matrix SOIL	Analysis Request: OCPs (EPA 8081A)	Total Lead (EPA 6010C)	TPHmo and TPHd (EPA 8015)	TPHg (EPA 8260B)	BTEX (EPA 8260B)	MTBE (EPA 8260B)	Five Waste Oil Metals (EPA 6000/7000 se	CAM 17 Metals (EPA 6000/7000 series)	Chlorinated Herbicides (EPA 8151A)	PAHs (EPA 8310)	TAT
S44 } Comp.	11-21-16	1100								C	D									
S45 } S44-S46		1105									D									
S46 }		1110									D									
S47 } Comp.		1115								C	D									
S48 } S47-S49		1120									D									
S49 }		1125									D									

TAT: ☐12Hr ☐24 Hr ☐48Hr ☐72 Hr ☐1 WK ☐2WK

For Lab Use Only

Relinquished by:	Date 12-1-16	Time	Received by:
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date 12/1/16	Time 09P	Received by Laboratory:

Remarks:
EMAIL to npl@wallace-kuhl.com and mtaylor@wallace-kuhl.com
C - Composite Analysis

Bill to:

9-3.

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

CZK1152-6

3050 Industrial Blvd.
West Sacramento, CA 95691
Tel: 916.372.1434
Fax: 916.372.2565

Lab No. _____ Page 5 of 18

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matt Taylor	California EDF Report? ☐Yes ☑No
Company / Address: see above	Recommended but not mandatory to complete this section: Sampling Company Log Code:
Phone No.: see above / Fax No.: see above	Global ID:
Project Number: / P.O. No.:	EDF Deliverable To (Email Address):
Project Name: 368 & 402 Petaluma Boulevard North	Sampler Signature:
Project Address:	

Sample Designation	Sampling: Date	Sampling: Time	Container: 4 oz. jar	Container: 8 oz. jar	Preservative: NONE	Preservative: HCl	Preservative: ICE	Matrix: WATER	Matrix: SOIL	Analysis Request: OCPs (EPA 8081A)	Total Lead (EPA 6010B)	TPHmo and TPHd (EPA 8015)	TPHg (EPA 8260B)	BTEX (EPA 8260B)	MTBE (EPA 8260B)	Five Waste Oil Metals (EPA 6000/7000 se	CAM 17 Metals (EPA 6000/7000 series)	Chlorinated Herbicides (EPA 8151A)	PAHs (EPA 8310)	TAT
S44			1							C	D									
S45			1								D									
S48			1								D									
S49			1								D									
S50	11-24-16	1120	1							C	D									
S51		1125	1								D									
S52		1130	1								D									
S53		1135	1								D									
S54		1140	1							C	D									
S55		1145	1								D									
S56		1150	1								D									
S57		1155	1								D									

COMP H:1 (S50–S53)
COMP H:1 (S54–S56)

Relinquished by:	Date 12-1-16	Time	Received by:
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date 12-1-16	Time 0930	Received by Laboratory:

Remarks:
EMAIL to npl@wallace-kuhl.com and mtaylor@wallace-kuhl.com
C - Composite Analysis

Bill to:

1.3

For Lab Use Only

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

CZK1152-7

~~CZK1152-6~~

3050 Industrial Blvd.
West Sacramento, CA 95691
Tel: 916.372.1434
Fax: 916.372.2565

Lab No. _____ Page 7 of 10

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matt Taylor
Company / Address: see above
Phone No.: see above | Fax No.: see above
Project Number: 10410.04 | P.O. No.:
Project Name: 368 & 402 Petaluma Boulevard North
Project Address:

California EDF Report? ☐Yes ☑No
Recommended but not mandatory to complete this section:
Sampling Company Log Code:
Global ID:
EDF Deliverable To (Email Address):
Sampler Signature:

Sample Designation	Sampling: Date	Sampling: Time	Container: 4 oz. jar	Container: 8 oz. jar	Preservative: NONE	Preservative: HCl	Preservative: ICE	Matrix: WATER	Matrix: SOIL	Analysis Request: OCPs (EPA 8081A)	Analysis Request: Total Lead (EPA 6010B)	Analysis Request: TPHmo and TPHd (EPA 8015)	Analysis Request: TPHg (EPA 8260B)	Analysis Request: BTEX (EPA 8260B)	Analysis Request: MTBE (EPA 8260B)	Analysis Request: Five Waste Oil Metals (EPA 6000/7000 se	Analysis Request: CAM 17 Metals (EPA 6000/7000 series)	Analysis Request: Chlorinated Herbicides (EPA 8151A)	Analysis Request: PAHs (EPA 8310)	TAT
S58	11-21-16	1220	1	1													D		D	
S59	"	1225	1	1													D		D	
S60	"	1230	1	1													D		D	
S61	"	1215	1	1													D		D	
S62	"	1220	1								D									
S63	"	1225	1								D									
S64	"	1230	1								D									
S65	"	1235	1								D									
S66 } Comp.	"	1240	1							C	D									
S67 } S66-S67	"	1245	1							↓	D									
S68 } Comp	"	1250	1							C	D									
S69 } S68-S69	↓	1255	1							↓	D									

Relinquished by:	Date	Time	Received by:
	11-21-16	1305	
Relinquished by:	Date	Time	Received by:
	11-30-16		
Relinquished by:	Date	Time	Received by Laboratory:

Remarks:
EMAIL to npl@wallace-kuhl.com and mtaylor@wallace-kuhl.com
C - Composite Analysis

Bill to: 11.30-16 1349 (09)

For Lab Use Only

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

CZK1152-8 ~~CZK1152-7~~

3050 Industrial Blvd.
West Sacramento, CA 95691
Tel: 916.372.1434
Fax: 916.372.2565

Lab No. _____ Page 8 of 10

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matt Taylor	California EDF Report? ☐Yes ☑No
Company / Address: see above	Recommended but not mandatory to complete this section: Sampling Company Log Code:
Phone No.: see above / Fax No.: see above	Global ID:
Project Number: 10410.04 / P.O. No.:	EDF Deliverable To (Email Address):
Project Name: 368 & 402 Petaluma Boulevard North	Sampler Signature:
Project Address:	

Analysis Request

TAT: ☐12Hr ☐24 Hr ☐48Hr ☐72 Hr ☐1 WK ☐2WK

For Lab Use Only

Sample Designation	Sampling: Date	Sampling: Time	Container: 4 oz. jar	Container: 8 oz. jar	Preservative: NONE	Preservative: HCl	Preservative: ICE	Matrix: WATER	Matrix: SOIL	OCPs (EPA 8081A)	Total Lead (EPA 6010B)	TPHmo and TPHd (EPA 8015)	TPHg (EPA 8260B)	BTEX (EPA 8260B)	MTBE (EPA 8260B)	Five Waste Oil Metals (LPA 6000/7000 se	CAM 17 Metals (EPA 6000/7000 series)	Chlorinated Herbicides (EPA 8151A)	PAHs (EPA 8310)
S70	11-29-16	1240	1								D								
S71		1245	1								D								
S72		1310	1								D								
S73		1315	1								D								
S74 } Comp.		1320	1							C	D								
S75 } S74-S77		1325	1								D								
S76 }		1330	1								D								
S77		1335	1								D								

Relinquished by:	Date	Time	Received by:
[signature]	11-29-16	1305	[signature]
[signature]	11-30-16		

Remarks:
EMAIL to npl@wallace-kuhl.com and mtaylor@wallace-kuhl.com
C - Composite Analysis

Relinquished by:	Date	Time	Received by Laboratory:
			[signature]

Bill to: 11-30-16 1349 (OG)

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

CZK1152-9

3050 Industrial Blvd.
West Sacramento, CA 95691
Tel: 916.372.1434
FAX: 916.372.2565

Lab No. _____ Page 9 of 10

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matt Taylor
Company / Address: see above
Phone No.: see above | Fax No.: see above
Project Number: 10410.04 | P.O. No.:
Project Name: 368 & 402 Petaluma Boulevard North
Project Address:

California EDF Report? ☐Yes ☑No
Recommended but not mandatory to complete this section:
Sampling Company Log Code:
Global ID:
EDF Deliverable To (Email Address):
Sampler Signature:

Sample Designation	Sampling: Date	Sampling: Time	Container: 4 oz. jar	Container: 8 oz. jar	Preservative: NONE	Preservative: HCl	Preservative: ICE	Matrix: WATER	Matrix: SOIL	OCPs (EPA 8081A)	Total Lead (EPA 6010B)	TPHmo and TPHd (EPA 8015)	TPHg (EPA 8260B)	BTEX (EPA 8260B)	MTBE (EPA 8260B)	Five Waste Oil Metals (EPA 6000/7000 se	CAM 17 Metals (EPA 6000/7000 series)	Chlorinated Herbicides (EPA 8151A)	PAHs (EPA 8310)	TAT: 12Hr	24 Hr	48Hr	72 Hr	1 WK	2WK
S78	9-23-16	1340	1							D	D														
S79		1345	1							C	D														
S80 (Comp.		1350	1							|	D														
S81 \ S79-S82		1355	1							|	D														
S82)		1400	1							0	D														
S83		1405	1							D	D														
S84)		1410	1	1						C	D	C	C	C	C	C									
S85 (Comp.		1415	1	1						|	D	|	|	|	|	|								
S86) S84-S86		1420	1	1						0	D	0	0	0	0	0									
S87)		1425	1	1						C	D	C	C	C	C	C									
S88 (Comp		1430	1	1						|	D	|	|	|	|	|								
S89) S87-S89	V	1435	1	1						0	D	0	0	0	0	0									

	Date	Time	Received by:
Relinquished by:	11-29-16	1305	
Relinquished by:	11-30-16		
Relinquished by:			Received by Laboratory:

Remarks:
EMAIL to npl@wallace-kuhl.com and mtaylor@wallace-kuhl.com
C - Composite Analysis

Bill to: 11-30-16 (09)

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

CZK1152-10.

[redacted]

3050 Industrial Blvd.
West Sacramento, CA 95691
Tel: 916.372.1434
Fax: 916.372.2565

Lab No. _____ Page 10 of 10

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Matt Taylor	California EDF Report? ☐Yes ☑No
Company / Address: see above	Recommended but not mandatory to complete this section: Sampling Company Log Code:
Phone No.: see above / Fax No.: see above	Global ID:
Project Number: 10410.04 / P.O. No.:	EDF Deliverable To (Email Address):
Project Name: 368 & 402 Petaluma Boulevard North	Sampler Signature:
Project Address:	

Sample Designation	Sampling: Date	Sampling: Time	Container: 4 oz. jar	Container: 8 oz. jar	Preservative: NONE	Preservative: HCl	Preservative: ICE	Matrix: WATER	Matrix: SOIL	OCPs (EPA 8081A)	Total Lead (EPA 6010B)	TPHmo and TPHd (EPA 8015)	TPHg (EPA 8260B)	BTEX (EPA 8260B)	MTBE (EPA 8260B)	Five Waste Oil Metals (EPA 6000/7000 se	CAM 17 Metals (EPA 6000/7000 series)	Chlorinated Herbicides (EPA 8151A)	PAHs (EPA 8310)	TAT: 12Hr	24 Hr	48Hr	72 Hr	1 WK	2WK
S90	11-29-16	1440	1	1								C					C	C	C						
S91 (Comp. S90-S93)		1445	1	1																					
S92		1450	1	1																					
S93		1453	1	1								↓					↓	↓	↓						
S94	↓	[redacted]	1												D										

Relinquished by:	Date	Time	Received by:	Remarks:
	11-29-16	1305		EMAIL to npi@wallace-kuhl.com and mtaylor@wallace-kuhl.com C - Composite Analysis
Relinquished by:	Date	Time	Received by:	
	11-30-16			
Relinquished by:	Date	Time	Received by Laboratory:	Bill to:
				11-30-16 1349 (0.9)

114

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

CLS LABS
SAMPLE RECEIVING EXCEPTION REPORTS

CLS Labs Job # CZK1152 - PINK.

Problem discovered by: GG. **Date:** 11/30/16.

Nature of problem

RECEIVED SAMPLE "SM6" & "SM7" AND THERE ARE NO ANALYSES ON CHAIN OF CUSTODY. SAMPLE "S66" & "S67" ARE ON CHAIN OF CUSTODY, BUT WERE NOT RECEIVED

Client contacted? Yes / **No** _____ **Spoke With:** NELSON PI / MATT TAYLOR.

By whom: GG **Date:** 11/30/16. **Time:** 1556 HRS

Client instructions:

PUT SAMPLE "SM6" & "S47" ON HOLD. NELSON WILL BRING IN SAMPLE "S66" & "S67". PROCEED WITH ALL OTHER ANALYSES.

Resolution of problem:

LOGGED IN PER MATT TAYLOR AND NELSON PI.

H:\Will\Orellana\SampleException.Doc

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

CAM 17 Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S31 (CZK1152-38) Soil Sampled: 11/29/16 09:55 Received: 11/30/16 13:49									
Antimony	ND	2.5	mg/kg	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Arsenic	ND	1.0	"	"	"	"	"	"	
Barium	**51**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	QC-2H
Cadmium	ND	1.0	"	"	"	"	"	"	
Chromium	**17**	1.0	"	"	"	"	"	"	
Cobalt	**2.1**	1.0	"	"	"	"	"	"	
Copper	**2.9**	1.0	"	"	"	"	"	"	
Lead	**3.4**	2.5	"	"	"	"	"	"	
Mercury	ND	0.10	"	1	CZ08886	12/02/16	12/05/16	EPA 7471A	
Molybdenum	ND	1.0	"	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Nickel	**12**	1.0	"	"	"	"	"	"	
Selenium	ND	2.5	"	"	"	"	"	"	
Silver	ND	1.0	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**23**	1.0	"	"	"	"	"	"	
Zinc	**18**	2.5	"	"	"	"	"	"	
S32 (CZK1152-39) Soil Sampled: 11/29/16 10:00 Received: 11/30/16 13:49									
Antimony	ND	2.5	mg/kg	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Arsenic	ND	1.0	"	"	"	"	"	"	
Barium	**36**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	QC-2H
Cadmium	ND	1.0	"	"	"	"	"	"	
Chromium	**16**	1.0	"	"	"	"	"	"	
Cobalt	**2.4**	1.0	"	"	"	"	"	"	
Copper	**2.8**	1.0	"	"	"	"	"	"	
Lead	**3.5**	2.5	"	"	"	"	"	"	
Mercury	ND	0.10	"	1	CZ08886	12/02/16	12/05/16	EPA 7471A	
Molybdenum	ND	1.0	"	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Nickel	**11**	1.0	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

CAM 17 Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S32 (CZK1152-39) Soil Sampled: 11/29/16 10:00 Received: 11/30/16 13:49									
Selenium	ND	2.5	mg/kg	5	CZ08885	"	12/02/16	EPA 6020	
Silver	ND	1.0	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**31**	1.0	"	"	"	"	"	"	
Zinc	**16**	2.5	"	"	"	"	"	"	
S33 (CZK1152-40) Soil Sampled: 11/29/16 10:05 Received: 11/30/16 13:49									
Antimony	ND	2.5	mg/kg	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Arsenic	ND	1.0	"	"	"	"	"	"	
Barium	**41**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	QC-2H
Cadmium	ND	1.0	"	"	"	"	"	"	
Chromium	**12**	1.0	"	"	"	"	"	"	
Cobalt	**2.1**	1.0	"	"	"	"	"	"	
Copper	**2.8**	1.0	"	"	"	"	"	"	
Lead	ND	2.5	"	"	"	"	"	"	
Mercury	ND	0.10	"	1	CZ08886	12/02/16	12/05/16	EPA 7471A	
Molybdenum	ND	1.0	"	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Nickel	**9.5**	1.0	"	"	"	"	"	"	
Selenium	ND	2.5	"	"	"	"	"	"	
Silver	ND	1.0	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**22**	1.0	"	"	"	"	"	"	
Zinc	**15**	2.5	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
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COC #:

CAM 17 Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S34 (CZK1152-41) Soil Sampled: 11/29/16 10:10 Received: 11/30/16 13:49									
Antimony	ND	2.5	mg/kg	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Arsenic	ND	1.0	"	"	"	"	"	"	
Barium	**42**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	QC-2H
Cadmium	ND	1.0	"	"	"	"	"	"	
Chromium	**15**	1.0	"	"	"	"	"	"	
Cobalt	**2.1**	1.0	"	"	"	"	"	"	
Copper	**3.7**	1.0	"	"	"	"	"	"	
Lead	**28**	2.5	"	"	"	"	"	"	
Mercury	ND	0.10	"	1	CZ08886	12/02/16	12/05/16	EPA 7471A	
Molybdenum	ND	1.0	"	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Nickel	**12**	1.0	"	"	"	"	"	"	
Selenium	ND	2.5	"	"	"	"	"	"	
Silver	ND	1.0	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**27**	1.0	"	"	"	"	"	"	
Zinc	**31**	2.5	"	"	"	"	"	"	
S58 (CZK1152-69) Soil Sampled: 11/29/16 12:00 Received: 11/30/16 13:49									
Antimony	ND	2.5	mg/kg	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Arsenic	ND	1.0	"	"	"	"	"	"	
Barium	**50**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	QC-2H
Cadmium	ND	1.0	"	"	"	"	"	"	
Chromium	**16**	1.0	"	"	"	"	"	"	
Cobalt	**3.2**	1.0	"	"	"	"	"	"	
Copper	**3.6**	1.0	"	"	"	"	"	"	
Lead	**2.8**	2.5	"	"	"	"	"	"	
Mercury	ND	0.10	"	1	CZ08886	12/02/16	12/05/16	EPA 7471A	
Molybdenum	ND	1.0	"	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Nickel	**16**	1.0	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

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CLS Work Order #: CZK1152
COC #:

CAM 17 Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S58 (CZK1152-69) Soil Sampled: 11/29/16 12:00 Received: 11/30/16 13:49									
Selenium	ND	2.5	mg/kg	5	CZ08885	"	12/02/16	EPA 6020	
Silver	ND	1.0	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**21**	1.0	"	"	"	"	"	"	
Zinc	**14**	2.5	"	"	"	"	"	"	
S59 (CZK1152-70) Soil Sampled: 11/29/16 12:05 Received: 11/30/16 13:49									
Antimony	ND	2.5	mg/kg	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Arsenic	ND	1.0	"	"	"	"	"	"	
Barium	**39**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	QC-2H
Cadmium	ND	1.0	"	"	"	"	"	"	
Chromium	**18**	1.0	"	"	"	"	"	"	
Cobalt	**2.4**	1.0	"	"	"	"	"	"	
Copper	**3.5**	1.0	"	"	"	"	"	"	
Lead	**2.5**	2.5	"	"	"	"	"	"	
Mercury	ND	0.10	"	1	CZ08886	12/02/16	12/05/16	EPA 7471A	
Molybdenum	ND	1.0	"	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Nickel	**11**	1.0	"	"	"	"	"	"	
Selenium	ND	2.5	"	"	"	"	"	"	
Silver	ND	1.0	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**26**	1.0	"	"	"	"	"	"	
Zinc	**17**	2.5	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
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COC #:

CAM 17 Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S60 (CZK1152-71) Soil Sampled: 11/29/16 12:10 Received: 11/30/16 13:49									
Antimony	ND	2.5	mg/kg	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Arsenic	ND	1.0	"	"	"	"	"	"	
Barium	**42**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	QC-2H
Cadmium	ND	1.0	"	"	"	"	"	"	
Chromium	**21**	1.0	"	"	"	"	"	"	
Cobalt	**2.3**	1.0	"	"	"	"	"	"	
Copper	**3.1**	1.0	"	"	"	"	"	"	
Lead	**3.3**	2.5	"	"	"	"	"	"	
Mercury	ND	0.10	"	1	CZ08886	12/02/16	12/05/16	EPA 7471A	
Molybdenum	ND	1.0	"	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Nickel	**10**	1.0	"	"	"	"	"	"	
Selenium	ND	2.5	"	"	"	"	"	"	
Silver	ND	1.0	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**25**	1.0	"	"	"	"	"	"	
Zinc	**14**	2.5	"	"	"	"	"	"	
S61 (CZK1152-72) Soil Sampled: 11/29/16 12:15 Received: 11/30/16 13:49									
Antimony	ND	2.5	mg/kg	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Arsenic	ND	1.0	"	"	"	"	"	"	
Barium	**110**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	QC-2H
Cadmium	ND	1.0	"	"	"	"	"	"	
Chromium	**19**	1.0	"	"	"	"	"	"	
Cobalt	**4.5**	1.0	"	"	"	"	"	"	
Copper	**3.8**	1.0	"	"	"	"	"	"	
Lead	**2.7**	2.5	"	"	"	"	"	"	
Mercury	ND	0.10	"	1	CZ08886	12/02/16	12/05/16	EPA 7471A	
Molybdenum	ND	1.0	"	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Nickel	**19**	1.0	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

CAM 17 Metals

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S61 (CZK1152-72) Soil Sampled: 11/29/16 12:15 Received: 11/30/16 13:49									
Selenium	ND	2.5	mg/kg	5	CZ08885	"	12/02/16	EPA 6020	
Silver	ND	1.0	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**32**	1.0	"	"	"	"	"	"	
Zinc	**16**	2.5	"	"	"	"	"	"	
S90-93 (Composite) (CZK1152-AL) Soil Sampled: 11/29/16 14:55 Received: 11/30/16 13:49									
Antimony	ND	2.5	mg/kg	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Arsenic	**3.2**	1.0	"	"	"	"	"	"	
Barium	**75**	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	QC-2H
Cadmium	ND	1.0	"	"	"	"	"	"	
Chromium	**31**	1.0	"	"	"	"	"	"	
Cobalt	**8.4**	1.0	"	"	"	"	"	"	
Copper	**20**	1.0	"	"	"	"	"	"	
Lead	**52**	2.5	"	"	"	"	"	"	
Mercury	ND	0.10	"	1	CZ08886	12/02/16	12/05/16	EPA 7471A	
Molybdenum	ND	1.0	"	5	CZ08885	12/02/16	12/02/16	EPA 6020	
Nickel	**35**	1.0	"	"	"	"	"	"	
Selenium	ND	2.5	"	"	"	"	"	"	
Silver	ND	1.0	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**37**	1.0	"	"	"	"	"	"	
Zinc	**120**	2.5	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

Chlorinated Herbicides by EPA Method 8151A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S90-93 (Composite) (CZK1152-AL) Soil	**Sampled: 11/29/16 14:55**	**Received: 11/30/16 13:49**							**QRL-8**
2,4,5-T	ND	0.050	mg/kg	5	CZ08868	12/02/16	12/06/16	EPA 8151A	
2,4,5-TP (Silvex)	ND	0.050	"	"	"	"	"	"	
2,4-D (2,4-Dichlorophenoxyacetic acid)	ND	0.25	"	"	"	"	"	"	
2,4-DB	ND	0.50	"	"	"	"	"	"	
Dalapon	ND	5.0	"	"	"	"	"	"	
Dicamba	ND	0.050	"	"	"	"	"	"	
Dichloroprop	ND	0.50	"	"	"	"	"	"	
Dinoseb	ND	0.050	"	"	"	"	"	"	
MCPA	ND	10	"	"	"	"	"	"	
MCPP	ND	10	"	"	"	"	"	"	
Pentachlorophenol	ND	0.050	"	"	"	"	"	"	
Surrogate: 2,4-DCAA		*54 %*		*50-150*	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
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CLS Work Order #: CZK1152
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S9-12 (Composite) (CZK1152-15) Soil Sampled: 11/29/16 08:20 Received: 11/30/16 13:49									
Diesel	ND	10	mg/kg	10	CZ08836	12/01/16	12/02/16	EPA 8015M	
Motor Oil	**300**	10	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*83 %*	*65-135*		*"*	"	*"*	*"*	
S84-86 (Composite) (CZK1152-AC) Soil Sampled: 11/29/16 14:20 Received: 11/30/16 13:49									
Diesel	ND	1.0	mg/kg	1	CZ08836	12/01/16	12/02/16	EPA 8015M	
Motor Oil	**4.7**	1.0	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*72 %*	*65-135*		*"*	"	*"*	*"*	
S87-89 (Composite) (CZK1152-AG) Soil Sampled: 11/29/16 14:35 Received: 11/30/16 13:49									
Diesel	ND	1.0	mg/kg	1	CZ08836	12/01/16	12/02/16	EPA 8015M	
Motor Oil	**8.2**	1.0	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*87 %*	*65-135*		*"*	"	*"*	*"*	
S90-93 (Composite) (CZK1152-AL) Soil Sampled: 11/29/16 14:55 Received: 11/30/16 13:49									
Diesel	ND	1.0	mg/kg	1	CZ08836	12/01/16	12/02/16	EPA 8015M	
Motor Oil	ND	1.0	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*70 %*	*65-135*		*"*	"	*"*	*"*	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S1 (CZK1152-01) Soil Sampled: 11/29/16 07:30 Received: 11/30/16 13:49									
Lead	**18**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S2 (CZK1152-02) Soil Sampled: 11/29/16 07:35 Received: 11/30/16 13:49									
Lead	**220**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S3 (CZK1152-03) Soil Sampled: 11/29/16 08:45 Received: 11/30/16 13:49									
Lead	**60**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S4 (CZK1152-05) Soil Sampled: 11/29/16 07:40 Received: 11/30/16 13:49									
Lead	**340**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S5 (CZK1152-06) Soil Sampled: 11/29/16 07:45 Received: 11/30/16 13:49									
Lead	**250**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S6 (CZK1152-07) Soil Sampled: 11/29/16 07:50 Received: 11/30/16 13:49									
Lead	**410**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S7 (CZK1152-08) Soil Sampled: 11/29/16 07:55 Received: 11/30/16 13:49									
Lead	**420**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S8 (CZK1152-10) Soil Sampled: 11/29/16 08:00 Received: 11/30/16 13:49									
Lead	**410**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S9 (CZK1152-11) Soil Sampled: 11/29/16 08:05 Received: 11/30/16 13:49									
Lead	**9.5**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S10 (CZK1152-12) Soil Sampled: 11/29/16 08:10 Received: 11/30/16 13:49									
Lead	**38**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S11 (CZK1152-13) Soil Sampled: 11/29/16 08:15 Received: 11/30/16 13:49									
Lead	**13**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S12 (CZK1152-14) Soil Sampled: 11/29/16 08:20 Received: 11/30/16 13:49									
Lead	**57**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S13 (CZK1152-16) Soil Sampled: 11/29/16 08:25 Received: 11/30/16 13:49									
Lead	**61**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S14 (CZK1152-17) Soil Sampled: 11/29/16 08:30 Received: 11/30/16 13:49									
Lead	**37**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S15 (CZK1152-18) Soil Sampled: 11/29/16 08:35 Received: 11/30/16 13:49									
Lead	**33**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S16 (CZK1152-19) Soil Sampled: 11/29/16 08:40 Received: 11/30/16 13:49									
Lead	**32**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S17 (CZK1152-20) Soil Sampled: 11/29/16 08:45 Received: 11/30/16 13:49									
Lead	**41**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S18 (CZK1152-21) Soil Sampled: 11/29/16 08:50 Received: 11/30/16 13:49									
Lead	**35**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
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CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S19 (CZK1152-22) Soil Sampled: 11/29/16 08:55 Received: 11/30/16 13:49									
Lead	**34**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S20 (CZK1152-24) Soil Sampled: 11/29/16 09:00 Received: 11/30/16 13:49									
Lead	**78**	2.5	mg/kg	5	CZ08850	12/01/16	12/01/16	EPA 6010B	ICP/MS
S21 (CZK1152-25) Soil Sampled: 11/29/16 09:05 Received: 11/30/16 13:49									
Lead	**31**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S22 (CZK1152-26) Soil Sampled: 11/29/16 09:10 Received: 11/30/16 13:49									
Lead	**48**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S23 (CZK1152-28) Soil Sampled: 11/29/16 09:15 Received: 11/30/16 13:49									
Lead	**37**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S24 (CZK1152-29) Soil Sampled: 11/29/16 09:20 Received: 11/30/16 13:49									
Lead	**48**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S25 (CZK1152-30) Soil Sampled: 11/29/16 09:25 Received: 11/30/16 13:49									
Lead	**99**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S26 (CZK1152-31) Soil Sampled: 11/29/16 09:30 Received: 11/30/16 13:49									
Lead	**39**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S27 (CZK1152-33) Soil Sampled: 11/29/16 09:35 Received: 11/30/16 13:49									
Lead	ND	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S28 (CZK1152-34) Soil Sampled: 11/29/16 09:40 Received: 11/30/16 13:49									
Lead	**7.6**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S29 (CZK1152-35) Soil Sampled: 11/29/16 09:45 Received: 11/30/16 13:49									
Lead	ND	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S30 (CZK1152-36) Soil Sampled: 11/29/16 09:50 Received: 11/30/16 13:49									
Lead	ND	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S35 (CZK1152-42) Soil Sampled: 11/29/16 10:15 Received: 11/30/16 13:49									
Lead	**3.7**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S36 (CZK1152-43) Soil Sampled: 11/29/16 10:20 Received: 11/30/16 13:49									
Lead	**84**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S37 (CZK1152-44) Soil Sampled: 11/29/16 10:25 Received: 11/30/16 13:49									
Lead	**87**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S38 (CZK1152-45) Soil Sampled: 11/29/16 10:30 Received: 11/30/16 13:49									
Lead	**14**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S39 (CZK1152-46) Soil Sampled: 11/29/16 10:35 Received: 11/30/16 13:49									
Lead	**58**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S40 (CZK1152-47) Soil Sampled: 11/29/16 10:40 Received: 11/30/16 13:49									
Lead	**17**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S41 (CZK1152-48) Soil Sampled: 11/29/16 10:45 Received: 11/30/16 13:49									
Lead	**28**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S42 (CZK1152-49) Soil Sampled: 11/29/16 10:50 Received: 11/30/16 13:49									
Lead	**70**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S43 (CZK1152-50) Soil Sampled: 11/29/16 10:55 Received: 11/30/16 13:49									
Lead	**23**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S44 (CZK1152-51) Soil Sampled: 11/29/16 11:00 Received: 11/30/16 13:49									
Lead	**22**	2.5	mg/kg	5	CZ08851	12/01/16	12/01/16	EPA 6010B	ICP/MS
S45 (CZK1152-52) Soil Sampled: 11/29/16 11:05 Received: 11/30/16 13:49									
Lead	**61**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S46 (CZK1152-53) Soil Sampled: 11/29/16 11:10 Received: 11/30/16 13:49									
Lead	**190**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S47 (CZK1152-55) Soil Sampled: 11/29/16 11:15 Received: 11/30/16 13:49									
Lead	**24**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S48 (CZK1152-56) Soil Sampled: 11/29/16 11:20 Received: 11/30/16 13:49									
Lead	**140**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S49 (CZK1152-57) Soil Sampled: 11/29/16 11:25 Received: 11/30/16 13:49									
Lead	**66**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
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CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S50 (CZK1152-59) Soil Sampled: 11/29/16 11:20 Received: 11/30/16 13:49									
Lead	**300**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S51 (CZK1152-60) Soil Sampled: 11/29/16 11:25 Received: 11/30/16 13:49									
Lead	**84**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S52 (CZK1152-61) Soil Sampled: 11/29/16 11:30 Received: 11/30/16 13:49									
Lead	**160**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S53 (CZK1152-62) Soil Sampled: 11/29/16 11:35 Received: 11/30/16 13:49									
Lead	**140**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S54 (CZK1152-64) Soil Sampled: 11/29/16 11:40 Received: 11/30/16 13:49									
Lead	**2.5**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S55 (CZK1152-65) Soil Sampled: 11/29/16 11:45 Received: 11/30/16 13:49									
Lead	**26**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S56 (CZK1152-66) Soil Sampled: 11/29/16 11:50 Received: 11/30/16 13:49									
Lead	**51**	2.5	mg/kg	5	CZ08898	12/05/16	12/05/16	EPA 6010B	ICP/MS
S57 (CZK1152-67) Soil Sampled: 11/29/16 11:53 Received: 11/30/16 13:49									
Lead	**3.0**	2.5	mg/kg	5	CZ08898	12/05/16	12/05/16	EPA 6010B	ICP/MS
S62 (CZK1152-73) Soil Sampled: 11/29/16 12:20 Received: 11/30/16 13:49									
Lead	ND	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S63 (CZK1152-74) Soil Sampled: 11/29/16 12:25 Received: 11/30/16 13:49									
Lead	**3.3**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S64 (CZK1152-75) Soil Sampled: 11/29/16 12:30 Received: 11/30/16 13:49									
Lead	**43**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S65 (CZK1152-76) Soil Sampled: 11/29/16 12:35 Received: 11/30/16 13:49									
Lead	**62**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S66 (CZK1152-77) Soil Sampled: 11/29/16 12:40 Received: 11/30/16 13:49									
Lead	**2.7**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S67 (CZK1152-78) Soil Sampled: 11/29/16 12:45 Received: 11/30/16 13:49									
Lead	**5.4**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S68 (CZK1152-80) Soil Sampled: 11/29/16 12:50 Received: 11/30/16 13:49									
Lead	**21**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S69 (CZK1152-81) Soil Sampled: 11/29/16 12:55 Received: 11/30/16 13:49									
Lead	**19**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S70 (CZK1152-83) Soil Sampled: 11/29/16 13:00 Received: 11/30/16 13:49									
Lead	**29**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS
S71 (CZK1152-84) Soil Sampled: 11/29/16 13:05 Received: 11/30/16 13:49									
Lead	**41**	2.5	mg/kg	5	CZ08867	12/02/16	12/02/16	EPA 6010B	ICP/MS

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S72 (CZK1152-85) Soil Sampled: 11/29/16 13:10 Received: 11/30/16 13:49									
Lead	**33**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S73 (CZK1152-86) Soil Sampled: 11/29/16 13:15 Received: 11/30/16 13:49									
Lead	**29**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S74 (CZK1152-87) Soil Sampled: 11/29/16 13:20 Received: 11/30/16 13:49									
Lead	**130**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S75 (CZK1152-88) Soil Sampled: 11/29/16 13:25 Received: 11/30/16 13:49									
Lead	**50**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S76 (CZK1152-89) Soil Sampled: 11/29/16 13:30 Received: 11/30/16 13:49									
Lead	**170**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S77 (CZK1152-90) Soil Sampled: 11/29/16 13:35 Received: 11/30/16 13:49									
Lead	**52**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S78 (CZK1152-92) Soil Sampled: 11/29/16 13:40 Received: 11/30/16 13:49									
Lead	**150**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S79 (CZK1152-93) Soil Sampled: 11/29/16 13:45 Received: 11/30/16 13:49									
Lead	**16**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S80 (CZK1152-94) Soil Sampled: 11/29/16 13:50 Received: 11/30/16 13:49									
Lead	**40**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S81 (CZK1152-95) Soil Sampled: 11/29/16 13:55 Received: 11/30/16 13:49									
Lead	**16**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S82 (CZK1152-96) Soil Sampled: 11/29/16 14:00 Received: 11/30/16 13:49									
Lead	**61**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S83 (CZK1152-98) Soil Sampled: 11/29/16 14:05 Received: 11/30/16 13:49									
Lead	**120**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S84 (CZK1152-99) Soil Sampled: 11/29/16 14:10 Received: 11/30/16 13:49									
Lead	**11**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S85 (CZK1152-AA) Soil Sampled: 11/29/16 14:15 Received: 11/30/16 13:49									
Lead	**10**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S86 (CZK1152-AB) Soil Sampled: 11/29/16 14:20 Received: 11/30/16 13:49									
Lead	**44**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S84-86 (Composite) (CZK1152-AC) Soil Sampled: 11/29/16 14:20 Received: 11/30/16 13:49									**ICP/MS**
Cadmium	ND	1.0	mg/kg	1	CZ08885	12/02/16	12/02/16	EPA 6010B	
Chromium	ND	5.0	"	"	"	"	"	"	
Lead	ND	10	"	"	"	"	"	"	
Nickel	ND	10	"	"	"	"	"	"	
Zinc	**15**	5.0	"	"	"	"	"	"	
S87 (CZK1152-AD) Soil Sampled: 11/29/16 14:25 Received: 11/30/16 13:49									
Lead	**22**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S88 (CZK1152-AE) Soil Sampled: 11/29/16 14:30 Received: 11/30/16 13:49									
Lead	**12**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S89 (CZK1152-AF) Soil Sampled: 11/29/16 14:35 Received: 11/30/16 13:49									
Lead	**7.9**	2.5	mg/kg	5	CZ08869	12/02/16	12/02/16	EPA 6010B	ICP/MS
S87-89 (Composite) (CZK1152-AG) Soil Sampled: 11/29/16 14:35 Received: 11/30/16 13:49									**ICP/MS**
Cadmium	ND	1.0	mg/kg	1	CZ08885	12/02/16	12/02/16	EPA 6010B	
Chromium	ND	5.0	"	"	"	"	"	"	
Lead	ND	10	"	"	"	"	"	"	
Nickel	ND	10	"	"	"	"	"	"	
Zinc	**14**	5.0	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S1-3 (Composite) (CZK1152-04) Soil Sampled: 11/29/16 08:45 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	33	µg/kg	10	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	33	"	"	"	"	"	"	
4,4´-DDT	ND	33	"	"	"	"	"	"	
Aldrin	ND	10	"	"	"	"	"	"	
alpha-BHC	ND	17	"	"	"	"	"	"	
beta-BHC	ND	17	"	"	"	"	"	"	
Chlordane-technical	ND	33	"	"	"	"	"	"	
delta-BHC	ND	17	"	"	"	"	"	"	
Dieldrin	ND	10	"	"	"	"	"	"	
Endosulfan I	ND	17	"	"	"	"	"	"	
Endosulfan II	ND	33	"	"	"	"	"	"	
Endosulfan sulfate	ND	33	"	"	"	"	"	"	
Endrin	ND	33	"	"	"	"	"	"	
Endrin aldehyde	ND	33	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	17	"	"	"	"	"	"	
Heptachlor	ND	17	"	"	"	"	"	"	
Heptachlor epoxide	ND	17	"	"	"	"	"	"	
Methoxychlor	ND	170	"	"	"	"	"	"	
Mirex	ND	33	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*108 %*	*52-141*		*"*	"	*"*	*"*	
Surrogate: Tetrachloro-meta-xylene		*78 %*	*46-139*		*"*	"	*"*	*"*	
S4-7 (Composite) (CZK1152-09) Soil Sampled: 11/29/16 07:55 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	33	µg/kg	10	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	33	"	"	"	"	"	"	
4,4´-DDT	**110**	33	"	"	"	"	"	"	
Aldrin	ND	10	"	"	"	"	"	"	
alpha-BHC	ND	17	"	"	"	"	"	"	
beta-BHC	ND	17	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S4-7 (Composite) (CZK1152-09) Soil Sampled: 11/29/16 07:55 Received: 11/30/16 13:49									**QRL-8**
Chlordane-technical	ND	33	µg/kg	10	CZ08859	"	12/06/16	EPA 8081A	
delta-BHC	ND	17	"	"	"	"	"	"	
Dieldrin	ND	10	"	"	"	"	"	"	
Endosulfan I	ND	17	"	"	"	"	"	"	
Endosulfan II	ND	33	"	"	"	"	"	"	
Endosulfan sulfate	ND	33	"	"	"	"	"	"	
Endrin	ND	33	"	"	"	"	"	"	
Endrin aldehyde	ND	33	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	17	"	"	"	"	"	"	
Heptachlor	ND	17	"	"	"	"	"	"	
Heptachlor epoxide	ND	17	"	"	"	"	"	"	
Methoxychlor	ND	170	"	"	"	"	"	"	
Mirex	ND	33	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*257 %*		*52-141*	"	"	"	"	*QS-4*
Surrogate: Tetrachloro-meta-xylene		*72 %*		*46-139*	"	"	"	"	
S17-19 (Composite) (CZK1152-23) Soil Sampled: 11/29/16 08:55 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	17	µg/kg	5	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	17	"	"	"	"	"	"	
4,4´-DDT	ND	17	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
alpha-BHC	ND	8.5	"	"	"	"	"	"	
beta-BHC	ND	8.5	"	"	"	"	"	"	
Chlordane-technical	ND	17	"	"	"	"	"	"	
delta-BHC	ND	8.5	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	8.5	"	"	"	"	"	"	
Endosulfan II	ND	17	"	"	"	"	"	"	
Endosulfan sulfate	ND	17	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
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CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S17-19 (Composite) (CZK1152-23) Soil Sampled: 11/29/16 08:55 Received: 11/30/16 13:49									**QRL-8**
Endrin	ND	17	µg/kg	5	CZ08859	"	12/06/16	EPA 8081A	
Endrin aldehyde	ND	17	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	8.5	"	"	"	"	"	"	
Heptachlor	ND	8.5	"	"	"	"	"	"	
Heptachlor epoxide	ND	8.5	"	"	"	"	"	"	
Methoxychlor	ND	85	"	"	"	"	"	"	
Mirex	ND	17	"	"	"	"	"	"	
Toxaphene	ND	100	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*90 %*	*52-141*		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*85 %*	*46-139*		"	"	"	"	
S20-22 (Composite) (CZK1152-27) Soil Sampled: 11/29/16 09:10 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	17	µg/kg	5	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	17	"	"	"	"	"	"	
4,4´-DDT	**19**	17	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
alpha-BHC	ND	8.5	"	"	"	"	"	"	
beta-BHC	ND	8.5	"	"	"	"	"	"	
Chlordane-technical	ND	17	"	"	"	"	"	"	
delta-BHC	ND	8.5	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	8.5	"	"	"	"	"	"	
Endosulfan II	ND	17	"	"	"	"	"	"	
Endosulfan sulfate	ND	17	"	"	"	"	"	"	
Endrin	ND	17	"	"	"	"	"	"	
Endrin aldehyde	ND	17	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	8.5	"	"	"	"	"	"	
Heptachlor	ND	8.5	"	"	"	"	"	"	
Heptachlor epoxide	ND	8.5	"	"	"	"	"	"	
Methoxychlor	ND	85	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S20-22 (Composite) (CZK1152-27) Soil Sampled: 11/29/16 09:10 Received: 11/30/16 13:49									**QRL-8**
Mirex	ND	17	µg/kg	5	CZ08859	"	12/06/16	EPA 8081A	
Toxaphene	ND	100	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*94 %*	*52-141*		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*82 %*	*46-139*		"	"	"	"	
S23-26 (Composite) (CZK1152-32) Soil Sampled: 11/29/16 09:30 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	33	µg/kg	10	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	33	"	"	"	"	"	"	
4,4´-DDT	ND	33	"	"	"	"	"	"	
Aldrin	ND	10	"	"	"	"	"	"	
alpha-BHC	ND	17	"	"	"	"	"	"	
beta-BHC	ND	17	"	"	"	"	"	"	
Chlordane-technical	ND	33	"	"	"	"	"	"	
delta-BHC	ND	17	"	"	"	"	"	"	
Dieldrin	ND	10	"	"	"	"	"	"	
Endosulfan I	ND	17	"	"	"	"	"	"	
Endosulfan II	ND	33	"	"	"	"	"	"	
Endosulfan sulfate	ND	33	"	"	"	"	"	"	
Endrin	ND	33	"	"	"	"	"	"	
Endrin aldehyde	ND	33	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	17	"	"	"	"	"	"	
Heptachlor	ND	17	"	"	"	"	"	"	
Heptachlor epoxide	ND	17	"	"	"	"	"	"	
Methoxychlor	ND	170	"	"	"	"	"	"	
Mirex	ND	33	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*116 %*	*52-141*		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*75 %*	*46-139*		"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S27-30 (Composite) (CZK1152-37) Soil Sampled: 11/29/16 09:50 Received: 11/30/16 13:49									
4,4´-DDD	ND	3.3	µg/kg	1	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	3.3	"	"	"	"	"	"	
4,4´-DDT	ND	3.3	"	"	"	"	"	"	
Aldrin	ND	1.0	"	"	"	"	"	"	
alpha-BHC	ND	1.7	"	"	"	"	"	"	
beta-BHC	ND	1.7	"	"	"	"	"	"	
Chlordane-technical	ND	3.3	"	"	"	"	"	"	
delta-BHC	ND	1.7	"	"	"	"	"	"	
Dieldrin	ND	1.0	"	"	"	"	"	"	
Endosulfan I	ND	1.7	"	"	"	"	"	"	
Endosulfan II	ND	3.3	"	"	"	"	"	"	
Endosulfan sulfate	ND	3.3	"	"	"	"	"	"	
Endrin	ND	3.3	"	"	"	"	"	"	
Endrin aldehyde	ND	3.3	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	1.7	"	"	"	"	"	"	
Heptachlor	ND	1.7	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.7	"	"	"	"	"	"	
Methoxychlor	ND	17	"	"	"	"	"	"	
Mirex	ND	3.3	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*93 %*	*52-141*		*"*	"	*"*	*"*	
Surrogate: Tetrachloro-meta-xylene		*81 %*	*46-139*		*"*	"	*"*	*"*	
S44-46 Composite (CZK1152-54) Soil Sampled: 11/29/16 11:10 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	33	µg/kg	10	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	33	"	"	"	"	"	"	
4,4´-DDT	ND	33	"	"	"	"	"	"	
Aldrin	ND	10	"	"	"	"	"	"	
alpha-BHC	ND	17	"	"	"	"	"	"	
beta-BHC	ND	17	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S44-46 Composite (CZK1152-54) Soil Sampled: 11/29/16 11:10 Received: 11/30/16 13:49									**QRL-8**
Chlordane-technical	ND	33	µg/kg	10	CZ08859	"	12/06/16	EPA 8081A	
delta-BHC	ND	17	"	"	"	"	"	"	
Dieldrin	ND	10	"	"	"	"	"	"	
Endosulfan I	ND	17	"	"	"	"	"	"	
Endosulfan II	ND	33	"	"	"	"	"	"	
Endosulfan sulfate	ND	33	"	"	"	"	"	"	
Endrin	ND	33	"	"	"	"	"	"	
Endrin aldehyde	ND	33	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	17	"	"	"	"	"	"	
Heptachlor	ND	17	"	"	"	"	"	"	
Heptachlor epoxide	ND	17	"	"	"	"	"	"	
Methoxychlor	ND	170	"	"	"	"	"	"	
Mirex	ND	33	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*92 %*	*52-141*		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*307 %*	*46-139*		"	"	"	"	*QS-4*
S47-49 (Composite) (CZK1152-58) Soil Sampled: 11/29/16 11:25 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	17	µg/kg	5	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	17	"	"	"	"	"	"	
4,4´-DDT	ND	17	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
alpha-BHC	ND	8.5	"	"	"	"	"	"	
beta-BHC	ND	8.5	"	"	"	"	"	"	
Chlordane-technical	ND	17	"	"	"	"	"	"	
delta-BHC	ND	8.5	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	8.5	"	"	"	"	"	"	
Endosulfan II	ND	17	"	"	"	"	"	"	
Endosulfan sulfate	ND	17	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S47-49 (Composite) (CZK1152-58) Soil Sampled: 11/29/16 11:25 Received: 11/30/16 13:49									**QRL-8**
Endrin	ND	17	µg/kg	5	CZ08859	"	12/06/16	EPA 8081A	
Endrin aldehyde	ND	17	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	8.5	"	"	"	"	"	"	
Heptachlor	ND	8.5	"	"	"	"	"	"	
Heptachlor epoxide	ND	8.5	"	"	"	"	"	"	
Methoxychlor	ND	85	"	"	"	"	"	"	
Mirex	ND	17	"	"	"	"	"	"	
Toxaphene	ND	100	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*80 %*	*52-141*		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*79 %*	*46-139*		"	"	"	"	
S50-53 (Composite) (CZK1152-63) Soil Sampled: 11/29/16 11:35 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	33	µg/kg	10	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	33	"	"	"	"	"	"	
4,4´-DDT	ND	33	"	"	"	"	"	"	
Aldrin	ND	10	"	"	"	"	"	"	
alpha-BHC	ND	17	"	"	"	"	"	"	
beta-BHC	ND	17	"	"	"	"	"	"	
Chlordane-technical	ND	33	"	"	"	"	"	"	
delta-BHC	ND	17	"	"	"	"	"	"	
Dieldrin	ND	10	"	"	"	"	"	"	
Endosulfan I	ND	17	"	"	"	"	"	"	
Endosulfan II	ND	33	"	"	"	"	"	"	
Endosulfan sulfate	ND	33	"	"	"	"	"	"	
Endrin	ND	33	"	"	"	"	"	"	
Endrin aldehyde	ND	33	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	17	"	"	"	"	"	"	
Heptachlor	ND	17	"	"	"	"	"	"	
Heptachlor epoxide	ND	17	"	"	"	"	"	"	
Methoxychlor	ND	170	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S50-53 (Composite) (CZK1152-63) Soil Sampled: 11/29/16 11:35 Received: 11/30/16 13:49									**QRL-8**
Mirex	ND	33	µg/kg	10	CZ08859	"	12/06/16	EPA 8081A	
Toxaphene	ND	200	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*122 %*	*52-141*		*"*	*"*	*"*	*"*	
Surrogate: Tetrachloro-meta-xylene		*78 %*	*46-139*		*"*	*"*	*"*	*"*	
S54-S57 (Composite) (CZK1152-68) Soil Sampled: 11/29/16 11:55 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	17	µg/kg	5	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	17	"	"	"	"	"	"	
4,4´-DDT	ND	17	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
alpha-BHC	ND	8.5	"	"	"	"	"	"	
beta-BHC	ND	8.5	"	"	"	"	"	"	
Chlordane-technical	ND	17	"	"	"	"	"	"	
delta-BHC	ND	8.5	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	8.5	"	"	"	"	"	"	
Endosulfan II	ND	17	"	"	"	"	"	"	
Endosulfan sulfate	ND	17	"	"	"	"	"	"	
Endrin	ND	17	"	"	"	"	"	"	
Endrin aldehyde	ND	17	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	8.5	"	"	"	"	"	"	
Heptachlor	ND	8.5	"	"	"	"	"	"	
Heptachlor epoxide	ND	8.5	"	"	"	"	"	"	
Methoxychlor	ND	85	"	"	"	"	"	"	
Mirex	ND	17	"	"	"	"	"	"	
Toxaphene	ND	100	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*103 %*	*52-141*		*"*	*"*	*"*	*"*	
Surrogate: Tetrachloro-meta-xylene		*83 %*	*46-139*		*"*	*"*	*"*	*"*	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S66-67 (Composite) (CZK1152-79) Soil Sampled: 11/29/16 12:45 Received: 11/30/16 13:49									
4,4´-DDD	ND	3.3	µg/kg	1	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	3.3	"	"	"	"	"	"	
4,4´-DDT	ND	3.3	"	"	"	"	"	"	
Aldrin	ND	1.0	"	"	"	"	"	"	
alpha-BHC	ND	1.7	"	"	"	"	"	"	
beta-BHC	ND	1.7	"	"	"	"	"	"	
Chlordane-technical	ND	3.3	"	"	"	"	"	"	
delta-BHC	ND	1.7	"	"	"	"	"	"	
Dieldrin	ND	1.0	"	"	"	"	"	"	
Endosulfan I	ND	1.7	"	"	"	"	"	"	
Endosulfan II	ND	3.3	"	"	"	"	"	"	
Endosulfan sulfate	ND	3.3	"	"	"	"	"	"	
Endrin	ND	3.3	"	"	"	"	"	"	
Endrin aldehyde	ND	3.3	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	1.7	"	"	"	"	"	"	
Heptachlor	ND	1.7	"	"	"	"	"	"	
Heptachlor epoxide	ND	1.7	"	"	"	"	"	"	
Methoxychlor	ND	17	"	"	"	"	"	"	
Mirex	ND	3.3	"	"	"	"	"	"	
Toxaphene	ND	20	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*86 %*	*52-141*		*"*	*"*	*"*	*"*	
Surrogate: Tetrachloro-meta-xylene		*83 %*	*46-139*		*"*	*"*	*"*	*"*	
S68-69 (Composite) (CZK1152-82) Soil Sampled: 11/29/16 12:55 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	17	µg/kg	5	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	17	"	"	"	"	"	"	
4,4´-DDT	ND	17	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
alpha-BHC	ND	8.5	"	"	"	"	"	"	
beta-BHC	ND	8.5	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S68-69 (Composite) (CZK1152-82) Soil Sampled: 11/29/16 12:55 Received: 11/30/16 13:49									**QRL-8**
Chlordane-technical	ND	17	µg/kg	5	CZ08859	"	12/06/16	EPA 8081A	
delta-BHC	ND	8.5	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	8.5	"	"	"	"	"	"	
Endosulfan II	ND	17	"	"	"	"	"	"	
Endosulfan sulfate	ND	17	"	"	"	"	"	"	
Endrin	ND	17	"	"	"	"	"	"	
Endrin aldehyde	ND	17	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	8.5	"	"	"	"	"	"	
Heptachlor	ND	8.5	"	"	"	"	"	"	
Heptachlor epoxide	ND	8.5	"	"	"	"	"	"	
Methoxychlor	ND	85	"	"	"	"	"	"	
Mirex	ND	17	"	"	"	"	"	"	
Toxaphene	ND	100	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*113 %*		*52-141*	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*99 %*		*46-139*	"	"	"	"	
S74-77 (Composite) (CZK1152-91) Soil Sampled: 11/29/16 13:35 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	17	µg/kg	5	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	17	"	"	"	"	"	"	
4,4´-DDT	ND	17	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
alpha-BHC	ND	8.5	"	"	"	"	"	"	
beta-BHC	ND	8.5	"	"	"	"	"	"	
Chlordane-technical	ND	17	"	"	"	"	"	"	
delta-BHC	ND	8.5	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	8.5	"	"	"	"	"	"	
Endosulfan II	ND	17	"	"	"	"	"	"	
Endosulfan sulfate	ND	17	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S74-77 (Composite) (CZK1152-91) Soil Sampled: 11/29/16 13:35 Received: 11/30/16 13:49									**QRL-8**
Endrin	ND	17	µg/kg	5	CZ08859	"	12/06/16	EPA 8081A	
Endrin aldehyde	ND	17	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	8.5	"	"	"	"	"	"	
Heptachlor	ND	8.5	"	"	"	"	"	"	
Heptachlor epoxide	ND	8.5	"	"	"	"	"	"	
Methoxychlor	ND	85	"	"	"	"	"	"	
Mirex	ND	17	"	"	"	"	"	"	
Toxaphene	ND	100	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*96 %*	*52-141*		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*81 %*	*46-139*		"	"	"	"	
S78 (CZK1152-92) Soil Sampled: 11/29/16 13:40 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	17	µg/kg	5	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	17	"	"	"	"	"	"	
4,4´-DDT	ND	17	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
alpha-BHC	ND	8.5	"	"	"	"	"	"	
beta-BHC	ND	8.5	"	"	"	"	"	"	
Chlordane-technical	**180**	17	"	"	"	"	"	"	
delta-BHC	ND	8.5	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	8.5	"	"	"	"	"	"	
Endosulfan II	ND	17	"	"	"	"	"	"	
Endosulfan sulfate	ND	17	"	"	"	"	"	"	
Endrin	ND	17	"	"	"	"	"	"	
Endrin aldehyde	ND	17	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	8.5	"	"	"	"	"	"	
Heptachlor	ND	8.5	"	"	"	"	"	"	
Heptachlor epoxide	ND	8.5	"	"	"	"	"	"	
Methoxychlor	ND	85	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S78 (CZK1152-92) Soil Sampled: 11/29/16 13:40 Received: 11/30/16 13:49									**QRL-8**
Mirex	ND	17	µg/kg	5	CZ08859	"	12/06/16	EPA 8081A	
Toxaphene	ND	100	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*78 %*	*52-141*		*"*	*"*	*"*	*"*	
Surrogate: Tetrachloro-meta-xylene		*82 %*	*46-139*		*"*	*"*	*"*	*"*	
S79-82 (Composite) (CZK1152-97) Soil Sampled: 11/29/16 14:00 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	17	µg/kg	5	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	17	"	"	"	"	"	"	
4,4´-DDT	ND	17	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
alpha-BHC	ND	8.5	"	"	"	"	"	"	
beta-BHC	ND	8.5	"	"	"	"	"	"	
Chlordane-technical	ND	17	"	"	"	"	"	"	
delta-BHC	ND	8.5	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	8.5	"	"	"	"	"	"	
Endosulfan II	ND	17	"	"	"	"	"	"	
Endosulfan sulfate	ND	17	"	"	"	"	"	"	
Endrin	ND	17	"	"	"	"	"	"	
Endrin aldehyde	ND	17	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	8.5	"	"	"	"	"	"	
Heptachlor	ND	8.5	"	"	"	"	"	"	
Heptachlor epoxide	ND	8.5	"	"	"	"	"	"	
Methoxychlor	ND	85	"	"	"	"	"	"	
Mirex	ND	17	"	"	"	"	"	"	
Toxaphene	ND	100	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*87 %*	*52-141*		*"*	*"*	*"*	*"*	
Surrogate: Tetrachloro-meta-xylene		*74 %*	*46-139*		*"*	*"*	*"*	*"*	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S83 (CZK1152-98) Soil Sampled: 11/29/16 14:05 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	17	µg/kg	5	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	17	"	"	"	"	"	"	
4,4´-DDT	ND	17	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
alpha-BHC	ND	8.5	"	"	"	"	"	"	
beta-BHC	ND	8.5	"	"	"	"	"	"	
Chlordane-technical	ND	17	"	"	"	"	"	"	
delta-BHC	ND	8.5	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	8.5	"	"	"	"	"	"	
Endosulfan II	ND	17	"	"	"	"	"	"	
Endosulfan sulfate	ND	17	"	"	"	"	"	"	
Endrin	ND	17	"	"	"	"	"	"	
Endrin aldehyde	ND	17	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	8.5	"	"	"	"	"	"	
Heptachlor	ND	8.5	"	"	"	"	"	"	
Heptachlor epoxide	ND	8.5	"	"	"	"	"	"	
Methoxychlor	ND	85	"	"	"	"	"	"	
Mirex	ND	17	"	"	"	"	"	"	
Toxaphene	ND	100	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*69 %*	*52-141*		*"*	"	*"*	*"*	
Surrogate: Tetrachloro-meta-xylene		*57 %*	*46-139*		*"*	"	*"*	*"*	
S84-86 (Composite) (CZK1152-AC) Soil Sampled: 11/29/16 14:20 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	17	µg/kg	5	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	17	"	"	"	"	"	"	
4,4´-DDT	ND	17	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
alpha-BHC	ND	8.5	"	"	"	"	"	"	
beta-BHC	ND	8.5	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S84-86 (Composite) (CZK1152-AC) Soil Sampled: 11/29/16 14:20 Received: 11/30/16 13:49									**QRL-8**
Chlordane-technical	ND	17	µg/kg	5	CZ08859	"	12/06/16	EPA 8081A	
delta-BHC	ND	8.5	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	8.5	"	"	"	"	"	"	
Endosulfan II	ND	17	"	"	"	"	"	"	
Endosulfan sulfate	ND	17	"	"	"	"	"	"	
Endrin	ND	17	"	"	"	"	"	"	
Endrin aldehyde	ND	17	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	8.5	"	"	"	"	"	"	
Heptachlor	ND	8.5	"	"	"	"	"	"	
Heptachlor epoxide	ND	8.5	"	"	"	"	"	"	
Methoxychlor	ND	85	"	"	"	"	"	"	
Mirex	ND	17	"	"	"	"	"	"	
Toxaphene	ND	100	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*99 %*	*52-141*		"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*87 %*	*46-139*		"	"	"	"	
S87-89 (Composite) (CZK1152-AG) Soil Sampled: 11/29/16 14:35 Received: 11/30/16 13:49									**QRL-8**
4,4´-DDD	ND	17	µg/kg	5	CZ08859	12/01/16	12/06/16	EPA 8081A	
4,4´-DDE	ND	17	"	"	"	"	"	"	
4,4´-DDT	ND	17	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
alpha-BHC	ND	8.5	"	"	"	"	"	"	
beta-BHC	ND	8.5	"	"	"	"	"	"	
Chlordane-technical	ND	17	"	"	"	"	"	"	
delta-BHC	ND	8.5	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	8.5	"	"	"	"	"	"	
Endosulfan II	ND	17	"	"	"	"	"	"	
Endosulfan sulfate	ND	17	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S87-89 (Composite) (CZK1152-AG) Soil	**Sampled: 11/29/16 14:35**	**Received: 11/30/16 13:49**							**QRL-8**
Endrin	ND	17	µg/kg	5	CZ08859	"	12/06/16	EPA 8081A	
Endrin aldehyde	ND	17	"	"	"	"	"	"	
gamma-BHC (Lindane)	ND	8.5	"	"	"	"	"	"	
Heptachlor	ND	8.5	"	"	"	"	"	"	
Heptachlor epoxide	ND	8.5	"	"	"	"	"	"	
Methoxychlor	ND	85	"	"	"	"	"	"	
Mirex	ND	17	"	"	"	"	"	"	
Toxaphene	ND	100	"	"	"	"	"	"	
Surrogate: Decachlorobiphenyl		*95 %*		*52-141*	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		*91 %*		*46-139*	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Polynuclear Aromatic Compounds by EPA Method 8310

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S31 (CZK1152-38) Soil Sampled: 11/29/16 09:55 Received: 11/30/16 13:49									
Acenaphthene	ND	17	µg/kg	1	CZ08852	12/01/16	12/05/16	EPA 8310	
Acenaphthylene	ND	17	"	"	"	"	"	"	
Anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) pyrene	ND	17	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	17	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	17	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	17	"	"	"	"	"	"	
Chrysene	ND	17	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	17	"	"	"	"	"	"	
Fluoranthene	ND	17	"	"	"	"	"	"	
Fluorene	ND	17	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	17	"	"	"	"	"	"	
Naphthalene	ND	17	"	"	"	"	"	"	
Phenanthrene	ND	17	"	"	"	"	"	"	
Pyrene	ND	17	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*100 %*	*70-130*		*"*	"	*"*	*"*	
S32 (CZK1152-39) Soil Sampled: 11/29/16 10:00 Received: 11/30/16 13:49									
Acenaphthene	ND	17	µg/kg	1	CZ08852	12/01/16	12/05/16	EPA 8310	
Acenaphthylene	ND	17	"	"	"	"	"	"	
Anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) anthracene	**26**	17	"	"	"	"	"	"	
Benzo (a) pyrene	**19**	17	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	17	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	17	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	17	"	"	"	"	"	"	
Chrysene	**34**	17	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	17	"	"	"	"	"	"	
Fluoranthene	**56**	17	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Polynuclear Aromatic Compounds by EPA Method 8310

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S32 (CZK1152-39) Soil Sampled: 11/29/16 10:00 Received: 11/30/16 13:49									
Fluorene	ND	17	µg/kg	1	CZ08852	"	12/05/16	EPA 8310	
Indeno (1,2,3-cd) pyrene	ND	17	"	"	"	"	"	"	
Naphthalene	ND	17	"	"	"	"	"	"	
Phenanthrene	**86**	17	"	"	"	"	"	"	
Pyrene	**64**	17	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*129 %*		*70-130*	"	"	"	"	
S33 (CZK1152-40) Soil Sampled: 11/29/16 10:05 Received: 11/30/16 13:49									
Acenaphthene	ND	17	µg/kg	1	CZ08852	12/01/16	12/05/16	EPA 8310	
Acenaphthylene	ND	17	"	"	"	"	"	"	
Anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) pyrene	ND	17	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	17	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	17	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	17	"	"	"	"	"	"	
Chrysene	**18**	17	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	17	"	"	"	"	"	"	
Fluoranthene	ND	17	"	"	"	"	"	"	
Fluorene	ND	17	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	17	"	"	"	"	"	"	
Naphthalene	ND	17	"	"	"	"	"	"	
Phenanthrene	ND	17	"	"	"	"	"	"	
Pyrene	**19**	17	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*102 %*		*70-130*	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Polynuclear Aromatic Compounds by EPA Method 8310

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S34 (CZK1152-41) Soil Sampled: 11/29/16 10:10 Received: 11/30/16 13:49									
Acenaphthene	ND	85	µg/kg	5	CZ08852	12/01/16	12/05/16	EPA 8310	
Acenaphthylene	ND	85	"	"	"	"	"	"	
Anthracene	ND	85	"	"	"	"	"	"	
Benzo (a) anthracene	**270**	85	"	"	"	"	"	"	
Benzo (a) pyrene	**270**	85	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	85	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	85	"	"	"	"	"	"	
Benzo (k) fluoranthene	**220**	85	"	"	"	"	"	"	
Chrysene	**430**	85	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	85	"	"	"	"	"	"	
Fluoranthene	**840**	85	"	"	"	"	"	"	
Fluorene	ND	85	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	**180**	85	"	"	"	"	"	"	
Naphthalene	ND	85	"	"	"	"	"	"	
Phenanthrene	**830**	85	"	"	"	"	"	"	
Pyrene	**870**	85	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*290 %*	*70-130*		*"*	"	*"*	*"*	*QS-4*
S58 (CZK1152-69) Soil Sampled: 11/29/16 12:00 Received: 11/30/16 13:49									
Acenaphthene	ND	17	µg/kg	1	CZ08852	12/01/16	12/05/16	EPA 8310	
Acenaphthylene	ND	17	"	"	"	"	"	"	
Anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) pyrene	ND	17	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	17	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	17	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	17	"	"	"	"	"	"	
Chrysene	ND	17	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	17	"	"	"	"	"	"	
Fluoranthene	ND	17	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Polynuclear Aromatic Compounds by EPA Method 8310

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S58 (CZK1152-69) Soil Sampled: 11/29/16 12:00 Received: 11/30/16 13:49									
Fluorene	ND	17	µg/kg	1	CZ08852	"	12/05/16	EPA 8310	
Indeno (1,2,3-cd) pyrene	ND	17	"	"	"	"	"	"	
Naphthalene	ND	17	"	"	"	"	"	"	
Phenanthrene	ND	17	"	"	"	"	"	"	
Pyrene	**24**	17	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*77 %*		*70-130*		*"*	*"*	*"*	*"*
S59 (CZK1152-70) Soil Sampled: 11/29/16 12:05 Received: 11/30/16 13:49									
Acenaphthene	ND	17	µg/kg	1	CZ08852	12/01/16	12/05/16	EPA 8310	
Acenaphthylene	ND	17	"	"	"	"	"	"	
Anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) pyrene	ND	17	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	17	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	17	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	17	"	"	"	"	"	"	
Chrysene	ND	17	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	17	"	"	"	"	"	"	
Fluoranthene	ND	17	"	"	"	"	"	"	
Fluorene	ND	17	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	17	"	"	"	"	"	"	
Naphthalene	ND	17	"	"	"	"	"	"	
Phenanthrene	ND	17	"	"	"	"	"	"	
Pyrene	ND	17	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*93 %*		*70-130*		*"*	*"*	*"*	*"*

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Polynuclear Aromatic Compounds by EPA Method 8310

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S60 (CZK1152-71) Soil Sampled: 11/29/16 12:10 Received: 11/30/16 13:49									
Acenaphthene	ND	17	µg/kg	1	CZ08852	12/01/16	12/05/16	EPA 8310	
Acenaphthylene	ND	17	"	"	"	"	"	"	
Anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) pyrene	ND	17	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	17	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	17	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	17	"	"	"	"	"	"	
Chrysene	ND	17	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	17	"	"	"	"	"	"	
Fluoranthene	ND	17	"	"	"	"	"	"	
Fluorene	ND	17	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	17	"	"	"	"	"	"	
Naphthalene	ND	17	"	"	"	"	"	"	
Phenanthrene	ND	17	"	"	"	"	"	"	
Pyrene	ND	17	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*88 %*	*70-130*		*"*	"	*"*	*"*	
S61 (CZK1152-72) Soil Sampled: 11/29/16 12:15 Received: 11/30/16 13:49									
Acenaphthene	ND	17	µg/kg	1	CZ08852	12/01/16	12/05/16	EPA 8310	
Acenaphthylene	ND	17	"	"	"	"	"	"	
Anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) anthracene	ND	17	"	"	"	"	"	"	
Benzo (a) pyrene	ND	17	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	17	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	17	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	17	"	"	"	"	"	"	
Chrysene	ND	17	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	17	"	"	"	"	"	"	
Fluoranthene	ND	17	"	"	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Polynuclear Aromatic Compounds by EPA Method 8310

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S61 (CZK1152-72) Soil Sampled: 11/29/16 12:15 Received: 11/30/16 13:49									
Fluorene	ND	17	µg/kg	1	CZ08852	"	12/05/16	EPA 8310	
Indeno (1,2,3-cd) pyrene	ND	17	"	"	"	"	"	"	
Naphthalene	ND	17	"	"	"	"	"	"	
Phenanthrene	ND	17	"	"	"	"	"	"	
Pyrene	ND	17	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*90 %*		*70-130*	"	"	"	"	
S90-93 (Composite) (CZK1152-AL) Soil Sampled: 11/29/16 14:55 Received: 11/30/16 13:49									
Acenaphthene	ND	85	µg/kg	5	CZ08852	12/01/16	12/05/16	EPA 8310	
Acenaphthylene	ND	85	"	"	"	"	"	"	
Anthracene	ND	85	"	"	"	"	"	"	
Benzo (a) anthracene	ND	85	"	"	"	"	"	"	
Benzo (a) pyrene	ND	85	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	85	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	85	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	85	"	"	"	"	"	"	
Chrysene	**28**	25	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	85	"	"	"	"	"	"	
Fluoranthene	**60**	50	"	"	"	"	"	"	
Fluorene	ND	85	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	85	"	"	"	"	"	"	
Naphthalene	ND	85	"	"	"	"	"	"	
Phenanthrene	**60**	50	"	"	"	"	"	"	
Pyrene	**160**	85	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*108 %*		*70-130*	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

TPH-Gasoline by GC/MS

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S9-12 (Composite) (CZK1152-15) Soil Sampled: 11/29/16 08:20 Received: 11/30/16 13:49									
Gasoline	ND	0.20	mg/kg	1	CZ08892	12/02/16	12/02/16	EPA 8260M	
Surrogate: Toluene-d8		*84 %*		*65-135*		"	"	"	"
S84-86 (Composite) (CZK1152-AC) Soil Sampled: 11/29/16 14:20 Received: 11/30/16 13:49									
Gasoline	ND	0.20	mg/kg	1	CZ08892	12/02/16	12/02/16	EPA 8260M	
Surrogate: Toluene-d8		*84 %*		*65-135*		"	"	"	"
S87-89 (Composite) (CZK1152-AG) Soil Sampled: 11/29/16 14:35 Received: 11/30/16 13:49									
Gasoline	ND	0.20	mg/kg	1	CZ08892	12/02/16	12/02/16	EPA 8260M	
Surrogate: Toluene-d8		*84 %*		*65-135*		"	"	"	"

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
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CLS Work Order #: CZK1152
COC #:

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S84-86 (Composite) (CZK1152-AC) Soil Sampled: 11/29/16 14:20 Received: 11/30/16 13:49									
Benzene	ND	5.0	µg/kg	1	CZ08892	12/02/16	12/02/16	EPA 8260B	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: Toluene-d8		*84 %*		*60-140*	"	"	"	"	
S87-89 (Composite) (CZK1152-AG) Soil Sampled: 11/29/16 14:35 Received: 11/30/16 13:49									
Benzene	ND	5.0	µg/kg	1	CZ08892	12/02/16	12/02/16	EPA 8260B	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: Toluene-d8		*84 %*		*60-140*	"	"	"	"	
S94 (CZK1152-AM) Soil Sampled: 11/29/16 08:15 Received: 11/30/16 13:49									
Methyl tert-butyl ether	ND	5.0	µg/kg	1	CZ08892	12/02/16	12/02/16	EPA 8260B	
Surrogate: Toluene-d8		*85 %*		*60-140*	"	"	"	"	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

CAM 17 Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08885 - EPA 3050B										
Blank (CZ08885-BLK1)				Prepared & Analyzed: 12/02/16						
Arsenic	ND	1.0	mg/kg							
Lead	ND	2.5	"							
Selenium	ND	2.5	"							
Thallium	ND	1.0	"							
Antimony	ND	2.5	"							
Barium	ND	1.0	"							
Beryllium	ND	1.0	"							
Cadmium	ND	1.0	"							
Chromium	ND	1.0	"							
Cobalt	ND	1.0	"							
Copper	ND	1.0	"							
Nickel	ND	1.0	"							
Molybdenum	ND	1.0	"							
Silver	ND	1.0	"							
Vanadium	ND	1.0	"							
Zinc	ND	2.5	"							
LCS (CZ08885-BS1)				Prepared & Analyzed: 12/02/16						
Arsenic	93.0	1.0	mg/kg	100		93	75-125			
Lead	97.9	2.5	"	100		98	75-125			
Selenium	96.0	2.5	"	100		96	75-125			
Thallium	95.6	1.0	"	100		96	75-125			
Antimony	104	2.5	"	100		104	75-125			
Barium	98.5	1.0	"	100		99	75-125			
Beryllium	105	1.0	"	100		105	75-125			
Cadmium	94.7	1.0	"	100		95	75-125			
Chromium	86.6	1.0	"	100		87	75-125			
Cobalt	83.5	1.0	"	100		83	75-125			
Copper	88.3	1.0	"	100		88	75-125			
Nickel	87.4	1.0	"	100		87	75-125			
Molybdenum	96.0	1.0	"	100		96	75-125			
Silver	119	1.0	"	100		119	75-125			

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

CAM 17 Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08885 - EPA 3050B										
LCS (CZ08885-BS1)				Prepared & Analyzed: 12/02/16						
Vanadium	96.0	1.0	mg/kg	100		96	75-125			
Zinc	84.3	2.5	"	100		84	75-125			
Matrix Spike (CZ08885-MS1)	**Source: CZL0031-01**			Prepared & Analyzed: 12/02/16						
Arsenic	82.7	1.0	mg/kg	100	4.35	78	75-125			
Lead	119	2.5	"	100	13.4	106	75-125			
Selenium	81.8	2.5	"	100	ND	82	75-125			
Thallium	105	1.0	"	100	0.265	105	75-125			
Antimony	43.0	2.5	"	100	0.695	42	75-125			QM-5
Barium	300	1.0	"	100	168	132	75-125			QM-5
Beryllium	101	1.0	"	100	0.260	101	75-125			
Cadmium	99.9	1.0	"	100	0.390	100	75-125			
Chromium	123	1.0	"	100	33.2	90	75-125			
Cobalt	88.7	1.0	"	100	7.89	81	75-125			
Copper	107	1.0	"	100	22.2	85	75-125			
Nickel	115	1.0	"	100	26.0	89	75-125			
Molybdenum	98.3	1.0	"	100	1.29	97	75-125			
Silver	126	1.0	"	100	0.105	126	75-125			QM-5
Vanadium	148	1.0	"	100	51.4	96	75-125			
Zinc	124	2.5	"	100	43.2	81	75-125			
Matrix Spike Dup (CZ08885-MSD1)	**Source: CZL0031-01**			Prepared & Analyzed: 12/02/16						
Arsenic	85.0	1.0	mg/kg	100	4.35	81	75-125	3	30	
Lead	117	2.5	"	100	13.4	104	75-125	1	30	
Selenium	81.1	2.5	"	100	ND	81	75-125	1	30	
Thallium	102	1.0	"	100	0.265	102	75-125	3	30	
Antimony	43.6	2.5	"	100	0.695	43	75-125	1	30	QM-5
Barium	306	1.0	"	100	168	137	75-125	2	30	QM-5
Beryllium	102	1.0	"	100	0.260	101	75-125	0.9	30	
Cadmium	101	1.0	"	100	0.390	100	75-125	0.7	30	
Chromium	128	1.0	"	100	33.2	95	75-125	4	30	
Cobalt	87.0	1.0	"	100	7.89	79	75-125	2	30	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

CAM 17 Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08885 - EPA 3050B										
Matrix Spike Dup (CZ08885-MSD1)	**Source: CZL0031-01**			Prepared & Analyzed: 12/02/16						
Copper	110	1.0	mg/kg	100	22.2	88	75-125	3	30	
Nickel	117	1.0	"	100	26.0	91	75-125	2	30	
Molybdenum	97.4	1.0	"	100	1.29	96	75-125	0.9	30	
Silver	124	1.0	"	100	0.105	124	75-125	2	30	
Vanadium	151	1.0	"	100	51.4	99	75-125	2	30	
Zinc	131	2.5	"	100	43.2	88	75-125	5	30	
Batch CZ08886 - EPA 7471A										
Blank (CZ08886-BLK1)				Prepared: 12/02/16 Analyzed: 12/05/16						
Mercury	ND	0.10	mg/kg							
LCS (CZ08886-BS1)				Prepared: 12/02/16 Analyzed: 12/05/16						
Mercury	0.265	0.10	mg/kg	0.250		106	75-125			
Matrix Spike (CZ08886-MS1)	**Source: CZL0031-01**			Prepared: 12/02/16 Analyzed: 12/05/16						
Mercury	0.381	0.10	mg/kg	0.250	0.0841	119	75-125			
Matrix Spike Dup (CZ08886-MSD1)	**Source: CZL0031-01**			Prepared: 12/02/16 Analyzed: 12/05/16						
Mercury	0.361	0.10	mg/kg	0.250	0.0841	111	75-125	5	25	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Chlorinated Herbicides by EPA Method 8151A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08868 - EPA 8151A										
Blank (CZ08868-BLK1)				Prepared: 12/02/16 Analyzed: 12/06/16						
2,4-D (2,4-Dichlorophenoxyacetic acid)	ND	0.050	mg/kg							
Dalapon	ND	1.0	"							
2,4-DB	ND	0.10	"							
Dicamba	ND	0.010	"							
Dichloroprop	ND	0.10	"							
Dinoseb	ND	0.010	"							
MCPA	ND	2.0	"							
MCPP	ND	2.0	"							
Pentachlorophenol	ND	0.010	"							
2,4,5-T	ND	0.010	"							
2,4,5-TP (Silvex)	ND	0.010	"							
Surrogate: 2,4-DCAA	*0.0437*		*"*	*0.0500*		*87*	*50-150*			
LCS (CZ08868-BS1)				Prepared: 12/02/16 Analyzed: 12/06/16						
Dicamba	0.0256	0.010	mg/kg	0.0250		102	50-150			
Dichloroprop	0.0294	0.10	"	0.0250		117	50-150			
Surrogate: 2,4-DCAA	*0.0427*		*"*	*0.0500*		*85*	*50-150*			
LCS Dup (CZ08868-BSD1)				Prepared: 12/02/16 Analyzed: 12/06/16						
Dicamba	0.0275	0.010	mg/kg	0.0250		110	50-150	7	30	
Dichloroprop	0.0313	0.10	"	0.0250		125	50-150	6	30	
Surrogate: 2,4-DCAA	*0.0445*		*"*	*0.0500*		*89*	*50-150*			
Matrix Spike (CZ08868-MS1)		**Source: CZK1152-AL**		Prepared: 12/02/16 Analyzed: 12/06/16						**QRL-8**
Dicamba	0.0214	0.050	mg/kg	0.0250	ND	86	50-150			
Dichloroprop	0.0233	0.50	"	0.0250	ND	93	50-150			
Surrogate: 2,4-DCAA	*0.0358*		*"*	*0.0500*		*72*	*50-150*			

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Chlorinated Herbicides by EPA Method 8151A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08868 - EPA 8151A										
Matrix Spike Dup (CZ08868-MSD1)	**Source: CZK1152-AL**			Prepared: 12/02/16 Analyzed: 12/06/16						**QRL-8**
Dicamba	0.0193	0.050	mg/kg	0.0250	ND	77	50-150	10	30	
Dichloroprop	0.0201	0.50	"	0.0250	ND	80	50-150	15	30	
Surrogate: 2,4-DCAA	*0.0336*		*"*	*0.0500*		*67*	*50-150*			

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08836 - CA LUFT - orb shaker										
Blank (CZ08836-BLK1)				Prepared: 11/30/16 Analyzed: 12/02/16						
Diesel	ND	1.0	mg/kg							
Motor Oil	ND	1.0	"							
Surrogate: o-Terphenyl	*0.401*		*"*	*0.500*		*80*	*65-135*			
LCS (CZ08836-BS1)				Prepared: 11/30/16 Analyzed: 12/02/16						
Diesel	54.6	1.0	mg/kg	50.0		109	65-135			
Surrogate: o-Terphenyl	*0.423*		*"*	*0.500*		*85*	*65-135*			
LCS Dup (CZ08836-BSD1)				Prepared: 11/30/16 Analyzed: 12/02/16						
Diesel	56.1	1.0	mg/kg	50.0		112	65-135	3	30	
Surrogate: o-Terphenyl	*0.428*		*"*	*0.500*		*86*	*65-135*			
Matrix Spike (CZ08836-MS1)	**Source: CZK1121-01**			Prepared: 11/30/16 Analyzed: 12/02/16						
Diesel	64.2	1.0	mg/kg	50.0	ND	128	59-138			
Surrogate: o-Terphenyl	*0.430*		*"*	*0.500*		*86*	*65-135*			
Matrix Spike Dup (CZ08836-MSD1)	**Source: CZK1121-01**			Prepared: 11/30/16 Analyzed: 12/02/16						
Diesel	66.0	1.0	mg/kg	50.0	ND	132	59-138	3	37	
Surrogate: o-Terphenyl	*0.435*		*"*	*0.500*		*87*	*65-135*			

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08850 - EPA 3050B										
Blank (CZ08850-BLK1)				Prepared & Analyzed: 12/01/16						
Lead	ND	2.5	mg/kg							
LCS (CZ08850-BS1)				Prepared & Analyzed: 12/01/16						
Lead	94.8	2.5	mg/kg	100		95	75-125			
Matrix Spike (CZ08850-MS1)	**Source: CZK1152-01**			Prepared & Analyzed: 12/01/16						
Lead	95.0	2.5	mg/kg	100	18.1	77	75-125			
Matrix Spike Dup (CZ08850-MSD1)	**Source: CZK1152-01**			Prepared & Analyzed: 12/01/16						
Lead	103	2.5	mg/kg	100	18.1	85	75-125	8	30	
Batch CZ08851 - EPA 3050B										
Blank (CZ08851-BLK1)				Prepared & Analyzed: 12/01/16						
Lead	ND	2.5	mg/kg							
LCS (CZ08851-BS1)				Prepared & Analyzed: 12/01/16						
Lead	96.9	2.5	mg/kg	100		97	75-125			
Matrix Spike (CZ08851-MS1)	**Source: CZK1152-25**			Prepared & Analyzed: 12/01/16						
Lead	90.7	2.5	mg/kg	100	31.0	60	75-125			QM-5
Matrix Spike Dup (CZ08851-MSD1)	**Source: CZK1152-25**			Prepared & Analyzed: 12/01/16						
Lead	84.6	2.5	mg/kg	100	31.0	54	75-125	7	30	QM-5
Batch CZ08867 - EPA 3050B										
Blank (CZ08867-BLK1)				Prepared & Analyzed: 12/02/16						
Lead	ND	2.5	mg/kg							

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08867 - EPA 3050B										
Blank (CZ08867-BLK2)				Prepared: 12/02/16 Analyzed: 12/06/16						
Lead	ND	0.50	mg/kg							
LCS (CZ08867-BS1)				Prepared & Analyzed: 12/02/16						
Lead	105	2.5	mg/kg	100		105	75-125			
Matrix Spike (CZ08867-MS1)	**Source: CZK1152-52**			Prepared & Analyzed: 12/02/16						
Lead	56.3	2.5	mg/kg	100	60.8	NR	75-125			QM-5
Matrix Spike Dup (CZ08867-MSD1)	**Source: CZK1152-52**			Prepared & Analyzed: 12/02/16						
Lead	131	2.5	mg/kg	100	60.8	71	75-125	80	30	QM-5
Batch CZ08869 - EPA 3050B										
Blank (CZ08869-BLK1)				Prepared & Analyzed: 12/02/16						
Lead	ND	2.5	mg/kg							
LCS (CZ08869-BS1)				Prepared & Analyzed: 12/02/16						
Lead	100	2.5	mg/kg	100		100	75-125			
Matrix Spike (CZ08869-MS1)	**Source: CZK1152-85**			Prepared & Analyzed: 12/02/16						
Lead	135	2.5	mg/kg	100	32.8	102	75-125			
Matrix Spike Dup (CZ08869-MSD1)	**Source: CZK1152-85**			Prepared & Analyzed: 12/02/16						
Lead	127	2.5	mg/kg	100	32.8	94	75-125	6	30	
Batch CZ08885 - EPA 3050B										
Blank (CZ08885-BLK1)				Prepared & Analyzed: 12/02/16						
Cadmium	ND	5.0	mg/kg							
Chromium	ND	25	"							
Lead	ND	50	"							
Nickel	ND	50	"							
Zinc	ND	25	"							

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08885 - EPA 3050B										
LCS (CZ08885-BS1)				Prepared & Analyzed: 12/02/16						
Cadmium	94.7	5.0	mg/kg	100		95	75-125			
Chromium	86.6	25	"	100		87	75-125			
Lead	97.9	50	"	100		98	75-125			
Nickel	87.4	50	"	100		87	75-125			
Zinc	84.3	25	"	100		84	75-125			
Matrix Spike (CZ08885-MS1)		**Source: CZL0031-01**		Prepared & Analyzed: 12/02/16						
Cadmium	99.9	5.0	mg/kg	100	ND	100	75-125			
Chromium	123	25	"	100	6.64	117	75-125			
Lead	119	50	"	100	ND	119	75-125			
Nickel	115	50	"	100	5.21	109	75-125			
Zinc	124	25	"	100	8.65	116	75-125			
Matrix Spike Dup (CZ08885-MSD1)		**Source: CZL0031-01**		Prepared & Analyzed: 12/02/16						
Cadmium	101	5.0	mg/kg	100	ND	101	75-125	0.7	30	
Chromium	128	25	"	100	6.64	122	75-125	4	30	
Lead	117	50	"	100	ND	117	75-125	1	30	
Nickel	117	50	"	100	5.21	112	75-125	2	30	
Zinc	131	25	"	100	8.65	123	75-125	5	30	
Batch CZ08898 - EPA 3020A										
Blank (CZ08898-BLK1)				Prepared & Analyzed: 12/05/16						
Lead	ND	2.5	mg/kg							
LCS (CZ08898-BS1)				Prepared & Analyzed: 12/05/16						
Lead	10.1	2.5	mg/kg	10.0		101	75-125			

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
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CLS Work Order #: CZK1152
COC #:

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08898 - EPA 3020A										
Matrix Spike (CZ08898-MS1)	**Source: CZL0079-01**			Prepared & Analyzed: 12/05/16						
Lead	17.6	2.5	mg/kg	10.0	7.34	103	75-125			
Matrix Spike Dup (CZ08898-MSD1)	**Source: CZL0079-01**			Prepared & Analyzed: 12/05/16						
Lead	17.6	2.5	mg/kg	10.0	7.34	103	75-125	0.07	30	

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
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CLS Work Order #: CZK1152
COC #:

Organochlorine Pesticides by EPA Method 8081A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08859 - LUFT-DHS GCNV										
Blank (CZ08859-BLK1)				Prepared: 12/01/16 Analyzed: 12/06/16						
Aldrin	ND	1.0	µg/kg							
alpha-BHC	ND	1.7	"							
beta-BHC	ND	1.7	"							
gamma-BHC (Lindane)	ND	1.7	"							
delta-BHC	ND	1.7	"							
Chlordane-technical	ND	3.3	"							
4,4´-DDD	ND	3.3	"							
4,4´-DDE	ND	3.3	"							
4,4´-DDT	ND	3.3	"							
Dieldrin	ND	1.0	"							
Endosulfan I	ND	1.7	"							
Endosulfan II	ND	3.3	"							
Endosulfan sulfate	ND	3.3	"							
Endrin	ND	3.3	"							
Endrin aldehyde	ND	3.3	"							
Heptachlor	ND	1.7	"							
Heptachlor epoxide	ND	1.7	"							
Methoxychlor	ND	17	"							
Mirex	ND	3.3	"							
Toxaphene	ND	20	"							
Surrogate: Tetrachloro-meta-xylene	*7.95*		*"*	*8.33*		*95*	*46-139*			
Surrogate: Decachlorobiphenyl	*8.64*		*"*	*8.33*		*104*	*52-141*			
LCS (CZ08859-BS1)				Prepared: 12/01/16 Analyzed: 12/06/16						
Aldrin	15.0	1.0	µg/kg	16.7		90	47-132			
gamma-BHC (Lindane)	14.7	1.7	"	16.7		88	56-133			
4,4´-DDT	17.1	3.3	"	16.7		103	46-137			
Dieldrin	15.5	1.0	"	16.7		93	44-143			
Endrin	18.5	3.3	"	16.7		111	30-147			
Heptachlor	16.5	1.7	"	16.7		99	33-148			
Surrogate: Tetrachloro-meta-xylene	*8.37*		*"*	*8.33*		*100*	*46-139*			

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COC #:

Organochlorine Pesticides by EPA Method 8081A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08859 - LUFT-DHS GCNV										
LCS (CZ08859-BS1)				Prepared: 12/01/16 Analyzed: 12/06/16						
Surrogate: Decachlorobiphenyl	*9.24*		*µg/kg*	*8.33*		*111*	*52-141*			
LCS Dup (CZ08859-BSD1)				Prepared: 12/01/16 Analyzed: 12/06/16						
Aldrin	13.9	1.0	µg/kg	16.7		84	47-132	7	30	
gamma-BHC (Lindane)	13.7	1.7	"	16.7		82	56-133	7	30	
4,4´-DDT	16.0	3.3	"	16.7		96	46-137	7	30	
Dieldrin	14.4	1.0	"	16.7		86	44-143	7	30	
Endrin	17.1	3.3	"	16.7		102	30-147	8	30	
Heptachlor	15.4	1.7	"	16.7		92	33-148	7	30	
Surrogate: Tetrachloro-meta-xylene	*8.75*		*"*	*8.33*		*105*	*46-139*			
Surrogate: Decachlorobiphenyl	*9.14*		*"*	*8.33*		*110*	*52-141*			
Matrix Spike (CZ08859-MS1)	**Source: CZK1152-04**			Prepared: 12/01/16 Analyzed: 12/06/16						**QRL-8**
Aldrin	12.3	10	µg/kg	16.7	ND	74	47-138			
gamma-BHC (Lindane)	10.8	17	"	16.7	ND	65	38-144			
4,4´-DDT	19.6	33	"	16.7	ND	118	41-157			
Dieldrin	11.7	10	"	16.7	ND	70	46-155			
Endrin	16.9	33	"	16.7	ND	101	34-149			
Heptachlor	15.3	17	"	16.7	ND	92	36-155			
Surrogate: Tetrachloro-meta-xylene	*17.5*		*"*	*20.8*		*84*	*46-139*			
Surrogate: Decachlorobiphenyl	*22.0*		*"*	*20.8*		*105*	*52-141*			
Matrix Spike Dup (CZ08859-MSD1)	**Source: CZK1152-04**			Prepared: 12/01/16 Analyzed: 12/06/16						**QRL-8**
Aldrin	11.7	10	µg/kg	16.7	ND	70	47-138	5	35	
gamma-BHC (Lindane)	10.5	17	"	16.7	ND	63	38-144	2	35	
4,4´-DDT	18.2	33	"	16.7	ND	109	41-157	7	35	
Dieldrin	12.1	10	"	16.7	ND	72	46-155	3	35	
Endrin	16.2	33	"	16.7	ND	97	34-149	4	35	
Heptachlor	14.3	17	"	16.7	ND	86	36-155	7	35	
Surrogate: Tetrachloro-meta-xylene	*16.7*		*"*	*20.8*		*80*	*46-139*			
Surrogate: Decachlorobiphenyl	*12.1*		*"*	*20.8*		*58*	*52-141*			

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Polynuclear Aromatic Compounds by EPA Method 8310 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08852 - LUFT-DHS HPLC										
Blank (CZ08852-BLK1)				Prepared: 12/01/16 Analyzed: 12/05/16						
Naphthalene	ND	17	µg/kg							
Acenaphthylene	ND	17	"							
Acenaphthene	ND	17	"							
Fluorene	ND	17	"							
Phenanthrene	ND	17	"							
Anthracene	ND	17	"							
Fluoranthene	ND	17	"							
Pyrene	ND	17	"							
Benzo (a) anthracene	ND	17	"							
Chrysene	ND	17	"							
Benzo (b) fluoranthene	ND	17	"							
Benzo (k) fluoranthene	ND	17	"							
Benzo (a) pyrene	ND	17	"							
Dibenz (a,h) anthracene	ND	17	"							
Benzo (g,h,i) perylene	ND	17	"							
Indeno (1,2,3-cd) pyrene	ND	17	"							
Surrogate: Terphenyl-dl4	*87.3*		*"*	*83.3*		*105*	*70-130*			
LCS (CZ08852-BS1)				Prepared: 12/01/16 Analyzed: 12/05/16						
Phenanthrene	85.7	17	µg/kg	83.3		103	70-130			
Chrysene	95.0	17	"	83.3		114	70-130			
Benzo (g,h,i) perylene	98.8	17	"	83.3		119	70-130			
Surrogate: Terphenyl-dl4	*91.2*		*"*	*83.3*		*109*	*70-130*			
LCS Dup (CZ08852-BSD1)				Prepared: 12/01/16 Analyzed: 12/05/16						
Phenanthrene	90.2	17	µg/kg	83.3		108	70-130	5	30	
Chrysene	100	17	"	83.3		120	70-130	5	30	
Benzo (g,h,i) perylene	104	17	"	83.3		125	70-130	5	30	
Surrogate: Terphenyl-dl4	*89.8*		*"*	*83.3*		*108*	*70-130*			

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Polynuclear Aromatic Compounds by EPA Method 8310 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08852 - LUFT-DHS HPLC										
Matrix Spike (CZ08852-MS1)	**Source: CZK1152-39**			Prepared: 12/01/16 Analyzed: 12/05/16						
Phenanthrene	196	85	µg/kg	83.3	85.8	132	60-140			
Chrysene	216	85	"	83.3	33.5	219	60-140			QM-5
Benzo (g,h,i) perylene	144	85	"	83.3	ND	173	60-140			QM-5
Surrogate: Terphenyl-dl4	*152*		*"*	*83.3*		*182*	*70-130*			*QS-4*
Matrix Spike Dup (CZ08852-MSD1)	**Source: CZK1152-39**			Prepared: 12/01/16 Analyzed: 12/05/16						
Phenanthrene	99.2	85	µg/kg	83.3	85.8	16	60-140	66	35	QM-5
Chrysene	94.2	85	"	83.3	33.5	73	60-140	78	35	QM-5
Benzo (g,h,i) perylene	74.2	85	"	83.3	ND	89	60-140	64	35	QM-5
Surrogate: Terphenyl-dl4	*95.8*		*"*	*83.3*		*115*	*70-130*			

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
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CLS Work Order #: CZK1152
COC #:

TPH-Gasoline by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08892 - EPA 5030 Soil MS										
Blank (CZ08892-BLK1)				Prepared & Analyzed: 12/02/16						
Gasoline	ND	0.20	mg/kg							
Surrogate: Toluene-d8	*0.0251*		*"*	*0.0300*		*84*	*65-135*			
LCS (CZ08892-BS1)				Prepared & Analyzed: 12/02/16						
Gasoline	1.60	0.20	mg/kg	2.00		80	65-135			
Surrogate: Toluene-d8	*0.0314*		*"*	*0.0300*		*105*	*65-135*			
LCS Dup (CZ08892-BSD1)				Prepared & Analyzed: 12/02/16						
Gasoline	1.71	0.20	mg/kg	2.00		85	65-135	6	30	
Surrogate: Toluene-d8	*0.0318*		*"*	*0.0300*		*106*	*65-135*			
Matrix Spike (CZ08892-MS1)		**Source: CZL0014-02**		Prepared & Analyzed: 12/02/16						
Gasoline	1.51	0.20	mg/kg	2.00	ND	75	63-124			
Surrogate: Toluene-d8	*0.0317*		*"*	*0.0300*		*106*	*65-135*			
Matrix Spike Dup (CZ08892-MSD1)		**Source: CZL0014-02**		Prepared: 12/02/16 Analyzed: 12/03/16						
Gasoline	1.48	0.20	mg/kg	2.00	ND	74	63-124	2	35	
Surrogate: Toluene-d8	*0.0329*		*"*	*0.0300*		*110*	*65-135*			

Wallace Kuhl & Associates- West Sacramento
3050 Industrial Boulevard
West Sacramento, CA 95691

Project: 368 &402 Petaluma Boulevard North
Project Number: 10410.04
Project Manager: Matthew Taylor

CLS Work Order #: CZK1152
COC #:

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CZ08892 - EPA 5030 Soil MS										
Blank (CZ08892-BLK1)				Prepared & Analyzed: 12/02/16						
Methyl tert-butyl ether	ND	5.0	µg/kg							
Benzene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
Toluene	ND	5.0	"							
Xylenes (total)	ND	10	"							
Surrogate: Toluene-d8	*25.1*		*"*	*30.0*		*84*	*60-140*			
LCS (CZ08892-BS1)				Prepared & Analyzed: 12/02/16						
Methyl tert-butyl ether	15.8	5.0	µg/kg	20.0		79	60-140			
Benzene	17.3	5.0	"	20.0		86	60-140			
Surrogate: Toluene-d8	*31.4*		*"*	*30.0*		*105*	*60-140*			
LCS Dup (CZ08892-BSD1)				Prepared & Analyzed: 12/02/16						
Methyl tert-butyl ether	14.8	5.0	µg/kg	20.0		74	60-140	7	30	
Benzene	17.4	5.0	"	20.0		87	60-140	0.9	30	
Surrogate: Toluene-d8	*31.8*		*"*	*30.0*		*106*	*60-140*			
Matrix Spike (CZ08892-MS1)	**Source: CZL0014-02**			Prepared & Analyzed: 12/02/16						
Methyl tert-butyl ether	11.7	5.0	µg/kg	20.0	ND	59	60-140			QM-5
Benzene	13.8	5.0	"	20.0	ND	69	60-140			
Surrogate: Toluene-d8	*31.7*		*"*	*30.0*		*106*	*60-140*			
Matrix Spike Dup (CZ08892-MSD1)	**Source: CZL0014-02**			Prepared: 12/02/16 Analyzed: 12/03/16						
Methyl tert-butyl ether	15.0	5.0	µg/kg	20.0	ND	75	60-140	25	30	
Benzene	16.7	5.0	"	20.0	ND	84	60-140	19	30	
Surrogate: Toluene-d8	*32.9*		*"*	*30.0*		*110*	*60-140*			

Wallace Kuhl & Associates- West Sacramento	Project: 368 &402 Petaluma Boulevard North	
3050 Industrial Boulevard	Project Number: 10410.04	**CLS Work Order #: CZK1152**
West Sacramento, CA 95691	Project Manager: Matthew Taylor	COC #:

Notes and Definitions

QS-4	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QRL-8	The extract of this sample was dark and/or oily. Therefore, the sample was analyzed with a dilution and the reporting limit was raised for all target compounds.
QM-5	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QC-2H	The recovery of one CCV was greater than the acceptance limit. However, all analytes in the associated samples were ND; therefore a reanalysis was not performed.
ICP/MS	It was run by ICP/MS (EPA method 200.8/6020).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference