

EXHIBIT 9

PUBLIC COMMENTS ON THE PETROCHEM PLANNED DEVELOPMENT PERMIT PROJECT AND PLANNING DIVISION STAFF'S RESPONSE TO PUBLIC COMMENTS, PL16-0118

County of Ventura
Planning Director Hearing
PL16-0118

Exhibit 9 - Public Comments and Response to Public Comments



P.O. Box 114 • Ojai, CA 93024
Email: ed@CFROG.org
Phone: (805) 243-8093
www.cfrog.org

September 16, 2019

Comment A

Dave Ward, Director
Ventura County Planning Division
800 S. Victoria Avenue
Ventura, CA 93009-1740

Dear Mr. Ward,

Climate First: Replacing Oil & Gas (CFROG) has been actively monitoring the Petrochem site and welcomes cleanup efforts there for the proposal by Petrochem Development 1, LLC. However, it is critical to point out that the 2019 Mitigated Negative Declaration (MND) for the proposal to build a transportation services storage yard and vehicle holding lot is seriously flawed as it incorrectly identifies the project location for air quality assessment purposes.

For purposes of air quality evaluation, the MND uses the Ventura County air emissions threshold of 25 pounds of ROC/NOx per day. However the project location is within the Ojai Valley airshed/Planning Area, and is therefore subject to the 5 lb-per-day threshold of significance for ROC/NOx.

According to Ventura County Air Quality Assessment Guidelines, page 3-2:

The following are the reactive organic compounds (ROC) and nitrogen oxides (NOx) thresholds that the Ventura County Air Pollution Control Board has determined will individually and cumulatively jeopardize attainment of the federal one-hour ozone standard, and thus have a significant adverse impact on air quality in Ventura County:

***Ojai Planning Area**

Reactive Organic Compounds: 5 pounds per day ROC. Nitrogen Oxides: 5 pounds per day NOx

*The Ojai Planning Area is the area defined as the "Ojai Valley" in Ventura County Non-Coastal Zoning Ordinance, Article 12, Section 8112-2, plus the Ventura (Ojai) Non-growth Area (NGA) (as depicted in the 1987 Ventura County Air Quality Management Plan (AQMP), Appendix E-87, Figure E-1, "Map of Ventura County with Growth/Nongrowth Areas," page E-11). In these Guidelines, see Figure 3-1, "Ojai Planning Area."

The MND established the following emission values:

"The project will generate 0.39 lbs/day of Reactive Organic Compounds (ROG) and 7.19 lbs/day of Nitrous Oxide (NOx). (MND, Page 9 of 99.)"

NOx emissions are likely at least 7.19 pounds per day which clearly exceed the Ojai Valley Planning

Area threshold of significance of 5 lbs. NOx per day. The air quality assessment in the MND must be re-evaluated in order to be consistent with the VCAPCD Guidelines and the Ojai Valley Planning Area thresholds of significance. The re-evaluation must include a detailed explanation of what emission sources were included in the NOx calculation and what method was used to determine the total.

CFROG has been vigilant about the enforcement of the 5 lb rule in the Ojai Planning Area for all projects. These criteria were established because of the area's unique air quality issues.

Thank you for your consideration in this matter.

Sincerely,

Marie Lakin, Executive Director,
Climate First: Replacing Oil & Gas

**Figure 3-1
Ojai Planning Area**



Boero, Kristina

From: Boero, Kristina
Sent: Wednesday, September 18, 2019 7:12 PM
To: CFROG Executive Director; Kathy Nolan
Cc: John Hecht; Helen Eloyan; Welch, Jennifer
Subject: Re: CFROG comments on Petrochem project
Attachments: 2019-09-18 GIS Exhibit - Ojai Planning Area - Petrochem Site.pdf; Air Quality Management Plan (1987) - Figure E-1.pdf; NCZO Section 8112-2 - Definitions (Ojai Valley).pdf

Dear Ms. Lakin:

Ventura County Planning is in receipt of your letter dated September 16, 2019. In your letter you identify the Petrochem project site being in the Ojai Valley Planning Area and thus subject to Ojai Area Plan Policy 1.1.2 which states the following:

Discretionary development in the Ojai Valley shall be found to have a significant adverse impact on the regional air quality if daily emissions would be greater than 5 pounds per day of Reactive Organic Compounds (ROC) and/or greater than 5 pounds per day of Nitrogen Oxides (NOx).

Attached are the following:

- Non-Coastal Zoning Ordinance Article 12, Section 8112-2 – Definitions.
- Figure E-1 from the Air Quality Management Plan (AQMP) (1987)
- An exhibit prepared by County GIS that is more accurate than Figure E-1 noted above

The definition for "Ojai Valley" identifies the Ojai Valley as depicted on AQMP Figure E-1. Figure E-1 is not very clear with regards to the Growth Area and its proximity to the project site. The GIS exhibit provides a more clear depiction of the project site and shows it is not in the "Ojai Valley Planning Area," and thus not subject to the 5 pounds per day threshold of NOx and ROC emissions.

I also wanted to let you know that the Planning Director hearing for the Petrochem project has been rescheduled to a tentative date of October 10th. Confirmation of the hearing date and time will be sent to you in the next week by email. Please continue to direct any future correspondence directly to me by email. Thank you.

Kristina Boero, Case Planner for the Petrochem project

From: CFROG Executive Director <ed@cfrog.org>
Sent: Tuesday, September 17, 2019 11:01 AM
To: Boero, Kristina <Kristina.Boero@ventura.org>
Subject: CFROG comments on Petrochem project

CAUTION: If this email looks suspicious, DO NOT click. Forward to Spam.Manager@ventura.org

Dear Ms. Boero,

CFROG has prepared comments on the project proposed by Petrochem Development 1, LLC (Case No. PL16-0118).

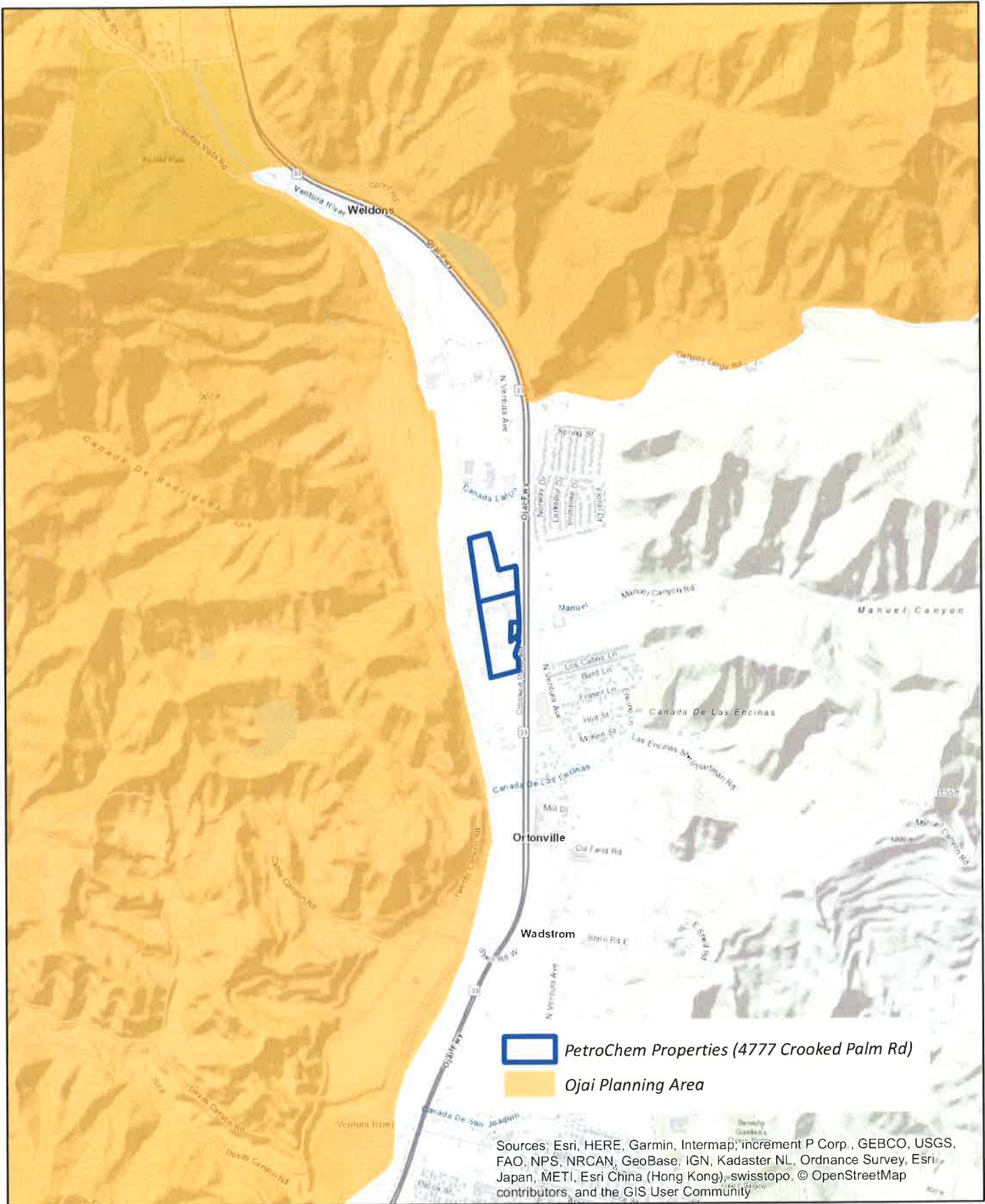
We believe the MND for the proposal to build a transportation services storage yard and vehicle holding lot is seriously flawed as it incorrectly identifies the project location for air quality assessment purposes.



For purposes of air quality evaluation, the MND uses the Ventura County air emissions threshold of 25 pounds of ROC/NOx per day. However the project location is within the Ojai Valley airshed/Planning Area, and is therefore subject to the 5 lb-per-day threshold of significance for ROC/NOx.

Attached is our comment letter for further discussion.

Marie Lakin
Executive Director
Climate First: Replacing Oil & Gas
(805) 243-8093
www.CFROG.org





 PetroChem Properties (4777 Crooked Palm Rd)
 Ojai Planning Area

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community



Ventura County
 Resource Management Agency
 Information Systems GIS Services
 Map created on 9/18/2019
 source: Picometry®, February 2014



County of Ventura
 Planning Division
PetroChem Properties
4777 Crooked Palm Rd



Disclaimer: this map was created by the Ventura County Resource Management Agency Information Systems GIS, which is designed and operated solely for the convenience of the County and related public agencies. The County does not warrant the accuracy of this map and no decision involving a risk of economic loss or physical injury should be made in reliance therein



Sec. 8112-2 - Definitions

As used in this Article, the following terms shall have the meanings set forth in this Section:

AQMP - The Air Quality Management Plan for Ventura County, including all appendices thereto, as amended from time to time.

AQMP Figure E-1 and AQMP Table E-6 - Figure E-1 and Table E-6, respectively, of Appendix E-87 to the version of the AQMP adopted July 26, 1988, or if such figure and table are amended by later versions of the AQMP, the most recent versions of such figure and table, however numbered.

Completed Dwelling Unit - A dwelling unit that is or could be lawfully occupied without the issuance of any further certificate of occupancy, certificate of final inspection or similar document.

Current Number of Dwelling Units - As of any given point in time, the total number of:

- a. Completed Dwelling Units; plus
- b. dwelling units that are not yet Completed Dwelling Units but for which a Current Residential Permit has been issued; plus
- c. dwelling units that are not yet Completed Dwelling Units but for which an unexpired building permit has been issued by the City of Ojai.

Current Residential Permit - A Residential Permit that has been issued and has not yet expired.

Developable Lot - A lot that:

- a. is a legal lot;
- b. meets all of the requirements set forth in Section 8111-2.2.1, subdivision (a), for the issuance of a Zoning Clearance for construction of an additional dwelling unit; and
- c. has been issued all discretionary permits, if any, that are a condition precedent to issuance of a building permit for an additional dwelling unit; provided that, if the lot could lawfully be developed with more than one additional dwelling unit the lot shall, for the purposes of this Article, be deemed to contain one Developable Lot for each such additional dwelling unit.

Maximum Permissible Number of Dwelling Units - As of any given point in time, the total number of dwelling units that, according to AQMP Table E-6, are forecasted to be in the Ojai Valley on January 1 of the second succeeding calendar year. For example, AQMP Table E-6 forecasts that there will be 11,044 dwelling units in the Ojai Valley on January 1, 1992. Hence, the Maximum Permissible Number of Dwelling Units for any given point of time in 1990 is 11,044. The second succeeding calendar year is selected in recognition of the fact that it takes approximately one year to complete a dwelling unit after the requisite permits have been issued.

Ojai Valley - The area comprised of all those areas referred to in AQMP Table E-6 as the "Ojai GA," "Ojai NGA," "Ventura River GA," and "Ventura River NGA," and depicted on AQMP Figure E-1 as the "Growth Area" and the "Nongrowth Area" for "Ojai" and "Ventura River Valley."

Residential Permit - A ministerial permit issued by the Planning Director pursuant to Section 8112-6.

Sec. 8112-3 - Limitations on Issuance of Building Permits

Notwithstanding any other provisions of this Code or of any other ordinance or resolution of the County, no building permit may be applied for or issued for the construction or

Boero, Kristina

From: Batinica, Meighan
Sent: Wednesday, September 18, 2019 3:05 PM
To: Kathy Nolan
Cc: Boero, Kristina; Hall, Anna
Subject: RE: Planning Commission Correspondence

comment
B.

Hi Kathy,

I will process your comment through the case Planner, Kristina Boero, but be aware this is not going to the Planning Commission. It is scheduled for a Planning Director hearing on September 19, 2019.

Since this is not a Planning Commission item, would you still like me to have this sent to the Planning Commissioners?

Please let me know.
Thank you,

Meighan Batinica
805-654-2478

From: Kathy Nolan <kn@studio-landscape.com>
Sent: Wednesday, September 18, 2019 3:01 PM
To: Batinica, Meighan <Meighan.Batinica@ventura.org>
Subject: Planning Commission Correspondence
Importance: High

Dear Meighan,
RE: Petrochem Site Proposal Hearing Thursday September 19, 2019

Please share the following with the Planning Commissioners.
I am in agreement with the following correspondence from CFROG

Dear Mr. Ward,
Climate First: Replacing Oil & Gas (CFROG) has been actively monitoring the Petrochem site and welcomes cleanup efforts there for the proposal by Petrochem Development 1, LLC. However, it is critical to point out that the 2019 Mitigated Negative Declaration (MND) for the proposal to build a transportation services storage yard and vehicle holding lot is seriously flawed as it incorrectly identifies the project location for air quality assessment purposes. For purposes of air quality evaluation, the MND uses the Ventura County air emissions threshold of 25 pounds of ROC/NOx per day. However the project location is within the Ojai Valley airshed/Planning Area, and is therefore subject to the 5 lb-per-day threshold of significance for ROC/NOx. According to Ventura County Air Quality Assessment Guidelines, page 3-2: The following are the reactive organic compounds (ROC) and nitrogen oxides (NOx) thresholds that the Ventura County Air Pollution Control Board has determined will individually and cumulatively jeopardize attainment of the federal one-hour ozone standard, and thus have a significant adverse impact on air quality in Ventura County: *Ojai Planning Area Reactive Organic Compounds: 5 pounds per day ROC. Nitrogen Oxides: 5 pounds per day NOx *The Ojai Planning Area is the area defined as the "Ojai Valley" in Ventura County Non-Coastal Zoning Ordinance, Article 12, Section 8112-2, plus the Ventura (Ojai) Non-growth Area (NGA) (as depicted in the 1987 Ventura County Air Quality Management Plan (AQMP), Appendix E-87, Figure E-1, "Map of Ventura County with Growth/Nongrowth Areas," page E-11). In these Guidelines, see Figure 3-1, "Ojai Planning Area." The MND established the following emission values: "The

project will generate 0.39 lbs/day of Reactive Organic Compounds (ROG) and 7.19 lbs/day of Nitrous Oxide (NOx). (MND, Page 9 of 99.)” NOx emissions are likely at least 7.19 pounds per day which clearly exceed the Ojai Valley Planning P.O. Box 114 • Ojai, CA 93024 Email: ed@CFROG.org Phone: (805) 243-8093 www.cfrog.org Area threshold of significance of 5 lbs. NOx per day. The air quality assessment in the MND must be re-evaluated in order to be consistent with the VCAPCD Guidelines and the Ojai Valley Planning Area thresholds of significance. The re-evaluation must include a detailed explanation of what emission sources were included in the NOx calculation and what method was used to determine the total. CFROG has been vigilant about the enforcement of the 5 lb rule in the Ojai Planning Area for all projects. These criteria were established because of the area’s unique air quality issues. Thank you for your consideration in this matter.

Sincerely,
Kathleen Nolan
340 Avenida de la Vereda
Ojai, CA 93023
Ventura County Resident
Planning Commissioner, City of Ojai

Boero, Kristina

From: Boero, Kristina
Sent: Thursday, September 19, 2019 8:51 AM
To: CFROG
Cc: Prillhart, Kim; Welch, Jennifer; Ward, Dave
Subject: RE: USA PetroChem

comment C.

Mr. Brooks,

Apologies for the inconvenience and late notice in continuing the Planning Director hearing. I understand that everyone has plans and things to do. This continuance was only confirmed last night after the close of business. The hearing is continued as Planning staff is working with US Fish and Wildlife to verify the mitigation measures related to biological resources. The hearing is continued to October 10th at 12:00 pm. If the October 10th date should change, you will be sent an email confirmation of the new date and time 72 hours prior to the new date.

Kristina Roodsari Boero, MPPA | Senior Planner

Residential Permits Section
kristina.boero@ventura.org

Ventura County Resource Management Agency | Planning Division
P. (805) 654-2467 | F. (805) 654-2509
800 S. Victoria Ave., L #1740 | Ventura, CA 93009-1740
Visit the Planning Division website at vcrma.org/planning
Ventura County General Plan Update. Join the conversation at VC2040.org
For online permits and property information, visit [VC Citizen Access](#)



Pursuant to the California Public Records Act, email messages retained by the County may constitute public records subject to disclosure.

-----Original Message-----

From: CFROG <cfrogvc@gmail.com>
Sent: Wednesday, September 18, 2019 8:47 PM
To: Boero, Kristina <Kristina.Boero@ventura.org>
Cc: Prillhart, Kim <Kim.Prillhart@ventura.org>
Subject: USA PetroChem

Dear Ms Boero,

I just checked the hearing schedule and the Petrochem matter is still set for 11 am on the 19th. Yet I have heard from others that it has been postponed.

This is inexcusable.

We make plans and deserve fair notice. I expect a full answer as to why this was postponed, if in fact it has been, John Brooks

New storm to pound county



Comment

D.

September 17, 2019

To: Ventura County Board of Supervisors and County Planning Director and Staff,

Re: Petrochem Site Redevelopment Proposal Planned Development Permit Request

Planning Director Staff Report for PL16-0118 Planning Director Hearing on Oct. 14, 2019

For full staff report see: [KB PL16-0118 Staff Report](#)

This public communication will challenge the adequacy and scope of the evidence/findings that must be made in order to issue a Planned Development Permit (PDP) to the Petrochem site redevelopment proposal. The proposal includes *the following physical changes* to the site to allow for the operation and maintenance of a 20.9 acre transportation services storage yard and vehicle holding lot, and the operation and maintenance of a 6.8 acre contractor service and storage yard which includes large contractor-equipment maintenance:

1. Reusing 5 existing buildings--remodeling each building to bring it up to current State/County code.
2. Removing existing concrete pads and crushing this concrete along with the previously removed concrete that is located in stockpiles around the site. The crushed concrete will be distributed onsite throughout the over 30 acres of the project site to act as base for roads to control erosion and limit dust. (It is not specified in the staff report where this crushed concrete will be used as a base material for roads. It is not specified if this crushed concrete will also be spread under the maintenance yards as well as the contractor equipment and car storage lots.) This process will disturb site soils and contamination.
3. Building a series of bollards spaced 5-feet apart along a 300-foot long segment of the western boundary adjacent to the river to keep cars from floating down river in flooding events.

Also, if this Planned Development Permit is approved it will be so without a current EIR to examine the impacts of these significant physical changes to the project site located in the environmentally sensitive Ventura River habitat area/floodplain as well as other *significant* adverse impacts which are addressed in the following public comments. A Mitigated Negative Declaration (MND) is not sufficient to protect the public health, safety and welfare; nor is it sufficient to protect the environmentally sensitive habitat area of the river, its floodplains/wetlands or the public interest in the longterm environmental restoration of the river, its floodplains/wetlands.

The following is pertinent detailed information from pages 1 to 7 of the 435 page Staff Report:

Site History: The project site is the former location of the Shell Oil Company anhydrous ammonia production facility established in the 1950's and the USA Petrochemical Company oil and gas refinery operation established in the 1970's. *Remnant concrete foundations from these facilities currently exist at various parts of the property.* All onsite activities associated with these two industrial uses ceased in 2008. Since that time, the property has not been in active use. (pg. 2 of 435)

Just west of the southern portion of the project site, two large spherical tanks built around 1950 and previously used to store ammonia gas remain in place. These spheres encompass approximately 20,179 square feet. *They are not apart of the proposed project as they located on a separate 0.5-acre area that is outside of the area that would be subject to the requested permit.* These structures, however, are the subject of a July 2018 Compliance Agreement between the landowner and the County Code Compliance Division that **requires their removal by April 1, 2019.** On August 30, 2018, the Planning Division issued a ministerial Zone Clearance (Zone Clearance No. ZCIB-1007) and Building Permit (B18-000944) to permit the demolition and removal of these spheres. (pg. 2 of 435)

Request: The applicant requests that a Planned Development Permit be granted to authorize the operation and maintenance of a transportation services storage yard and vehicle holding lot, and the operation and maintenance of a contractor service and storage yard. (Case No. PL16-0118). The proposed transportation services yard would occupy 20.9 acres in the northern part of the subject property. The contractor service and storage yard would occupy 6.8 acres in the southern part of the property. The remaining 10.7 acres of the site would remain undeveloped and not be developed with an industrial use. (Exhibit 4)

Decision-maker: The County Planning Director is the decision-maker for the planned development permit. Zoning Designation: The zoning designation in County General Plan for the project site is M3-10,000 sq. ft. (Gen.Industrial, 10,000 sq. ft. min. lot size) (Exhibit 3) (Pg. 1 of 435)

Specific Project Description: The requested permit would authorize the operation and maintenance of a "transportation services storage yard / vehicle holding lot" on the northern portion of the project site and the operation and maintenance of a contractor service and storage yard on the southern portion of the project site. The project components are described in detail below.

Transportation Services Storage Yard / Vehicle Holding Lot

The operation and maintenance of a transportation services storage yard /vehicle holding lot is proposed to occur on approximately 20.9-acre area of the project site. The transportation services storage yard vehicle holding lot is designed to provide for short-term storage of passenger vehicles for future sale prior to delivery to various auto dealerships in Ventura County. The vehicles will be stored on the holding lot between fourteen and ninety days depending on market conditions. Prior to leaving the site, most vehicles will be prepared to be delivered to the dealerships by removing transportation packaging, minimal rinsing within a designated vehicle rinse area to remove dust, dirt, adding floor mats and off-the-shelf parts. The three (3) existing buildings (Building A, B, and C) on this portion of the project site are proposed to be used for storage, administration and tenant uses.

Contractor Service and Storage Yard

The operation and maintenance of a contractor service and storage yard is proposed to occur on an approximately 6.8-acre area of the project site. There are two (2) existing buildings (Buildings D and E) on the site that will be rehabilitated and used for storage, equipment maintenance, administration and tenant use.

Tenants will include general contractors, *oil field support operations*, and the fishing industry. All of these uses are customary and incidental to a contractor service and storage yard. Potential tenants of the contractor service and storage yard will lease space for the storage of equipment, roll-off bins, building materials, pipe, and commercial fishing equipment. Vehicle parking will be available on the project site for trucking companies and municipalities. Parking, operation, or maintenance of food trucks would not be authorized by the requested permit.

Concrete Pads

Concrete pads are located throughout the project site and are remnants of the former Shell Oil and USA Petrochemical facilities. A shed west of the spheres and an API Separator were demolished in 2017. Due to these recent demolition activities, small concrete stockpiles remain in locations throughout the project site. The use of a mobile crusher to process the remaining concrete debris into useable road base is proposed. This material will be used on the project site. Minor ground disturbance will occur as a result of this activity.

Grading and Drainage

Approximately 10.7 acres of the project site is not authorized to be utilized for industrial purposes. This portion of the site surrounds the two (2) spherical storage tanks that are scheduled for demolition and removal. The 0.5-acre site of these tanks is not a part of the permit area. This 10.7-acre area will not be altered, improved, or used as part of the operation of either the Transportation Services Yard or the Contractor Service and Storage Yard. *The project includes the removal of some of the remaining impervious concrete surfaces.* The waste concrete will be crushed into useable road base, placed in temporary stockpiles, and ultimately spread throughout the site to control erosion and limit dust generation.

Flood Safety Improvements:

The Transportation Services Yard portion of the project site *is partially located within the floodplain* of the Ventura River. In order to prevent the vehicles temporarily stored in this area from being floated into the active river channel during flood conditions, a series of bollards spaced 5-feet apart will be installed along a 300-foot long segment of the western boundary of the facility as indicated on the approved site plan.

B. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) COMPLIANCE

Pursuant to CEQA (Public Resources Code S21000 et seq.) and the CEQA Guidelines (Title 14, California Code of Regulations, Division 6, Chapter 3, §15000 et seq.), the subject application is a "project" that is subject to environmental review. County staff prepared an Initial Study in accordance with the County's Initial Study Assessment Guidelines. Based on the information contained in the Initial Study, the Planning Director Staff Report for PL16-0118 Planning Director Hearing on September 19, [changed to October 14,] 2019 Page 7 of 19 County prepared a Mitigated Negative Declaration (MND) and made the MND available for public review and comment from December 28, 2018 to January 27, 2019. The method of notification was *direct mailing to property owners within 300 feet of proposed project boundary*, and a legal notice published in the Ventura County Star newspaper. In addition, the MND (Exhibit 6) was circulated to State agencies through the State Clearinghouse.

A MND is a written statement briefly describing the reasons that a proposed project will not have a significant effect on the environment and therefore does not require the preparation of an Environmental Impact Report. However, the Initial Study identified potentially significant effects on the environment related to biological resources, but the applicant agreed to mitigations prior the release of the MND. Proposals agreed to by the applicant before the MND is released for public review would avoid the effects or mitigate the effects to a point where no significant effect on the environment would occur.

Findings for Adoption of an Mitigated Negative Declaration (MND):

The CEQA Guidelines [S 15074(b)] state that a MND *shall only* be adopted by a decision-making body if there is no substantial evidence, in light of the whole record, that the proposed project may have a significant adverse effect on the environment and that the MND reflects the Lead Agency's independent judgment and analysis.

Public Comments on Petrochem Site Proposal Made in the Interest of Public Health, Safety and Welfare:

First, the following public comments will assert that there is "substantial evidence, when looking at the whole record, that the proposed project will have significant adverse effect on the environment" as well as being *detrimental to the public interest, health, safety, convenience, or welfare* and will further contend that the required evidence and findings for the adoption of an Mitigated Negative Declaration should not have been made. Secondly, the following public comments challenge the evidence/findings presented in this staff report and identified as numbers 1 thru 4 (listed below) and also number 6 (listed later in the comments) that represent the findings that the Planning Director must make to grant the requested Planned Development Permit.

Under the CEQA compliance section above, it states: "The County prepared a Mitigated Negative Declaration (MND) and made the MND available for public review and comment from December 28, 2018 to January 27, 2019. The method of notification was *direct mailing to property owners within 300 feet of proposed project boundary*, and a legal notice published in the Ventura County Star newspaper." The City of Ventura owns the the Ventura River Parkway Trail bike path and as a property owner within 300 feet of the proposed project it should have received a direct mailing notice. However, although the City holds title to the bike path, *it owns and operates the trail for the public interest*. The Friends of the Ventura (FoVR) is a coalition of numerous local environmental groups, businesses, public agencies, and individuals interested in preserving and protecting the river as well as promoting the Ventura River Parkway. The FoVR coalition has long been active in protecting the public interest in restoring the river's ecosystems and enhancing the recreational trail. No notice of this MND was received by the FoVR even though the County Planning Staff should have been aware that the group is an active stakeholder for the public's interest in the City's/County's property ownership of the Parkway bike path. Where it may not be legally required for stakeholders for the public interest like the FoVR be notified of such MNDs for projects along the Ventura River Parkway, the FoVR would like to formally request notification from County Planning for any Parkway adjacent projects and/or MNDs for such projects in the future.

According to the staff report page 16 of 345 under the PLANNED DEVELOPMENT PERMIT FINDINGS AND SUPPORTING EVIDENCE the Planning Director must make certain findings in order to grant the requested permit pursuant to Sections 81 1 1-1.2.1.1 of the Ventura County Non-Coastal Zoning Ordinance (NCZO). The ability of the decision-maker to make these findings is evaluated below. According to the staff report:

1. **The proposed development is *consistent with the intent and provisions of the County's General Plan and of Division 8, Chapters 1 and 2, of the Ventura County Ordinance Code [S811 1-1.2.1.1.a].*** Based on the information and analysis presented in Sections C, D and E of this staff report, the finding that the proposed development is consistent with the intent and provisions of the County's General Plan and of Division B, Chapters 1 and 2, of the Ventura County Ordinance Code can be made.
2. **The proposed development is *compatible with the character of surrounding, legally established development [S81 1 1-1.2.1.1.b].*** The proposed transportation services yard and contractor service and storage yard contractor service and storage yard would be compatible with the surrounding development. These proposed industrial uses would be set back from residential uses located to the east and set back from sensitive habitat located to the west along the Ventura River. The use of the site for temporary vehicle parking and for contractor storage would not adversely affect the institutional (Brooks Institute) and industrial (RDK contractor service and storage yard) located north of the site. The land to the south of the site is undeveloped. Based on the above discussion, this finding can be made.
3. **The proposed development would not be *obnoxious or harmful, or impair the utility of neighboring property or uses [S8111-'1'.2.1.1.c].*** As indicated in Section B of this staff report, no significant and unavoidable environmental effects have been identified that would result from the proposed project. Mitigation measures required to ensure that impacts are less than significant are incorporated into the conditions of approval. The Conditions of Approval (Exhibit 7) establish limits on the hours of operation, lighting, traffic volume, the use of the existing buildings on the site, and the storage and disposition of waste concrete generated by the demolition of the former chemical plant and petroleum refinery. The conditions also include landscape screening requirements (Condition of Approval #19) that reflect the landscape screening plan (Exhibit 5) included in the applicant's proposal. The proposed screening would *minimize public views* of the proposed facilities. With 2 Planning Director Staff Report for PL16-01 18 Planning Director Hearing on September 19, 2019 Page 17 of 19 these measures, no aspect of the proposed facilities has been identified that would be obnoxious or harmful or impair the use of neighboring property. Based on the above discussion, this finding can be made.
4. **The proposed development would not be *detrimental to the public interest, health, safety, convenience, or welfare [S811 1-1.2.1.1.d].*** As indicated in Section B of this staff report, no adverse effect of the proposed project on the environment or public health and safety has been identified. The project would not involve any adverse effects on adjacent properties. Based on the above discussion, this finding can be made.

These 4 necessary findings, in fact, cannot be made because according to Ventura County General Plan Resources Policy 1.1.2-1: All General Plan amendments, zone changes and discretionary development shall be evaluated for their *individual* and *cumulative* impacts on resources in compliance with the California Environmental Quality Act (CEQA). Resources as used here include, but are not limited to, natural resources like water (including the Ventura River its self with its ESHA-qualified environmentally sensitive habitat areas), air, plants and wildlife, and scenic resources as well as other resources like road and safety service infrastructure. The following public comments will specifically challenge the finding that a full EIR study is not needed for this project; *and* specifically challenge the accuracy of the above 4 listed findings as well as finding 6 (embedded in the following observations), all of which are necessary to issue a Planned Development Permit.

The proposed Petrochem-site project described above will create *significant* individual and cumulative impacts that will adversely impact long-term environmental goals. The proposed project *does* involve noise, vibration, light pollution, and scenic resource degradation that is significant and that will interfere with surrounding uses and wildlife, as well as create traffic hazards, adverse impacts to area air quality and to water bodies located on or around the project site, and will additionally generate hazardous wastes because of the project's proposed uses -- particularly, but not limited to, the maintenance of contractor equipment on the site and disturbance of potentially contaminated soil and disturbance of potentially contaminated concrete pads and potentially contaminated concrete stockpiles (including crushing the concrete creating potentially-contaminated dust particulate and contaminated crushed road base that will be spread around the project site which could further contaminate the site). The proposed project will create substantial adverse environmental effects to air and water

quality that will directly and/or indirectly impact human beings, the environment, and protected wildlife as well as potential impacts on common and rare plant and animal species that occupy the river and wetland habitat that exists in and around the Ventura River and its floodplains/wetlands. This project's proposed mitigation measures **do not** reduce these environmental impacts to less than significant levels. Additionally, the proposed project does not meet these PDP criteria because it:

1. is not consistent with the intent and provisions of the County's General Plan;
2. is not *compatible* with the character of surrounding, legally established development (including the Ventura River Parkway Trail);
3. would be obnoxious or harmful, or impair the utility of neighboring property or uses (including the Ventura River Parkway Trail); and
4. does degrade the quality of the area's environment and it will pose a threat to wildlife and human health and will be detrimental to the public interest, health, safety, convenience, or welfare.

The following public comments will enumerate the reasons and evidence behind these 4 assertions as well as challenging finding number 6 that the lots and property lines of the project are legal.

The vehicle holding lot will generate **40** daily large auto-transporter truck trips 7 days a week. The contractor storage/service/maintenance yard will generate **60** daily contractor equipment truck trips 7 days a week. The hours of operation are from 7 am to 7 pm with tenant access available 24 hours a day every day. The impact of **100** large equipment truck trips going on 7 days a week 52 weeks a year will have major impacts on surrounding uses. The heavy use of a project site located in/a round the river/floodplain has the potential for major environmental impacts to area air quality; as well as adverse water quality impacts; and adverse impacts to protected river-area wildlife; and adverse noise, scenic, and environmental impacts to the nationally recognized Ventura River Parkway Trail that is an adjacent project site neighbor. Additionally the residential Bounds neighborhood, the new Patagonia Campus (located at the former Brooks Institute site) will be adversely impacted by the noise and traffic created by the project and these entities as well as the residents and wildlife in the entire Ojai Valley air basin will also be adversely impacted by the air quality degradation (which does not end at project site boundaries/buffers) caused by the traffic-heavy industrial uses of the proposed project.

The estimated 40 auto-mover truck trips a day will not only adversely impact the direct neighboring properties' air quality but also the city of Ventura's air quality as well as the air quality of other communities along the port-to-site traffic routes. The cumulative impacts to Ventura County's *worsening* air quality must be considered. Note that the Ojai Valley air basin is particularly hard hit by air pollutants from the Ventura Avenue Area that are pushed into the basin by the predominantly onshore air flows which accumulate and remain in the mountain-enclosed Ojai Valley basin, causing significant air quality health issues for area residents. In public comments on this project CFROG observed: "For purposes of air quality evaluation, the MND uses the Ventura County air emissions threshold of 25 pounds of ROC/NOx per day. However the project location is within the Ojai Valley airshed/ Planning Area, and is therefore subject to the 5 lb-per-day threshold of significance for ROC/NOx." (Please see submitted CFROG public comments on this projects PDP for further information.)

As the many daily auto-mover-truck trips to this North Ventura Avenue area site will be from Port Hueneme, these trips will run through the city of Ventura on the 101 Freeway or on Harbor Blvd (or ?) to Highway 33 adversely *impacting road traffic and infrastructure* along the route as well as area air quality. Once the cars have been trucked to the site for storage/dealer-delivery-preparation there will also be another large-carbon-footprint trip to distribute the cars from this site at the far western edge of the county to auto dealers throughout the county. There must be alternative sites that are closer to the Port *and* to the different Ventura County auto dealers that would **not** create such a needlessly large carbon-footprint to store, prepare and ultimately distribute the new vehicles. Please look at page 35 of 435 of the staff report which is a site map demonstrating that it would be extremely difficult to find a **less central** and **less appropriate** location for a storage lot to prep vehicles for county auto dealers *than this far western edge of the County along the Ventura River*.

A VC Star 9/25/19 AP article "*EPA targets California over air quality*" reports that the EPA warned the California Air Resources Board that it could lose federal highway funds if it doesn't clean up its air. The EPA described the state's air quality as the worst in the country, with 34 million people living in areas that do not meet National Ambient Air Quality Standards. The article explains the "EPA called on the state to address a backlog in plans aimed at reducing air pollution and to work with the agency to develop workable plans or risk highway funding sanctions and other penalties." Ventura County should be part of the solution, not the problem. We must consider the needlessly large carbon-footprints/cumulative impacts that an ill-sited project might cause.

On page 6 of 435, the staff report cites the County General Plan requirement that:

“site plans for discretionary development that will generate hazardous wastes *or utilize hazardous materials* shall include details on hazardous waste reduction, recycling and storage but then goes on to *erroneously* say that the proposed project generally does not involve the *use* or generation of hazardous materials. Any hazardous chemicals (such as lubricants or surfactants for washing vehicles) will be stored and used in accordance with State regulations (Exhibit 7, Condition of Approval #22).” *The staff report goes on to erroneously conclude:* “Based on the above discussion, the proposed project is consistent with Hazardous Materials and Waste Policy 2.15.2-2.D.”

The project includes a 6.8-acre *contractor equipment maintenance* yard (which includes “*oil field support operations*”) this means the project *will* generally *utilize* hazardous waste materials. This site has suffered serious contamination in the past. This contamination has yet to be completely removed (refer to staff report page 226 et al.). This should be a cautionary tale – this site's remaining contaminants should not be made even more *cumulatively significant* by continuing to allow polluting industrial uses because the site is adjacent to a sensitive river habitat and in the river's 100-year flood plain.

Given the existence of these known and substantial industrial contaminants on the Petrochem project site (contaminants that have accumulated over decades of active use as a petroleum/chemical refinery plant as well as over a decade of the heavy industrial uses infrastructure deteriorating on the site) and knowing a complete “clean-up of the site to background levels” has never been done (but instead only some surface and remedial clean up has been accomplished) some might consider that the property *itself* is still “generating” hazardous waste. Compounding the *cumulative significance*, is the past and current common practices for stabilizing petroleum-related soil contaminants including capping contaminated soil layers with concrete or other material (like asphalt) or mixing soils with concrete or other binders to trap contaminants in a solid matrix (Riser-Roberts, 1998 *Remediation of petroleum contaminated soils, biological, physical and chemical processes*). Without a current EIR/testing it is difficult to know if this site used such practices, *however*, even if the site's concrete was not purposefully capping contaminated soil layers and/or the concrete was not purposefully mixed with contaminated soil to bind it in a solid matrix, it still must be *acknowledged* that decades of contaminants leaking or spilling onto the concrete pads under equipment, sheds, and tanks and in/around the chemical/oil refinery site would potentially *contaminate the site's concrete* as well as the soil and groundwater under it.

It is therefore necessary to be wary of issuing a Planned Development Permit for a proposal that plans to disturb the site's concrete pads and therefore disturb the contaminated soil underneath the former tank, shed, and other building pads, and additionally plans to crush the pad concrete (and previously removed concrete stockpiles) to use as a base material for roads (and storage lots?) throughout the site -- all without a current EIR to examine the adverse environmental impacts of the project which include the cumulative impacts of the site's ongoing contamination. If the site's concrete has been contaminated – either purposefully or simply by existing for decades in a petroleum and chemical processing plant site -- then the plan for crushing and using this material throughout the project site should absolutely not be allowed. If this project site is to be reused it should not be for projects that will continue to pollute the site and it should not be redeveloped until this contaminated brownfield is cleaned to a level that it is no longer a danger to: the surrounding environment, and wildlife, employees, truckers, or visitors coming to the site; or the Ventura River Parkway users exercising on the bike trail; or the employees/visitors at the Patagonia (aka Brooks) campus and other existing surrounding businesses; or the Bounds neighborhood residents; or drivers, bicycle riders and/or pedestrians passing on Crooked Palm Road, Hwy 33, and/or the northern sections of Ventura Avenue; or the communities north of the project – because air and water borne toxic pollution *do not respect buffers or site boundaries*.

Also note that, beyond the many petroleum and chemical plant contaminants that have been identified and not completely removed from this site, that for years there were asbestos contamination warnings signs posted on the fencing around this property. Additionally, consider the known methyl tert-butyl ether or MTBE contaminant under the refinery site found migrating in a ground water plume. The plume was monitored with two test wells registering high levels of MTBE (Stratus Environmental Inc. 2008 Report). Why this is important is that most of the project site is within the FEMA 100-year floodplain – a circumstance that increases the risk of MTBE *and other contaminants* reaching the river.

According to a recent article by Perry Van Houten in the Ojai Valley news:

In 2008, a report by Stratus Environmental raised health concerns when it identified a plume of methyl tertiary-butyl ether (MTBE) contamination in groundwater beneath the former facility. MTBE is a

blending component for gasoline that the Environmental Protection Agency identified as a possible carcinogen. California banned MTBE in 2002.

According to the report, groundwater under the site flows directly toward the Ventura River channels, directly to the west of the site, suggesting that remediation efforts would be needed. Rick Bandelin, who manages the hazardous materials program for the Ventura County Environmental Health Division, told the Ojai Valley News the MTBE was identified following the removal of an underground storage tank in 2005. The contaminated soil was removed and the groundwater was monitored from 2005 to 2010.

“Based on this information, the residual contamination that *remained* did not pose a risk to human health, to beneficial or potentially beneficial groundwater, or to the environment,” Bandelin said in an email.

A current EIR should be done to establish if the “*contamination that remained*” **does**, in fact, “pose a risk to human health, to beneficial or potentially beneficial groundwater, or to the environment” because the MTBE contaminated groundwater is *just one of many* contaminants that have been identified in/under the soil, concrete and asphalt of the project site (see staff report page 226 et al. The Dudek letter). Note that the testing for the MTBE referred to in the Dudek letter was done in 2005 which was a very *wet year* after several very dry years. Both extremely low or extremely high rainfall years could potentially impact MTBE test results. *According to the Dudek letter, no testing for MTBE has been performed since 2005.*

Here are some other pertinent excerpts from that Dudek environmental engineering letter:

“Soil near Tanks 3 and 4 were excavated in 2014 following the trenching requested by EPA. This work is documented in the 2014 Dudek Excavation Report Tanks 3 and 4. TPH-impacted soil around Tanks 3 and 4 was excavated in August 2014. A total of 2,200 cubic yards of soil were removed and confirmation sampling indicated the completion of the excavation in this area. *However*, in October and November 2014, Tanks 3 and 4 were removed. Samples collected underneath the former tanks indicated the presence of additional TPH-impacted soil under former Tank 4. The TPH impacts under Tank 4 and near the former western loading rack *remain to date* and will be addressed during upcoming site remediation work as noted below.”

“Upon removal of the tank farm *aboveground storage tanks* (ASTs) in 2014, Dudek sampled the soil under the former ASTs. The sampling is documented in the 2015 Dudek Draft AST Removal Confirmation Soil Sampling Report. 2015 Dudek Draft AST Removed Confirmation Soil Sampling Report One to three soil samples were collected under each former tank in the Tank Farm. The draft report also discusses samples collected under 7 [seven] ASTs removed in 2013. The report noted PCB detections at Tanks 14, F, and G (Tanks F and G were located in the southwestern portion of the Site). The PCB detections at Tanks F and 14 were less than the EPA Regional Screening Level (RSL) for the *commercial/industrial scenario*. The PCB impacts at Tank G are currently being investigated and remediated under EPA oversight. The report also noted heavy-end TPH impacts at Tanks E, F, G, and 4 (all located on the western portion of the Site). Impacts at these tank areas are being addressed as discussed below.”

2013 -2015 USEPA Oversight

No further action was recommended for the site *excepting the following areas*:

- [The southwestern 10.7 acre spherical tank] area is located outside of the *proposed use areas* and, therefore, will have no impact on human health *within* the proposed use areas.
- Further remediation of heavy-end TPH under the former loading rack on the western portion of the Site is planned.
- This area is located underneath a concrete and asphalt-paved area. As there is no potential exposure under the proposed use (there is no direct contact due to site paving and no buildings through which vapor intrusion could be an issue), the remaining impacted soil in this area will have no impact on human health *within* the proposed use areas.

2015 AST Removal

“Further remediation of heavy-end TPH under former Tanks E, F, and G is planned, These areas are also being investigated under EPA oversight due to PCB impacts and *should not be disturbed* until the remediation is complete. These areas are also shown on Figure 1 as areas of on-going PCB investigation

and remediation (note that former Tanks E and F are located adjacent to each other in the western portion of the Site and are shown as one area on the Figure).”

PCB investigations under USEPA Oversight.

“The USEPA is currently overseeing further PCB remediation at the *Compressor Building, Tank F, Tank G, and Tank 14*. The areas of the Compressor Building, Tank F, and Tank G are highlighted on Figure 1 as areas of on-going PCB investigation and remediation - *these areas should not be disturbed until the remediation is completed*. Note that the Tank E, F and 14 areas, while they have not yet received closure from EPA for unrestricted use, do not have PCB impacts that would impact *human health* under the *commercial/industrial scenario*. Additionally, the USEPA has stated their intent to provide closure approval for the Tank 14 area”.

“Based on this evaluation, three areas of the Site ***should not be disturbed*** until remediation of those areas is complete. These areas are shown as areas of on-going PCB investigation and remediation on Figure 1. ***With the exception of these three areas***, the extensive Site sampling conducted to date does not indicate a potential human health hazard ***within*** the proposed use areas.”

Note the frequency the letter warns that “areas of the site should not be disturbed until remediation of those areas is complete.” Also, the letter explicitly states the site is only being cleaned to a level that “*would impact human health*” under the “*industrial /commercial scenario*” meaning that the contamination on the site is not being cleaned to standards to allow other uses, only an industrial/commercial use, which with the industrial uses outlined in the PDP proposal would likely *continue to contribute* more hazardous waste contaminants to this site.

This Dudek letter also establishes that there are areas of this site ***that testing indicates do have potential human health hazards*** on both the proposed-for-use portions of the site as well as the not-proposed-for-use 10.7-acre portion and the 0.5 acres under the two spherical tanks. *Note: CEQA policies do not allow a project site to be split, like the 0.5 acre sphere-site and the 10.7 not-for-use acres from the remainder of the for-use site to avoid accurate contamination and cumulative impact examination.* Also note that these 0.5 and 10.7 acre portions will remain undeveloped *seemingly* because of the extent of the remaining contamination as well as its flood risk. However, under the “Grading and Drainage” description of the staff report it appears to also be referring to the 10.7-acre not-for-use portion when stating: “The project includes the removal of some of the remaining impervious concrete surfaces.” Why the concrete removal/crushing/site distribution from the 10.7 acre portion is so important to the environmental health of the river and its habitats/ecosystems as well as public interest, health, safety and welfare is: the unused 10.7-acre portion of the site is closest to, even protruding into, the historic Ventura River channel/floodway and *is located in the 100-year floodplain* as is *most* of the for-use project site. If the site testing indicates that there are potential *human health hazards* that still exist in this not-for-use 10.7-acre portion as well as in the remaining for-use portions to this significant extent, then imagine how damaging these contaminants potentially-contained in the crushed concrete and newly exposed soil could be to the river's fragile ecosystems during high rain events that wash such contaminants into the river -- because aquatic species, birds and other wild animals have smaller bodies that are more susceptible to toxic exposure because they must live in the river habitat 24 hours a day. Imagine all the environmental consequences of this contamination.

Page 13 of 435 reviewing compliance with city/county N.Ventura Avenue Area Plan the staff report says this:

A8. Floodplain Lands adjacent to the Ventura River which have been designated as "Floodplain" are generally not appropriate for urban uses until a Floodplain ordinance is adopted by the city. The areas designated as the 100-Year Floodplain are based on the Flood Insurance Rate maps prepared for the United States Department of Housing and Urban Development's Federal Insurance Administration. The underlying land use designations *outside the floodway* but *within the 100-Year Floodplain* are "Industrial," generally located north of Shell Road or south of Gosnell Bend, and "Oilfield Industrial," generally located north of Gosnell and south of Shell Road.

County Policy - New industrial or oilfield industrial development or *an expansion* of existing industrial or oilfield industrial development may occur ***only if it can be shown through additional analysis that such areas will be protected from a 100-year flood.***

City Policy - *An expansion* of existing industrial or oilfield industrial urbanization may occur ***only if it can be shown through additional analysis that such areas are currently protected from a 100-year flood.*** Any flood protection measures necessary to protect existing development in the Floodplain shall minimize adverse impacts and changes to the river channel.

The joint City/County **North Avenue Area Plan** is attached to both the city and county's General Plans as it is assumed that at some distant date in the future the North Avenue area will be annexed from the County to the City of Ventura. Given this, and the fact that most of **this project site is located in the 100-year floodplain and is not protected from such an event** (which is explicitly stated when the bollard discussion is covered on page 13 of the staff report and is addressed later in these public comments) and given the fact the project proposes **expanded industrial uses including "oil field support operations"** means that developing this site is **not** in compliance with either the County or City policies.

Also consider, on page 14 of 435 the staff report states:

B6. Industrial Buffering

New or expanded industrial development in either of the industrial designations which is adjacent to residential areas shall provide buffers to adequately protect residential areas from *any intrusion or nuisance factors generated by the industrial development*.

Industrial uses adjacent to the Ventura River (which is an anadromous fish stream), shall be **compatible with the goal of preserving the natural attributes of the River, and development should not be permitted which would result in its degradation**.

The proposed project is not located adjacent to any residential uses. Thus, a buffer from such uses is not required. *The areas proposed for active use* as part of the project are located from 100 to 400 feet away from the channel of the Ventura River. Thus, no degradation of the riparian habitat or other attributes of the river channel is anticipated to result from project implementation.

First, to contest the above conclusion, the Bounds neighborhood is located just across Hwy 33 from the project site. Intrusion or nuisance factors to this neighborhood generated by this industrial project development will include, but are not limited to: adverse noise, light, vibration, traffic, and air quality impacts. Even though Hwy 33 is between the Bounds neighborhood and the project site, the fact is that the neighborhood is still in very close proximity to the project site and intrusions like noise, light, traffic and air quality impacts do *not stop at project buffers or boundaries*.

Secondly, the staff report conclusion that the areas of the site proposed for *active use* are located 100 to 400 feet away from the channel of the Ventura River is erroneous because in high rain events portions of **the project site are effectively in and become the channel of the Ventura River**. This is why we *should* have learned by now not to develop, *or contaminate*, known floodplains. The Planned Development Permit for the proposed site should not be approved because the location in and adjacent to the Ventura River and its active floodplains should not include the kind of uses that present potential harm and degradation to the river and its ecosystems.

Storage and maintenance of large construction equipment in river floodplain could adversely impact the river's water quality if oil, grease, fuel or fuel tanks, or other hazardous waste maintenance materials get washed into the river in high rain events. Additionally, if the contractor equipment arrives back at this river-adjacent site from areas around the county and beyond and gets hosed down (by human effort or natural rain) and it retains foreign materials in its tire treads or tractor tracks, then the potential for non-native species seeds, spores, dirt, living organisms, etc. to be introduced into the Ventura River ecosystems is significant. (Think of the invasive quagga mussels and the biological environmental nightmare they introduce to lakes and rivers.) A 100-400 foot buffer area is not sufficient for a site historically known to have repeated, severe and **immersive** flooding by the adjacent Ventura River and the Canada Larga Creek confluence just to the north of the site. This river-adjacent site is too fragile for the proposed project because of the potential adverse impacts to the river ecosystem from hazardous maintenance materials, the accidental transfer of invasive plants or species, and/or the use of potentially contaminated crushed concrete as the base for roads throughout the site as well as other reasons.

The project should not be permitted to go forward because of the many adverse impacts of disturbing the concrete, asphalt, soils and/or other materials on the site thereby exposing the existing area's river habitat, wildlife, residential, business, or recreational Parkway trail users to air or water borne toxic contaminants particularly if potentially contaminated materials are allowed to be repurposed and reused on the site. The proposed project should not be allowed in the river floodplain area even if a more thorough clean-up monitored by the proper agencies is completed, because of the project's potential to continue to adversely impact the area.

This project is also utterly and completely antithetical to the concept of the Ventura River Parkway which is a City-owned and (at/above Foster Park) a County-owned public amenity and is a neighboring property to this project site that the staff report *did not fully acknowledge and/or address* the many adverse impacts it would incur due to its adjacency/proximity to the project site. The Ventura River Parkway began as a “Rails to Trails” project that decades ago turned a defunct railroad right-of-way into recreational trails. The County-owned 9-mile Ojai Valley Trail and the City-owned 6-mile Ventura River Trail create the Ventura River Parkway trail. The Ventura River Parkway trail connects with the Omer Rains Coastal Trail to create one of the finest multi-use trail networks in the region and impacts to this trail and the ongoing river restoration efforts were all but ignored.

The Ventura River Parkway includes many current/future river restoration efforts that have garnered substantial support from Federal, State, and local entities including, but not limited to: the Ojai Valley Land Conservancy; Ventura Land Trust; National Parks Service; State Parks; California Coastal Conservancy; Trust for Public Land; Ventura River Watershed Council; State Senate; Ventura City Council; and the County Board of Supervisors. The Parkway concept is an attempt to correct past environmental mistakes, like allowing oil/chemical companies to operate contaminating industries in or adjacent to the Ventura River and its floodplains. We are now modernly aware that such uses adjacent to sensitive river habitats/floodplains are a recipe for environmental disaster and our General Plan policies reflect this knowledge.

The River Parkway concept is to protect and reconnect people to the natural resource of the river – which historically had served as a gathering place for human communion with nature for recreation and interaction. However, when Hwy 33 was built in 1946, the neighboring communities were cut off from accessing the river. National Parks Service, California Coastal Conservancy, and other local grants have all invested in this public amenity's planning, promotion and expansion. In 2014 the Ventura River Parkway Trail gained national (and State Senate) recognition as an official National Recreation Trail (NRT).

The *long-term environmental goals* of the Parkway include the concept that as we move forward into the future, we will continually work to improve and expand the Parkway, which connects the Omer Rains Coastal trail to the Los Padres National Forest, so it might fulfill its potential of being a great public-interest community and visitor asset. Permitting the proposed project that degrades air quality, and will potentially degrade habitat and water quality, and that degrades the area's scenic resources, and produces 7 am -7 pm noise *that will adversely impact Parkway users as well as the surrounding river habitat species* is not a move in the right direction to correct past mistakes and environmental abuses that this property's former uses have already perpetrated on the area's local environment.

When weighing the public-interest in the Ventura River Parkway and its restoration/enhancement, decision-makers must understand River Parkways benefit people/wildlife/communities/businesses/tourism because they: **Attract Jobs & Investment.**

By protecting scenic and recreational areas for the public to enjoy, river parkways make communities more inviting for businesses, encouraging more job opportunities. Parkways can also increase property values in adjacent communities or stimulate the investment in once blighted areas.

Benefit the Local Economy.

Parks and trails attract visitors who, in turn, support local businesses such as hotels, restaurants, retail and recreational services. In fact a recent study found the 23-mile Sacramento Parkway brought 8 million visitors to the region every year and generated more than \$364 million in annual revenue for the local economy.

Protect Floodplains.

Conserving natural floodplains helps local government avoid the long-term costs of protecting property and infrastructure. Floodplains provide natural flood management, erosion control, groundwater recharge, and natural stormwater filtration saving communities millions of dollars over the years.

Protect Habitat and Water Quality.

River and stream banks are home to hundreds of species, including many threatened or endangered plants and animals. River Parkways also protect biodiversity, restore wildlife corridors and improve water quality.

To get a full measure of the above benefits that our Ventura River Parkway could offer, decision-makers must protect the public-interest and stop permitting incompatible uses adjacent to the river and in its floodplain areas. We must now repair and heal the river and restore the floodplains that past incompatible uses have abused and contaminated. If this PDP is issued it will more than likely lock-in these types of incompatible uses on this river adjacent land for the next 50 years. It is generally accepted that a commercial business building has a lifespan of approximately 50 years. If PDP permits updates to the 5 existing warehouse/office buildings to current State/

County building codes, it likely locks-in these kind of incompatible river floodplain uses for the next 50 years.

Also, because a current EIR was not done, all of the impacts of the project's site disturbance, rehabilitation of the five existing buildings as well as the creation of a 20.9-acre car storage lot and a 6.8-acre contractor equipment/maintenance yard were not examined. For instance, the adverse impacts of placing what amounts to a 27-acre of parking lot, with all the vehicles' heated metal and glaring glass baking in the relentless southern California sun potentially creating a micro-climate *heat island effect* near the river's sensitive habitat areas and in the river's floodplain and should be examined because the significance of these impacts *alone* could be project stopping.

A current EIR would additionally have more thoroughly studied *all* of the adverse impacts of locating such project in such a sensitive river area – including the adverse impacts of allowing *expanded* incompatible industrial uses on the site and not restoring the project site to function as a natural river floodplain as is the intent expressed in the City/County's General Plan floodplain policies; and also the adverse impacts like those the heat and glare of 27-acres of glass and steel would create on the River Parkway area habitat, wildlife and humans; and impacts to General-Plan-identified scenic resources like Hwy 33 and the Ventura River Parkway bike path.

Ventura County has often been a leader in far-sighted long-term environmental planning because its elected officials and residents understand the importance of active conservation and restoration of important natural resources. Recent news reports have underlined how vital preservation and restoration of habitat is – particularly in sensitive areas like those in and around rivers. Recent studies demonstrate that healthy habitats will be key to helping re-establish decimated bird populations. These studies have found an alarming 30 to 40 percent reduction in both rare and common bird populations in North America. This is a bird crisis that has been caused by humans encroaching on, polluting, and destroying vital habitat. To understand how important it is to correct our past mistakes like allowing polluting industries to develop in and around the rivers/floodplains that should be providing important *healthy* wildlife habitats, please see the scientific study information included in these recent reports offered in the following links:

<https://www.commondreams.org/news/2019/09/19/bird-emergency-study-shows-north-american-bird-population-has-fallen-nearly-one>
<https://www.sciencenews.org/article/3-billion-birds-lost-since-1970-north-america>
<https://news.google.com/search?q=birds&hl=en-US&gl=US&ceid=US%3Aen>
<https://www.npr.org/2019/09/19/762090471/north-america-has-lost-3-billion-birds-scientists-say>

Now consider page 10 of the 435 page PDP staff report:

Biological Resources Policy

Discretionary development shall be sited and designed to incorporate all feasible measures to mitigate any significant impacts to biological resources. *If the impacts cannot be reduced to a less than significant level, findings of overriding considerations must be made by the decision-making body.* An Initial Study Biological Assessment (ISBA) Report was prepared for the proposed project site by BioResource Consultants, Inc. in 2016. *This report identified potential adverse effects on special status species (California Red-Legged Frog, nesting birds) and mitigation measures to address these effects.* With imposition of biological mitigation conditions of approval MM1 through MM4 (Exhibit 7, Conditions of Approval, Condition Nos. 41 through 44) potential impacts on biological resources would be reduced to a less than significant level.

Tell this: “the potential adverse impacts on biological resources (including nesting birds) will be reduced to a “less than significant” level” to the bird lovers and watchers of *the 3 billion bird-population-numbers we have lost in North America since 1970.* EIRs must study the *cumulative impacts* of allowing these type of polluting industrial uses to continue in sensitive river areas/floodplains, and then the people interpreting these reports must *not accept* that the impact to biological resources will be reduced to “less than significant level” and/or “findings of overriding considerations must be made by the decision-making body.” Enough is enough -- it is past time to *stop* making poor environmental decisions. If we do not start acting *now* to correct our past injustices to our natural environment, there will come a time when we will not be able to ask “Will this be good for our grandchildren?” because we will have neglected and undervalued our planet and its natural environment to a point where there will be no repairing the cumulative adverse impacts that human encroachment into sensitive areas has caused. Humans used to use canaries in coal mines to tell the miners when the air is no longer safe to breathe, *what is the loss of 3 BILLION bird population numbers since 1970 trying to tell us?*

On pages 21, 22 and 23 of the 435 page staff report have maps showing the Ventura River Parkway Trail bike path bisecting the project site. The path shown on these 3 maps clearly indicates the original straight railroad right-of-way which should be the original trail path. Was the bike trail temporarily relocated to edge of the Petrochem property for public safety purposes while the surface contamination clean-up and dismantling of the defunct petroleum /chemical processing plant was progressing? Was the bike path intended to be returned to its original railroad right-of-way path after the removal of the asbestos contaminated tanks (which are now gone) and the two spherical tanks (which have passed their April 2019 remove-by-date)? And if the trail is not to be returned to the railroad right-of-way, then by what legal instrument was the right-of-way transferred? The map on page 34 of 435 of the report shows the bike path skirting the property. Can staff explain the discrepancy between the staff report's maps and well as the below description?

On page 50 of 435 of the staff report it states under #5:

Description of the Environmental Setting:

The project site is located between the Ventura River, west of site, and State Route 33 (SR-33), east of site on approximately 34.6 acres. The Ventura River Bike Trail is **currently** located west of the project site, adjacent to the Ventura River. ***Two decommissioned ammonia gas storage spheres are located west of the Bike Trail. An abandoned railroad line, owned by the City of Ventura, bisects the project site*** in a north-south direction, ***east of the existing spheres*** and Ventura River (Attachment 4). All uses associated with the project are proposed to occur east of this abandoned railroad line. Landscape screening has been proposed by the applicant to screen the proposed transportation services storage yard / vehicle holding lot and contractor service and storage yard from public views from the Ventura River Bike Trail (refer to Section 8-6 below for detailed information on the landscape screening plan).

The words made italic/bold in the above description clearly locate the Ventura River Parkway Trail bike path as bisecting the property adjacent to the project site's for-use areas to the east of the 10.7-acre not-for-use plot and the two existing spheres. This brings into question whether finding # 6 that the Planning Director must make to issue a PDP is correct because the city-owned bike path should be on/returned to the railroad right-of-way.

6. **The proposed development will occur on a legal lot [Sections 8101-3.4 and 8111-1.2.1.11.]** On August 29, 2019, the County Surveyor confirmed that the lots that constitute the project site are legal lots or a combination of legal lots. The lots were confirmed to be legal by the following Legal Lot Determinations: AD05-0053, AD05-0051, AD05-0054, AD05-0052, a legal lot determination certified prior to 1955. The remaining lots are determined to be legal through mergers with other legal lots.

When, why, and how was the path relocated from the original railroad right-of-way to the "current" location on the map on page 34 of this staff report? Was this a temporary realignment for the purposes of the EPA-oversight clean-up? Given this questionable relocation of the bike path, are these project-site lots actually "legal" lots given that the old railroad right-of-way bisecting the project site is owned by the City and was transferred the City to be held in trust for the public's interest to be used as a recreational bike path trail?

It is also important to note that the western edge of the old refinery site *replaced* the floodplain of the Ventura River with what appears to be a earthen levee "projection" that encroaches and pinches the river into a narrow cross section. This means that the river will flow harder and faster here, at this constricted point, in high rain events which increases the chance of more destructive and costly erosion and flooding downstream. Another reason this is important is because the bike path now appears to be currently temporarily located on this levee-type structure which may be a less safe placement for the trail than the original railroad right-of-way location which bisected the old refinery site. Will this levee, that constricts the river's flow and its floodplain function, need to be corrected when with climate change the periodic future extreme-flooding events grow rather than shrink? Was this apparent levee-like structure that pinches and encroaches on the river's channel certified by the U.S. Army Corps of Engineers both when it was constructed (which was when?) and currently?

On page 13 of 435 the staff report describes bollard construction in the river habitat/floodplain and states:
"The proposed bollards would be 5 feet apart and placed along a 300-foot long segment of the western edge of the proposed transportation services yard. ***These bollards would not "protect" the proposed facility site from flood flows*** and would serve only to prevent the floating of stored vehicles into the Ventura River channel during extreme flooding events. It is not required for the proposed use to protect the project site from flooding."

It should be noted that with this request to add bollards along the western edge of the proposed transportation services yard that both the County staff and project applicant ***display awareness of the flooding risks on this project site***. Constructing bollards in the river habitat area/ floodplain could be detrimental to public safety and the river's natural ecosystems because floating cars dammed up against these bollards could constrict river floodplain function. With enough pressure the vehicles might over top the bollards. Adding vehicles to high river flows could adversely impact downstream residential and business properties and also impact river plant and wildlife. The Ventura River is a “flashy” river and can easily and quickly flood in high rain events. The definition of a 100-year flood is that in any given year there is a one percentage chance of such a flood. The name can be misleading because during the 20th century numerous 100-year floods events occurred. Now climate change (which predicts longer drought periods and bigger storms) must also be considered, meaning the 21st century may see even more of these 100-year flood events. It also should be noted that the Canada Larga Creek confluence with the Ventura River happens just north of this project site which has historically compounded the high-rain-event flooding risks.

And in event that the “100-year floodplain” terminology lulls decision-makers into a sense of false security that the flood risk in a drier climate like that of Ventura County does not put development in the floodplain at risk, consider this: “Floods causing injury or property damage in Ventura County have occurred ***on average every five years***, at least since the first report of such an event in 1862. The greatest damage was from the 1969 event that cost thirteen lives and \$60 million in damage to the Ventura and Santa Clara watersheds” (USR Corporation 2004 Flood Mitigation Plan for Ventura County Watershed Protection District). Also, consider the new 9/25/19 ‘*Special Report on Oceans and the Cryosphere*’ from the United Nations climate scientists which states that: “In the U.S., most of the East and West coasts will experience what were once ‘hundred-year’ floods on an annual basis, even if greenhouse gas emissions are sharply reduced, unless major investments are made to adapt to the coming high waters” (9/26/19 VC Star article: “*Climate panel sees dire future for us*”).

The potential of this former oil/chemical site of having “capped” contamination (either purposefully or due to contaminant leaks) under existing concrete pads demands a current CEQA required EIR review. Disturbing the concrete pads and the contaminated soil underneath these pads should not be done. The pads and the contaminated soil/material under them should be removed from the floodplain under conditions fully and continually monitored by the proper agencies. Onsite crushing (a dust-particulate creating activity) of potentially contaminated concrete/other material as well as spreading this crushed material throughout the project site is not acceptable for environmental and human safety reasons particularly on a site ***which is historically known to flood***. This project's crushing and use of potentially contaminated material as a road base and for “dust and erosion control” throughout the 6.8 acre large-contractor-equipment maintenance yard and 20.9 acres of car storage/prep area pose significant threats to the natural resource of the river itself, to its groundwater and surface water quality, to its area's air quality as also to the health of area humans and health of common and protected river-area wildlife.

Additionally, the project *location and related impacts* should be addressed in a current EIR and by decision-makers because joint agencies have been working for decades to remove the silted-up and unsafe Matilija Dam. The coming dam-removal and the currently occurring climate change will both impact the river's flow and behavior and must be considered. There are many reasons that issuing a Planned Development Permit on this site that is known to flood in high volume-rain-events should not be done including the fact that toxic contaminants are known to remain below the surface on this brownfield site. Contamination uncovered by the project's disturbance of soil and planned concrete/asphalt removal and concrete crushing/redistribution throughout the site-- is not in the best interest of the environment or human or wildlife health --not only now but also in the future-- because in the next decade Matilija Dam removal/climate change will potentially change river actions.

It is important to recognize that protecting river floodplains is of paramount importance for the safe conveyance of periodic flood waters. It is vital for decision-makers to understand the scope of the long-term environmental restoration projects that will impact the river, and its water and sediment flows. To quote the *2008 Vision Plan for the Lower Ventura River Parkway* as it highlights *some* of the many *long-term environmental* river-area restoration goals including: to preserve and expand space for natural river function; restore and enhance ecosystems; increase habitat connectivity; enhance biodiversity by reducing harmful impacts; minimize incompatible land uses near the river; and improve access to and recreation at the river. Page 154 states:

FEMA flood insurance policies discourage development in the floodway zone and these policies are reflected in the Ventura County floodplain ordinance. Most of the land in this zone is above water most

of the time. It is a zone of mostly riparian ecosystems through which braided channels of the river move in changing configurations.

The floodway is a reasonable starting point for preserving and expanding the space that will be available to the river for its flow and function. This plan envisions preservation of both wet and dry portions of the current floodway as no-build, low impact areas where hydrological function is increased, native vegetation and wildlife habitat is emphasized and human activities are limited.

Although large areas of the floodway are dry for much of the year, the entire zone, wet and dry, must remain available for the changing paths of the river and the safe conveyance of occasional floodwater. A parkway that emphasizes passive recreational activities – and only those activities – in this zone furthers the goals of the county's floodplain management ordinance and General Plan while also expanding opportunities for human use and appreciation of the river.

Preservation means limiting development within that zone and designing parkway structures and visitor activities that are compatible with the movement of wild water.

Moving outward from the floodway, this plan seeks opportunities to preserve additional riparian space along the floodway edges – the area defined by FEMA as the floodway fringe. In some cases this can be accomplished through the relocation of existing structures which are in the pathway of a 100-year (one percent annual chance) flood. Another possibility of expanding the river space is the setting aside of some agricultural edges for a return to riverine and riparian ecosystems, through mechanisms such as conservation easements, conservation subdivision, and fee title acquisition on a “willing seller” basis.

A point made in this *Ventura River Parkway Vision Plan* is in the section explaining the hydrological changes that should be expected with the removal of the Matilija Dam on page 154. The vision plan explains:

Some projected infrastructure changes will occur beyond the proposed parkway corridor. The removal of Matilija Dam, expected to begin during the next decade, is one of the largest and most complex dam removal projects undertaken in the United States, and it will have a significant beneficial impact on the lower river. The dam has not performed any significant water storage for many years, and its removal will not significantly increase the long-term supply of water to the lower river. However, removal will return the sediment flow in the river to something resembling the pre-development regime, and it will supply additional sand to Ventura's depleted beaches. As landscape planning studies continue, the manner in which the return of sediment will occur and its impacts to the river are still uncertain (Greimann 2006). Despite this uncertainty, the project, with its improved sediment regime, presents opportunities for bank restoration, erosion control, and correction of riverbed elevations that will gradually help to correct impairments in the river in the proposed parkway area over the many decades to come. Due to the influence of dam removal, these stream restoration activities along the Lower Ventura River may not be amenable to any comprehensive plan at the present time. Feasibility studies indicate that the gradual adjustment of the Ventura River channel will require approximately 20 years after dam removal, and that there will be large variations in both flow and sediment supply during that period (Greimann 2006).

The relevancy of Matilija Dam removal and other restoration projects along the Ventura River to the health of the Ventura River estuary and Ventura County beaches shows how *interconnected area resources* are and is why, in 2007, the California Coastal Conservancy issued this statement:

“The Ventura River is a critical coastal watershed in southern California and enhancement of habitat, water quality and other natural resources in the watershed is essential to the restoration and enhancement of significant coastal resources in the state, including riparian and watershed resources.”

On page 198-200 of 435 the staff report for the PDP has the following information:

Coastal Habitat Regulations

Ventura County's Coastal Area Plan and the Coastal Zoning Ordinance, which constitute the “Local Coastal Program” (LCP) for the unincorporated portions of Ventura County's coastal zone, ensure that the County's land use plans, zoning ordinances, zoning maps, and implemented actions *meet the requirements of, and implement the provisions and polices of California's 1976 Coastal Act at the local level.*

Environmentally Sensitive Habitats

The Coastal Act specifically calls for protection of "*environmentally sensitive habitat areas*" or ESHA it defines as: **Any area** in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be disrupted or degraded by human activities and developments" (Section 30107'5).

Section 30240 of the Coastal Act states:

- (a) "Environmentally sensitive habitat areas **shall** be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas."
- (b) "Development in areas *adjacent to environmentally sensitive habitat areas and parks and recreation areas shall* be sited and designed to prevent impacts which would significantly degrade such areas, and *shall be compatible with the continuance of such habitat areas.*"

There are three important elements to the definition of ESHA. *First, a geographic area can be designated ESHA either because of the presence of individual species of plants or animals or because of the presence of a particular habitat.* Second, in order for an area to be designated as ESHA if species or habitat must be either rare or it must be especially valuable. Finally, the area must be easily disturbed or degraded by human activities.

Protection of ESHA is of particular concern in the southeastern part of Ventura County, where the coastal zone extends inland 5 miles to include an extensive area of the Santa Monica Mountains. For ESHA identification in this location, the Coastal Commission, the agency charged with the administering the Coastal Act, *has described the habitats that are considered ESHA.* A memo from a Coastal Commission biologist that describes ESHA in the Santa Monica Mountains can be found at http://www.ventura.org/rma/planning/ceqa/bio_resource_review.html.

The County's Local Coastal Program outlines other specific protections to environmentally sensitive habitats in the Coastal zone, such as to wetlands, riparian habitats, dunes, and upland habitats within the Santa Monica Mountains (M overlay Zone). Protections in some cases are different for different segments of the coastal zone. Copies of the Coastal Area Plan and the Coastal Zoning Ordinance can be found at: <http://www.ventura.org/rma/planning/Programs/local.html>

Wildlife Migration Regulations

The Ventura County General Plan specifically includes wildlife migration corridors as an element in the region's significant biological resources. In addition, protecting habitat connectivity is critical to the success of special status species and other biological resource protections. *Potential project impacts to wildlife migration are analyzed by biologists on a case-by-case basis.* The issue involves both a macro-scale analysis --where routes used by large carnivores connecting very large core habitat areas may be impacted --as well as a micro-scale analysis--where a road or stream crossing may impact localized movement by many different animals.

Locally Important Species/Communities Regulations

Locally important species/communities are considered to be significant biological resources in the Ventura County General Plan, thus one of the County's threshold criteria for the evaluation of impacts to biological resources is whether the project impacts locally important species/communities.

Given the above information and given the fact Ventura River and its tributaries as well as the entire Ventura River watershed area significantly impacts the coastal environment means the intent of the CEQA rules, California Coastal Act rules, the County's local Coastal Program, and Ventura County's General Plan policies would include the project-site's surrounding location under their protections, because it meets the criteria for a *environmentally sensitive habitat area* and because the site is in the 100-year floodplain meaning the site should be protected even if it falls geographically outside of specified boundaries like those of the County's Local Coastal Program designation. Similarly on page 200 of 435 the staff report states:

The County maintains a list of locally important species, which can be found at: <http://www.ventura.org/rma/planning/Programs/local.html> *This list should not be considered comprehensive. Any species that meet the criteria qualifies as locally important, whether or not it is included on this list.*

Page 72 of 435 under Southern California Steelhead and Aquatic Species the report *erroneously* states:

“...project plans do not involve encroachment into the jurisdictional areas of the river or its floodplain that would result in direct impacts to aquatic habitats.”

It is a fact that the project site is in the river's 100-year floodplain and that the site has historically, periodically flooded in high rain events. The property has had decades of oil and chemical processing uses that have grossly contaminated the site and its soils and potentially the concrete that this project proposes to crush and widely distribute across the project site. It is the height of human hubris to think that the environment and/or protected and common bird/animal/aquatic species as well as human/environmental health will not be *significantly* impacted by this proposed site redevelopment that continues to *compound* the site's environmental degradation.

Additionally, if a PDP is issued for this project it will negate the ongoing long-term environmental efforts to restore the river to a more natural state which may culminate with the removal of the Matilija Dam. When the dam is gone, the river's endangered steelhead trout population will gain access to 17 miles of habitat – whether that habitat is *ideal* or not for the steelhead and other protected biological species will depend on whether County/City planners make the correct choices when faced with issuing project permits like this one.

Finally, on page 58 of the staff report under Ventura water impact discussions it states: “According to the City of Ventura, a six-inch meter has been used to serve the property since 1982. The proposed water demand of 100 cubic feet per month can be provided using the existing infrastructure/service to the site. *No new or increased water use is proposed.* The site's historical allocation (100 cubic feet per month) and the proposed uses are not expected to increase demand over historic consumption. The impacts to groundwater quantity are considered to be less than significant.”

The water use for prepping new cars and for operating an contractor maintenance yard seems here to be *seriously underestimated*. In the City's review (staff report page 58 of 435) it is stated that a 6 inch pipe exists and Ventura Water will serve the project site with water, and that no new or increased water use is proposed. The staff report established that the previous industrial uses closed in 2008 and the site has since been inactive. How can a proposed project with the potential of storing 20.9 acres of new cars needing to be washed for dealership delivery (with these vehicles turning over every 14 to 90 days), and a 6.7-acre contractor equipment storage/ maintenance yard *as well as* over 37,000 square feet of the 5 newly-remodeled/reoccupied office and warehouse buildings ***not use substantially more water than a project site that has been inactive for over a decade?*** It also must be considered that the project's “historical consumption” existed outside of the city of Ventura's current stage 3 water-shortage event that is still in effect because of the prolonged local drought conditions. Every Ventura Water ratepayer paying higher shortage rates while conserving water. The truth is that if the drought conditions are not broken, that Ventura may not currently have the water to serve this project.

In summary:

This project does not meet the CEQA requirements for a Mitigated Negative Declaration and does not meet the findings criteria for the County Planning Director to issue a Planned Development Permit for all of the above cited reasons presented in these public comments. The evidence discussed in these public comments demonstrate the the following PDP findings cannot be made: 1.) it is not consistent with the intent and provisions of the County's (or City's) General Plan; 2.) it is not *compatible* with the character of surrounding, legally established development; 3.) it would be obnoxious or harmful, or impair the utility of neighboring property or uses; and 4.) it *does* degrade the quality of the area's environment and *it will pose a threat to wildlife and human health and will be detrimental to the public interest, health, safety, convenience, or welfare;* and also, 6.) there are questions surrounding legal standing of project site lots and the Parkway trails right-of-way.

Among the previously cited problems with this PDP proposal, it should be underlined that the project could be detrimental to the public interest in the long-term environmental goals of the City/County General Plan policies promoting the restoration of the Ventura River, including Matilija Dam removal, and the cleaning-up of the incompatible brownfield uses in and around the Ventura River and its floodplains. In fact, approval of this Planned Development Permit could abet the *cumulative significance* of the site's environmental contamination by, but not limited to, allowing continuing environmental degradation by approving *expanded* industrial uses that include continued hazardous waste usage to occur as well as permitting the potential for the site to create an almost 27-acre micro-climate “heat island effect” adjacent to the river and in the river's floodplain therefore

posing a significant risk to the fragile and environmentally-sensitive-habitat-area of the river and its floodplains.

The issuing of a Planned Development Permit for this project in this site location will be detrimental to long-term environmental goals and public interest if: instead of moving forward to clean-up and improve and enhance the nationally recognized Ventura River Parkway Trail area, to make it an economic driver and shining star spotlighting one of the environmental natural resources that Ventura County has to offer both community residents and visitors alike – we instead follow the old less-forward-thinking patterns by allowing environmental and scenic degradation to occur by permitting incompatible projects like the proposed 6.8-acre contractor equipment service/storage yard and a 20.9-acre vehicle storage/prep yard with all of their associated environment-compromising problems to occupy and potentially continue to pollute the air and land adjacent to Ventura River and the Parkway in a flood prone area that qualifies as an environmentally sensitive habitat area which *should be*, according to CEQA and County/City General Plan policies, protected and restored.

There should be no question that the Ventura River is a natural resource that should have its surrounding habitats and floodplain lands restored, protected and celebrated. If we do not start now, then when? While there might be some good potential reuses of this old refinery site once its existing site contamination has been successfully and fully remediated, the concept proposed for this Planned Development Permit application is not it. Please deny this Planned Development Permit.

Submitted in the public interest and in the interest of public health, safety and welfare by:
Diane Underhill for Friends of the Ventura River

As a picture is worth a thousand words, these show a past 100-year flooding events in the Ventura River. The first color photo and headline was printed in the VC Star in either the floods of 2005 (or possibly 1997). The locale of that photo is the flooded RV park in the lower Ventura River close to the river's estuary. The 2 photographs below show a 1938 flood event was smaller than several events that have occurred in the past 30 years, however, it caused over one million dollars in damage and inundated oil fields along Ventura Avenue. (URS 2004). (Note: This 1938 flood event was also significantly smaller than the 1969 flooding event that cost 13 lives and caused \$60 million of property damage.)



Boero, Kristina

From: Carol Holly <carol.holly2@gmail.com>
Sent: Monday, September 30, 2019 2:36 PM
To: Boero, Kristina
Subject: Re: MND for Petrochem new project

E.

CAUTION: If this email looks suspicious, DO NOT click. Forward to Spam.Manager@ventura.org

The Following is in the current staff report under biological assessment for the IS. Will there still be vehicle storage for municipalities and companies? The MND is devoid of information about this planned use. Every vehicle stored needs to be brought in and out. How frequently? How many vehicles? What types? Where on the facility? Will they also have bollards for flooding? For example, the CalTrans lot in Ojai is a known source of air pollution. Will the lot be a similar size? Usage?

Carol

Contractor's Service and Storage Yard – The Applicant is proposing to use an approximately 16-acre area of the site as a Contractor's Service and Storage Yard. There are five existing buildings on the site that will be rehabilitated for storage equipment maintenance, administration, and tenant use. Tenants will include general contractors, oilfield support operations, and the fishing industry. Potential tenants will lease space for the storage of equipment, roll-off bins, building materials, pipe and commercial fishing equipment. The Applicant is also proposing to include parking for truck companies and municipalities. The Applicant is not including food trucks as a part of this application.

Fuel Card-Lock – The Applicant is proposing to use an approximately 1.7-acre area of the site as a Fuel Card-Lock station. There is an existing building that will be used for administration and customer support services associated with the Card-Lock facility.

Card-Locks are fully-automated commercial fueling stations designed for commercial fleet vehicles. They have excellent accessibility for larger commercial trucks and are more convenient and efficient than retail fuel sites. Customers have to set up an account prior to being allowed to use the service. The Card-Lock facility is intended for commercial (business) uses and no public or personal use. Two 20,000-gallon, double-walled, above-ground fuel storage tanks will be used for the Card-Lock facility.

Construction Footprint Size 37.6

Survey Area Size 43.38 acres

On Sep 30, 2019, at 1:33 PM, Boero, Kristina <Kristina.Boero@ventura.org> wrote:

Ms. Holly,

This is not part of the project. It was originally proposed when the application was submitted in 2016, but the applicant removed that component of the project prior to the release of the MND. The only version of the MND is the version that is included in the September 19, 2019 Planning Director staff report. If there are multiple versions of the staff report in circulation, please provide me with that information.

Kristina Roodsari Boero, MPPA | Senior Planner

Residential Permits Section

kristina.boero@ventura.org

<image002.png>

Ventura County Resource Management Agency | Planning Division

P. (805) 654-2467 | F. (805) 654-2509

800 S. Victoria Ave., L #1740 | Ventura, CA 93009-1740

Visit the Planning Division website at vcrma.org/planning

Ventura County General Plan Update. Join the conversation at VC2040.org

For online permits and property information, visit [VC Citizen Access](#)

Pursuant to the California Public Records Act, email messages retained by the County may constitute public records subject to disclosure.

From: Carol Holly <carol.holly2@gmail.com>

Sent: Monday, September 30, 2019 12:23 PM

To: Boero, Kristina <Kristina.Boero@ventura.org>

Subject: MND for Petrochem new project

There seem to be different versions of the MND in circulation. Can you please tell me if the facility below is part of the project under review today?

"Fuel Card-Lock - The Applicant is proposing to use an approximately 1.7-acre area of the site as a Fuel Card-Lock station. There is an existing building that will be used for administration and customer support services associated with the Card-Lock facility. Card-Locks are fully-automated commercial fueling stations designed for commercial fleet vehicles. They have excellent accessibility for larger commercial trucks and are more convenient and efficient than retail fuel sites. Customers have to set up an account prior to being allowed to use the service. The Card-Lock facility is intended for commercial business uses and no public or personal use. Two 20,000-gallon, double walled above-ground fuel storage tanks will be used for the Card-Lock facility."

Thank you,

Carol Holly



Exhibit 9 – Response to Public Comment

County of Ventura • Resource Management Agency • Planning Division

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Response to Comment on the Petrochem Project Planned Development Case No. PL16-0118

The table below includes a summary of the public comments received for the proposed project. The comments center around the following environmental issues: impacts on air quality, biological resources, flooding, traffic and circulation, groundwater / soil contamination, and degradation of scenic resources. A Mitigated Negative Declaration (MND) was prepared for the project. The public review period for the environmental document was from December 28, 2018 to January 27, 2019. No new information was presented in these public comments that would result in a substantial adverse impact on surrounding properties or the environment or change any findings contained in the environmental document prepared for the permit.

Public Comment on the Petrochem Project and Staff Response

<p>A. Climate First: Replacing Oil and Gas, Marie Lakin (September 17, 2019)</p> <p><i>Comment contends that the County's evaluation of air quality impacts is flawed as the project is located within the Ojai Valley Planning area, and subject to the 5 pounds per day threshold of significance for ROC and NOx emissions (Summary of Comment).</i></p>
<p>County Response</p> <p>The project is not located within the Ojai Valley Planning Area and thus not subject to the 5 pounds per day threshold of significance (Attachment 1, Boundary of Ojai Valley Planning Area in relation to the project site).</p>
<p>B. Kathleen Nolan (September 18, 2019)</p> <p><i>The project is located within the Ojai Valley Planning area and thus subject to the 5 pounds per day threshold of significance for ROC and NOx emissions (Summary of Comment).</i></p>
<p>County Response</p> <p>Refer to Response to Comment A above.</p>
<p>C. John Brooks (September 19, 2019)</p> <p><i>Asked why the Planning Director hearing was continued without sufficient reason or notice.</i></p>
<p>County Response</p> <p>The hearing was continued to obtain verification from the United States Fish and Wildlife (USFWS) that the recommended biological resource mitigation measures (Exhibit No. 7, BIO MMs Condition No. 20 through No. 26), were adequate. As stated in Section F of the October 14, 2019 Planning Director staff report for the proposed</p>

<p>project, the USFWS concurred that the proposed biological mitigation measures were adequate (Exhibit 6, email dated September 23, 2019).</p>	
<p>D. Friends of the Ventura River, Diane Underhill (September 28, 2019)</p>	
<p>D - 1</p>	<p><i>It is not specified in the staff report where this crushed concrete will be used as base material for the roads.</i></p>
<p>County Response</p>	
<p>The crushed concrete will be used as road base and spread in areas designated for the contractor service and storage yard and the transportation service and storage lot.</p>	
<p>D - 2</p>	<p><i>Just west of the southern portion of the project site, there are two large spherical tanks built around 1950... These structures are the subject of a July 2018 Compliance Agreement that requires their removal by April 1, 2019. On August 30, 2018, the Planning Division issued a ministerial Zone Clearance (Zone Clearance No. ZCIB-1007) and Building Permit (B18-000944) to permit the demolition and removal of these spheres.</i></p>
<p>County Response</p>	
<p>The Commenter is inquiring about the status of this demolition. A Compliance Agreement was executed by the County on March 5, 2019. Term No. 1 of the Compliance Agreement stipulates that the spheres must be removed by October 1, 2019. The Compliance Agreement was amended on September 11, 2019. The Amended Compliance Agreement requires the property owner to remove the spheres by December 31, 2019. The Compliance Agreement was amended to allow cessation of the nesting bird season (February 1 to August 31).</p>	
<p>D - 3</p>	<p><i>No notice of the MND was received by the Friends of the Ventura (FoVR) even though the County Planning Staff should have been aware that the group is an active stakeholder for the public's interest in the City's/County's property ownership of the Parkway bike path. Where it may not be legally required for stakeholders for the public interest like the FoVR be notified of such MNDs for projects along the Ventura River Parkway, the FoVR would like to formally request notification from County Planning for any Parkway adjacent projects and/or MNDs for such projects in the future.</i></p>
<p>County Response</p>	
<p>Notification of the Mitigated Negative Declaration (MND) public review period was made available to property owners within 300 feet of the project property boundary in compliance with Section 8111-3.1.3 of the <i>Ventura County Non-coastal Zoning Ordinance</i>. On December 29, 2018, notice of the MND public review period was placed in the Ventura County Star and on the Planning Division's website.</p>	
<p>The FoVR were notified of the project on September 8, 2016. The notification included the project description, site plans, a location map, and a request any for comments by September 28, 2016. The notice also stated the organization</p>	

	<p>needs to contact the case planner if they wish to be sent copies of formal correspondence regarding the project, a notice informing them of the opportunity to comment on the draft environmental document for this project and/or a notice of the public hearing. No comments were received regarding the proposed project during the requested timeframe (Attachment 2, September 8, 2016 Letter to the Friends of the Ventura River).</p>
<p>D - 4</p>	<p><i>The Planning Director must make certain findings in order to grant the requested permit pursuant to Non-Coastal Zoning Ordinance Section 8111-1.2.1.1. These findings, in fact, cannot be made because according to Ventura County General Plan Resources Policy 1.1.2-1 discretionary development shall be evaluated for their individual and cumulative impacts on resources in compliance with the California Environmental Quality Act (CEQA). The proposed project involves noise, vibration, light pollution, degradation of scenic resources, traffic, air quality and hazardous waste. Proposed mitigation does not reduce environmental impacts to less than significant. The project is not consistent with the General Plan, is not compatible with surrounding development, would be obnoxious and harmful, and degrades the quality of the environment.</i></p> <p>County Response</p> <p>The MND (Exhibit 6) identified potentially significant but mitigable impacts on biological resources, scenic resources and noise and vibration. The cumulative and individual impacts on the environment that would result from the proposed project were evaluated in compliance with the CEQA Guidelines (2018) and the <i>Ventura County Initial Study Assessment Guidelines (ISAGs)</i> (2011). As stated in Sections C and D of the Planning Director staff report (dated October 14, 2019), the project is consistent with the policies of the <i>Ventura County General Plan</i>, the <i>North Ventura Avenue Area Plan</i>, the <i>Ventura County Air Quality Assessment Guidelines</i>, and NCZO Section 8111-1.2.1.1 Findings.</p>
<p>D - 5</p>	<p><i>The proposed Petrochem-site project will generate hazardous wastes when potentially contaminated soil and potentially contaminated concrete pads and concrete stockpiles will be crushed and reused as road base that will be spread around the project site.</i></p> <p>County Response</p> <p>On March 12, 2012, the County Environmental Health Division confirmed that “corrective action carried out at the underground storage tank site is in compliance with the requirements of the Health and Safety Code Section 252299.37, subsections (a) and (b) and with corrective action regulations adopted pursuant to Health and Safety Code Section 25299.77, no further action related to the petroleum releases at the site is required” (Attachment 3, March 12, 2019 Letter from Ventura County Environmental Health Division). This corrective action addresses the MBTE contamination.</p> <p>On April 27, 2017, the United States Environmental Protection Agency confirmed that Petrochem has complied with the Agency’s approved PCB</p>

	<p>cleanup requirements, as specified in the cleanup requirements included in the February 16, 2016 approval letter <i>Submittal of PCB Cleanup Plan Former USA Petrochem Refinery</i> (Attachment 4, April 27, 2017 Letter from United States Environmental Protection Agency). This compliance refers to the Tank G area.</p> <p>On July 12, 2018, Destrier Consulting prepared the Final Cleanup Report for the Former Compressor Building on the Petrochem site (Attachment 5, July 12, 2018) Destrier Consulting Report). The report concluded that TPH constituents were cleared from the site and the requirements of the PCB Cleanup Plan approved by the EPA have been satisfied.</p> <p>On May 10, 2019, the United States Environmental Protection Agency (Attachment 6) confirmed that the site had been remediated to levels that would not require further action and would not cause further human or environmental harm. The Permittee will be required to retain a California registered Geologist to monitor the removal of the concrete pads. The soil beneath the concrete shall be tested to determine if the soil is contaminated. Any hazardous material that is found during concrete removal above Environmental Protection Agency regional screening levels, or State of California thresholds must be disposed of properly per state and federal regulations (Exhibit 7, Condition No. 28).</p>
<p>D - 6</p>	<p><i>The proposed project does not meet these PDP criteria because it:</i></p> <ol style="list-style-type: none"> 1. <i>is not consistent with the intent and provisions of the County's General Plan;</i> 2. <i>is not compatible with the character of surrounding, legally established development (including the Ventura River Parkway Trail)</i> <p>County Response</p> <p>Refer to Response to Comment D-4, above.</p> <p>On July 31, 2012, the County Board of Supervisors approved, in concept, support for creation of the Ventura River Parkway Plan, however, the Board has not adopted the plan.</p> <p>The proposed project site is located within the geographic area covered by the Ventura River Parkway Plan. The Ventura River Parkway Plan envisions the northern portion of the Petrochem site as a public park area that would allow for passive recreation and access to the Ventura River, but leaves the future use of the remainder of the Petrochem site relatively unspecified due to uncertainty related to environmental remediation outcomes at the time of the document's writing in 2008. The proposed development will be located in this unspecified area.</p>
<p>D - 7</p>	<p><i>The residential Bounds neighborhood, the new Patagonia Campus (located at the former Brooks Institute site), other area residents and wildlife in the entire</i></p>

	<p><i>Ojai Valley air basin will be adversely impacted by the noise and traffic created by the traffic-heavy industrial uses of the proposed project.</i></p> <p>County Response</p> <p>The Ventura County Transportation Department reviewed the proposed project and Traffic Study prepared by Associated Transportation Engineers (ATE), dated December 2, 2016. The Transportation Department concluded that the proposed 40 peak hour trips would not create a significant impact on area roadways. As stated in item 27a(1) of the MND, according to the ATE report traffic generated from the project will not change the Level of Service (LOS) at any of the six (6) study intersections near the project site. These intersections include Ventura Ave. / Canada Larga; SR 33 ramps southbound / Canada Larga Road; SR 33 ramps northbound / Canada Larga Road; Ventura Ave / Crooked Palm Road; Ventura Avenue / Shell Road and SR 33 northbound / Shell Road.</p> <p>Refer to Response to comment and D - 4 regarding impacts on biological resources that would result from the proposed project.</p> <p>The MND concluded that noise impacts would result from construction activities related to the refurbishment of Buildings D and E. This impact is considered temporary and does not reach the thresholds of significance in the ISAGs, Construction Noise Threshold Criteria and Control Plan, and CEQA Guidelines. Although considered a temporary impact, the crushing of concrete for road base would create a potentially significant but mitigable impact to the federally-protected red-legged frog that is known to be within the area of the Ventura River. The applicant has agreed to recommended measure N-1 that requires concrete crushing equipment to be setback 200 feet from the identified riparian area and the installation of a portable sound barrier if crushing activities are located less than 200 feet from the riparian habitat (Exhibit 7, MM N-1, Condition No. 26).</p>
<p>D - 8</p>	<p><i>There must be alternative sites that are closer to the Port and to the different Ventura County auto dealers that would not create such a needlessly large carbon-footprint to store, prepare and ultimately distribute the new vehicles.</i></p> <p>County Response</p> <p>The County does not have the authority to prohibit the applicant from requesting a permit to allow a permitted use on the subject property. The County's responsibility is to ensure that the project complies with CEQA, is consistent with the policies of the <i>County General Plan</i> and <i>North Ventura Avenue Area Plan</i>, and the development standards of the <i>Ventura County Non-coastal Zoning Ordinance</i>. The proposed contractor service and storage yard and the transportation services storage yard / transportation service and storage yard are allowable uses in the M3 zone.</p>

	<p>The amount of greenhouse gases anticipated from this project will be a small fraction of the levels being considered by the Ventura County Air Pollution Control District for a greenhouse gas emission significance threshold (10,000 MTCO₂e/yr). Therefore, the proposed project will not create a “needlessly large carbon footprint”.</p>
D - 9	<p><i>On page 6 of 435, the staff report cites the County General Plan requirement that: “site plans for discretionary development that will generate hazardous wastes or utilize hazardous materials shall include details on hazardous waste reduction, recycling and storage but then goes on to erroneously say that the proposed project generally does not involve the use or generation of hazardous materials. Any hazardous chemicals (such as lubricants or surfactants for washing vehicles) will be stored and used in accordance with State regulations (Exhibit 7, Condition of No. 22).” The staff report goes on to erroneously conclude: “Based on the above discussion, the proposed project is consistent with Hazardous Materials and Waste Policy 2.15.2-2.D.”</i></p> <p>County Response</p> <p>The County Environmental Health Division evaluated the proposed project and determined that no hazardous materials or waste that would require an Environmental Health Division-issued CUPA permit would be required. The requirement to handle, store and dispose of hazardous materials and waste is a State of California requirement that must be met regardless of the proposed use and is routinely placed as a condition of approval for commercial and industrial discretionary type uses.</p>
D - 10	<p><i>Two areas are excluded from the project site, a 10.7-acre not-proposed-for-use portion located in the southwestern portion of the property and the 0.5 acres under the two spherical tanks. Note: CEQA policies do not allow a project site to be split, like the 0.5 acre sphere-site and the 10.7 not-for-use acres from the remainder of the for-use site to avoid accurate contamination and cumulative impact examination.</i></p> <p>County Response</p> <p>CEQA Section 21159.27 prohibits an Applicant from dividing a project into smaller projects to qualify for one or more exemptions or to avoid preparing an EIR. The applicant removed the spheres area, including the 10.7 acre southwestern portion of the site where the spheres are located from the proposed project at the recommendation of the Cultural Heritage Board prior to the release of the MND. These areas as not a part of the proposed project.</p>
D - 11	<p><i>County Policy - New industrial or oilfield industrial development or an expansion of existing industrial or oilfield industrial development may occur only if it can be shown through additional analysis that such areas will be protected from a 100-year flood.</i></p> <p><i>City Policy - An expansion of existing industrial or oilfield industrial urbanization may occur only if it can be shown through additional analysis that such areas are currently protected from a 100-year flood. Any flood protection measures</i></p>

	<p><i>necessary to protect existing development in the Floodplain shall minimize adverse impacts and changes to the river channel.</i></p> <p><i>The joint City/County North Avenue Area Plan is attached to both the city and county's General Plans as it is assumed that at some distant date in the future the North Avenue area will be annexed from the County to the City of Ventura. Given this, and the fact that most of this project site is located in the 100-year floodplain and is not protected from such an event (which is explicitly stated when the bollard discussion is covered on page 13 of the staff report and is addressed later in these public comments) and given the fact the project proposes expanded industrial uses including "oil field support operations" means that developing this site is not in compliance with either the County or City policies.</i></p>
	<p>County Response</p> <p>As stated in the MND (Exhibit 6 Section A-6 and C-17B), the transportation services yard portion of the project site is partially located within the floodplain of the Ventura River. According to the best available floodplain data, the 2016 FEMA preliminary Digital Flood Insurance Rate Map (DFIRM), the project site will be located within the "AE Zone" floodplain of Canada Larga Creek as is evidenced on the preliminary FIRM map No. 06111C0733F.</p> <p>The City of Ventura reviewed the proposed project and determined that the proposed installation of the bollards does not conflict with City Policy (Exhibit 8, City of Ventura Letter, dated March 21, 2018, of the October 14, 2019 Planning Director staff report). As stated in Section D of the Planning Director staff report, the project is consistent with the County General Plan and North Ventura Avenue Area Plan policies regarding floodplain impacts.</p>
<p>D - 12</p>	<p><i>The Bounds neighborhood is located just across Hwy 33 from the project site. Intrusion or nuisance factors to this neighborhood generated by this industrial project development will include, but are not limited to: adverse noise, light, vibration, traffic, and air quality impacts. Even though Hwy 33 is between the Bounds neighborhood and the project site, the fact is that the neighborhood is still in very close proximity to the project site and intrusions like noise, light, traffic and air quality impacts do not stop at project buffers or boundaries.</i></p> <p><i>Secondly, areas of the site proposed for active use located 100 to 400 feet away from the channel are effectively in the river because in high rain events portions of the project site become the channel of the Ventura River. The Planned Development Permit for the proposed site should not be approved because the location in and adjacent to the Ventura River and its active floodplains should not include the kind of uses that present potential harm and degradation to the river and its ecosystems.</i></p>

County Response	
	<p>The Bounds neighborhood is located approximately 480 feet northeast from the project site. SR 33 and Crooked Palm Road are located between the project site and this neighborhood. The County designates land uses as either open space, agricultural, industrial, commercial, or residential. Land uses permitted under these designations are located with the intent of avoiding or minimizing conflicts between incompatible land uses. The County's zoning designations for the Bounds residential community and the project site were determined to provide adequate separation.</p> <p>As explained in Response to Comment D – 4 above, the MND concluded that noise impacts would result from construction activities related to the refurbishment of Buildings D and E and the crushing of concrete. This impact is considered temporary and does not reach the thresholds of significance in the ISAGs, Construction Noise Threshold Criteria and Control Plan, and CEQA Guidelines. Although temporary, the MND identified the crushing of concrete for road base would create a potentially significant but mitigable impact to the federally-protected red-legged frog that is known to be within the area of the Ventura River. The applicant has agreed to mitigation (Exhibit 7, MM N-1, Condition No. 26) that would reduce impacts to a less than significant level by requiring concrete crushing equipment to be setback 200 feet from the identified riparian area. If crushing activity is less than 200 feet from the riparian area, a portable sound barrier must be installed.</p> <p>The northwestern portion of the proposed transportation service and storage yard is located in the floodplain. In accordance with Section 5.3 (A)(B) of the Ventura County Floodplain Management Ordinance, the applicant is required to implement measures that will minimize flood damage. To avoid potential damage to areas adjacent to the project site during flood events, bollards will be installed at the northeastern portion of the project site. These measures will be included in the Floodplain Development Permit that the applicant will be required to obtain prior to the issuance of the Zoning Clearance for use inauguration of the project (Exhibit 7, Condition No. 34). A Notice of Flood Hazard must also be recorded on the property title prior to issuance of a Zoning Clearance for use inauguration (Exhibit 7, Condition No. 35). Through the implementation of these two requirements, the proposed development operations will not result in project-related impacts related to flooding or contribute to cumulative impacts related to flooding.</p> <p>The proposed uses are not located in the Ventura River. The proposed uses are setback between 100 and 400 feet east from the banks of the Ventura River.</p>
D - 13	<i>Storage and maintenance of large construction equipment in river floodplain could adversely impact the river's water quality if oil, grease, fuel or fuel tanks,</i>

	<p><i>or other hazardous waste maintenance materials get washed into the river in high rain events. Additionally, if the contractor equipment arrives back at this river-adjacent site from areas around the county and beyond and gets hosed down (by human effort or natural rain) and it retains foreign materials in its tire treads or tractor tracks, then the potential for non-native species seeds, spores, dirt, living organisms, etc. to be introduced into the Ventura River ecosystems is significant. A 100-400 foot buffer area is not sufficient for a site historically known to have repeated, severe and immersive flooding by the adjacent Ventura River and the Canada Larga Creek confluence just to the north of the site.</i></p>
	<p>County Response</p> <p>As indicated on the Site Plan (Exhibit 3), no construction equipment will be stored or maintained in the floodplain that would adversely affect the water quality of the river. Additionally, oil, grease, fuel or fuel tanks, or other hazardous waste maintenance materials are required to be secured in a self-contained storage unit as required by the County Environmental Health Division.</p>
<p>D - 14</p>	<p><i>The adverse impacts of placing what amounts to a 27-acre of parking lot, with all the vehicles' heated metal and glaring glass baking in the relentless southern California sun potentially creates a micro-climate heat island effect near the river's sensitive habitat areas and in the river's floodplain and should be examined because the significance of these impacts alone could be project stopping.</i></p>
	<p>County Response</p> <p>According to the California Environmental Protection Agency (https://calepa.ca.gov/climate/urban-heat-island-index-for-california/), heat island effect is defined as large urban areas that often experience higher temperatures, greater pollution, and more negative health impacts during hot summer months, when compared to more rural communities. Heat islands are created by a combination of heat-absorptive surfaces (such as dark pavement and roofing), heat-generating activities (such as engines and generators), and the absence of vegetation (which provides evaporative cooling). The Urban Heat Island Index, as found on the California Environmental Protection Agency website (https://calepa.ca.gov/climate/urban-heat-island-index-for-california/urban-heat-island-interactive-maps/), does not include an urban heat island effect calculation in the area of where the project site is located, because the project site is not located in an urban area per the State definition of heat island effect. In any case, the project is not expected to create a significant heat island effect. In general, lighter colored materials reflect more sunlight than darker colors and therefore have a higher albedo. Albedo is measured on a scale of zero to one. A zero means that the surface of a material absorbs all the sunlight that hits it. Asphalt has an albedo of approximately 0.05 which means 95% is absorbed and thus generates heat. Vehicles of a variety of colors will be parked on crushed road base resulting in an albedo that is less</p>

	<p>than 95%. Additionally, the applicant will be required to install landscaping and screening to screen existing buildings “D” and “E” of the proposed project from public views along Crooked Palm Road and SR-33. A minimum of 15 California sycamore trees along the western perimeter of the project site will also be planted to screen public views from the Ventura Ojai Bike Trail. This landscaping, along with the existing vegetation on the project site will aide in the reduction of any higher temperatures, pollution and adverse impacts that may occur as a result of the parking of cars on the project site.</p>
<p>D - 15</p>	<p><i>Recent studies demonstrate that healthy habitats will be key to helping re-establish decimated bird populations. These studies have found an alarming 30 to 40 percent reduction in both rare and common bird populations in North America. This is a bird crisis that has been caused by humans encroaching on, polluting, and destroying vital habitat.</i></p> <p>County Response</p> <p>In order to prevent impacts on nesting birds protected under the Migratory Bird Treaty Act and Californian Department of Fish and Game Code (Sections 3503, 3503.5, 3511, 3513 and 3800), land clearing activities shall be regulated to avoid construction activities during the bird nesting season or to provide a bird nesting survey to confirm presence or absence. If nesting birds are located on or adjacent to the project site that could be impacted by construction activities, the Applicant must postpone construction until the nesting birds have fledged or the nest has been abandoned and birds have not returned to the nest (Exhibit 7, MM BIO – 2, Condition No. 23). The applicant has also agreed to setback concrete crushing activities a minimum of 200 feet from the riparian corridor. If concrete crushing activities are less than 200 feet from the riparian area, a portable sound barrier must be installed (Exhibit 7, MM N-1, Condition No. 26).</p>
<p>D - 16</p>	<p><i>The Ventura River Parkway Trail bike path bisects the project site. The original straight railroad right-of-way should be the original trail path. Was the bike trail temporarily relocated to edge of the Petrochem property for public safety purposes while the surface contamination clean-up and dismantling of the defunct petroleum /chemical processing plant was progressing? Was the bike path intended to be returned to its original railroad right-of-way path after the removal of the asbestos contaminated tanks (which are now gone) and the two spherical tanks (which have passed their April 2019 remove-by-date)? And if the trail is not to be returned to the railroad right-of-way, then by what legal instrument was the right-of-way transferred? The map on page 34 of 435 of the report shows the bike path skirting the property. Can staff explain the discrepancy between the staff report's maps as well as the below description?</i></p> <p>County Response</p> <p>The Ventura Ojai Bike trail is not proposed to be relocated as a result of the proposed project. On December 1, 1998, a Reciprocal Easement Agreement was recorded between the City of Ventura and the property owner to allow the City to construct the Ventura Ojai Bike Trail (Attachment 7, Reciprocal</p>

	Easement Agreement, Recital D). The plans that are included in the agreement match the current configuration of the Ojai Ventura Bike Trail as identified on the site plan for the proposed project (Exhibit 3 of the October 14, 2019 Planning Director staff report).
D - 17	<i>Given this questionable relocation of the bike path, are these project-site lots actually "legal" lots given that the old railroad right-of-way bisecting the project site is owned by the City and was transferred the City to be held in trust for the public's interest to be used as a recreational bike path trail?</i>
	County Response
	All parcels that are included as part of the proposed project are owned by the Applicant. The Ventura Ojai Bike trail is not proposed to be relocated as a result of the proposed project. As discussed in the response above, in December 1998, the Applicant allowed the City to construct the Ventura Ojai Bike Trail on a portion of the Applicant's property through a reciprocal access easement. (Attachment 6, Reciprocal Easement Agreement, Recital D). All proposed uses would be located east of the existing railroad track and not adversely impact public use of the bike trail.
D - 18	<i>It is also important to note that the western edge of the old refinery site replaced the floodplain of the Ventura River with what appears to be an earthen levee "projection" that encroaches and pinches the river into a narrow cross section. The bike path now appears to be currently temporarily located on this levee-type structure. Will this levee, that constricts the river's flow and its floodplain function, need to be corrected when with climate change the periodic future extreme-flooding events grow rather than shrink? Was this apparent levee-like structure that pinches and encroaches on the river's channel certified by the U.S. Army Corps of Engineers both when it was constructed (which was when?) and currently?</i>
	County Response
	CEQA requires the Lead Agency to evaluate potentially significant impacts the proposed project may have on the environment, not impacts from potential flooding from an offsite earthen levee projection. In accordance with Section 5.3 (A)(B) of the Ventura County Floodplain Management Ordinance, the applicant must implement measures that will minimize flood damage. The installation of bollards at the northeastern portion of the project site will be included in the Floodplain Development Permit that the applicant will be required to obtain prior to the issuance of the Zoning Clearance for use inauguration of the project. Further, there is no nexus to require the Applicant to provide a geomorphic study of the Ventura River as the proposed project does not directly or indirectly impact the Ventura River.
D - 19	<i>This project's crushing and use of potentially contaminated material as a road base and for "dust and erosion control" throughout the 6.8 acre large-contractor-equipment maintenance yard and 20.9 acres of car storage/prep area pose significant threats to the natural resource of the river itself, to its</i>

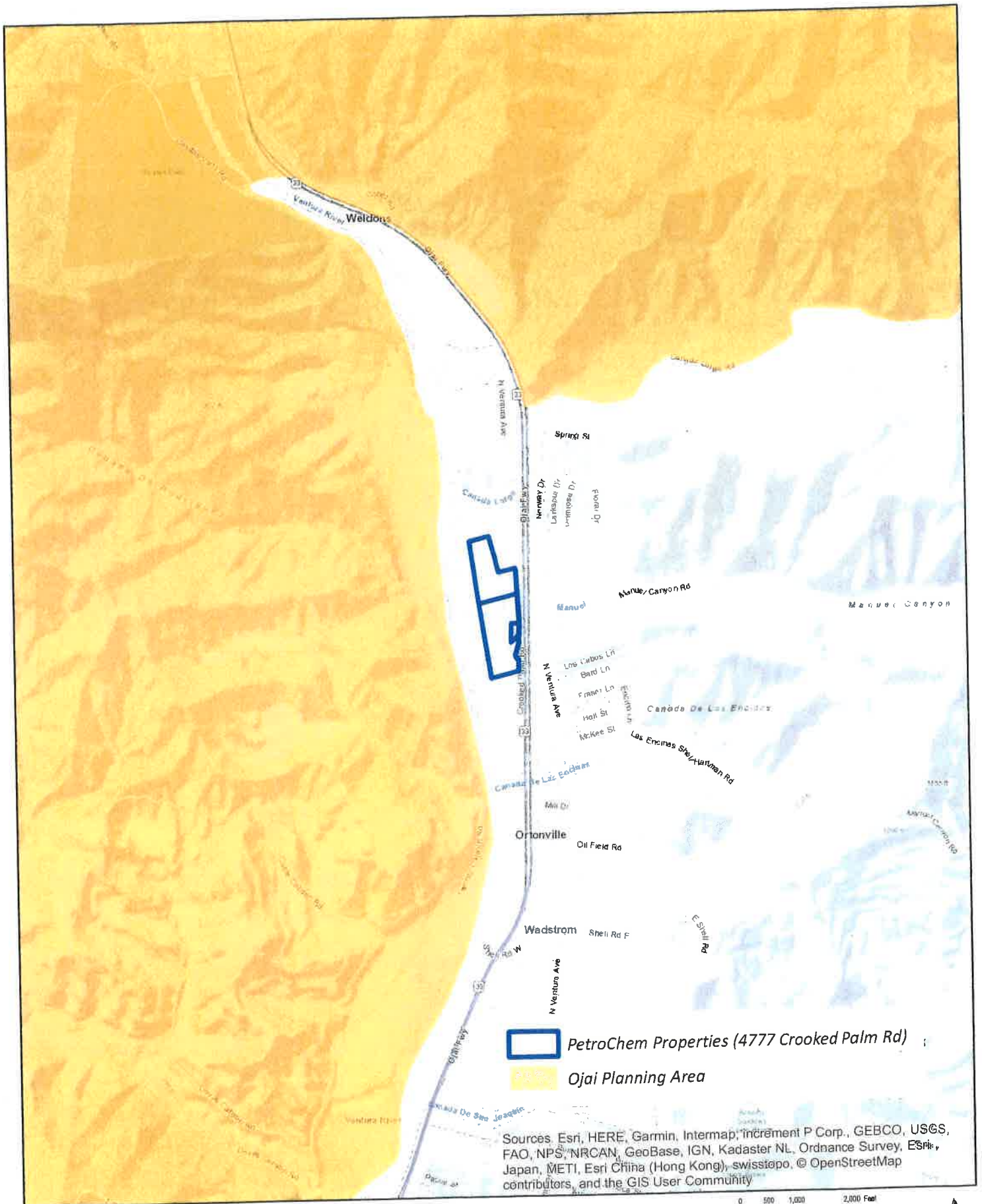
	<p><i>groundwater and surface water quality, to its area's air quality as also to the health of area humans and health of common and protected river-area wildlife.</i></p> <p>County Response</p> <p>The applicant will be required to conduct site preparation and operation of the proposed uses in conformance with the provisions of applicable Ventura County Air Pollution Control District Rules and Regulations, which include but are not limited to, Rule 50 (Opacity), Rule 51 (Nuisance), and Rule 55 (Fugitive Dust). Specifically, the applicant will be required to minimize fugitive dust by use of a water truck during the installation of the crushed concrete for road base (Exhibit 7, Condition No. 53). The crushed concrete will control erosion when placed on the site as useable road base.</p>
D - 20	<p><i>(a) "Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas."</i></p> <p>As included in Section 4-e of the MND and in Section 3.1 of the Initial Study Biological Assessment (pg. 10), the project site is not located in the Coastal Zone. Thus, habitats that meet the definition of ESHA were not found within the project survey area. The proposed project will not result in direct or indirect impacts to ESHA. As a result, ESHA policies and analysis do not apply.</p>
D - 21	<p><i>How can a proposed project with the potential of storing 20.9 acres of new cars needing to be washed for dealership delivery (with these vehicles turning over every 14 to 90 days), and a 6.7-acre contractor equipment storage/maintenance yard as well as over 37,000 square feet of the 5 newly-remodeled/reoccupied office and warehouse buildings not use substantially more water than a project site that has been inactive for over a decade?</i></p> <p>County Response</p> <p>Ventura Water reviewed the proposed project and estimated that the water demand of the project (100 cubic feet per month or 0.03 acre-feet per year) is minimal and can be provided from the existing 6-inch meter water meter that is located on the project site.</p>
E. Carol Holly, September 30, 2019	
E - 1	<p><i>Will there still be vehicle storage for municipalities and companies? Every vehicle stored needs to be brought in and out. How frequently? How many vehicles? What types? Where on the facility? Will they also have bollards for flooding? The CalTrans lot in Ojai is a known source of air pollution. Will the lot be a similar size? Usage?</i></p> <p>County Response</p>

The proposed project includes a contractor service and storage yard and the transportation service and storage lot. Vehicles imported to Port Hueneme will be delivered to the site from private automobile retailers. The storage lot will not be used to store vehicle fleets for municipalities or companies. However, the contractor service and storage yard would be made available to any lessee which could be a municipality or company.

The proposed transportation services storage yard will allow for short-term storage of passenger vehicles for future sale before they are delivered to various auto dealerships in Ventura County. They will be stored on the holding lot between 14 and 90 days depending on market conditions. The cars will be transported to the site from Port Hueneme and shipped throughout the Western United States. Based on the acreage proposed for the transportation service and storage yard (20.9 acres) and the average size of a midsize car (between 8.7 feet and 9 feet in length, or 9 foot by 18 foot-sized parking space), roughly a maximum of 5,619 cars can be parked in tandem on the project site. This rough estimate does not account for any onsite access roads or drive through lanes that may be placed within the transportation service and storage yard portion of the project site, which would reduce the number of cars that could be parked onsite.

Attachments:

- | | |
|--------------|---|
| Attachment 1 | Ojai Planning Area Map, Map of Project Site with Ojai Planning Area Boundary Overlay, Definition of Ojai Valley per the Ventura County Non-Coastal Zoning Ordinance |
| Attachment 2 | September 8, 2016 Request for Comment on PL16-0118 to the Friends of Ventura River |
| Attachment 3 | March 12, 2012 Letter from the County of Ventura Environmental Health Department |
| Attachment 4 | April 27, 2017 Letter from the United States Environmental Protection Agency |
| Attachment 5 | July 12, 2018 Destrier Final Clean up Report for the Compressor Building at the Petrochem Site |
| Attachment 6 | May 10, 2019 Letter from the United States Environmental Protection Agency |
| Attachment 7 | Reciprocal Easement Agreement between the City of Ventura and Petrochem |



Ventura County
Resource Management Agency
Information Systems GIS Services
Map created on 9/18/2019
source: Pictometry®, February 2014

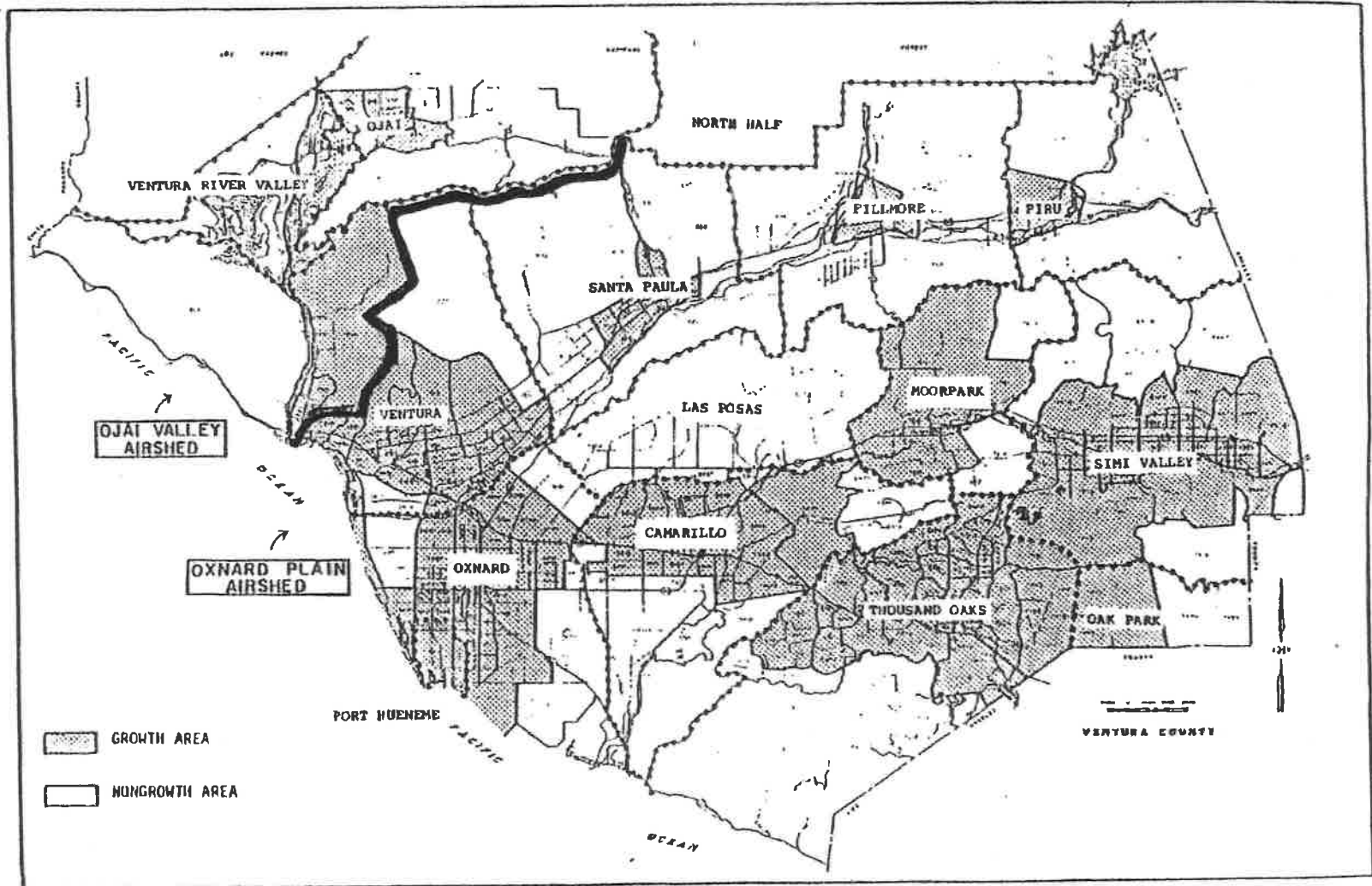
County of Ventura
Planning Director Hearing
PL16-0118

Exhibit 9, Attachment 1- Ojai Planning Area information

Disclaimer: This map was created by the Ventura County Resource Management Agency Information Systems GIS, which is designed and created solely for the convenience of the County and related agencies. The County does not warrant the accuracy of this map and no decision involving a risk of economic loss or physical injury should be made in reliance thereon.



FIGURE E-1



E-11

Sec. 8112-2 - Definitions

As used in this Article, the following terms shall have the meanings set forth in this Section:

AQMP - The Air Quality Management Plan for Ventura County, including all appendices thereto, as amended from time to time.

AQMP Figure E-1 and AQMP Table E-6 - Figure E-1 and Table E-6, respectively, of Appendix E-87 to the version of the AQMP adopted July 26, 1988, or if such figure and table are amended by later versions of the AQMP, the most recent versions of such figure and table, however numbered.

Completed Dwelling Unit - A dwelling unit that is or could be lawfully occupied without the issuance of any further certificate of occupancy, certificate of final inspection or similar document.

Current Number of Dwelling Units - As of any given point in time, the total number of:

- a. Completed Dwelling Units; plus
- b. dwelling units that are not yet Completed Dwelling Units but for which a Current Residential Permit has been issued; plus
- c. dwelling units that are not yet Completed Dwelling Units but for which an unexpired building permit has been issued by the City of Ojai.

Current Residential Permit - A Residential Permit that has been issued and has not yet expired.

Developable Lot - A lot that:

- a. is a legal lot;
- b. meets all of the requirements set forth in Section 8111-2.2.1, subdivision (a), for the issuance of a Zoning Clearance for construction of an additional dwelling unit; and
- c. has been issued all discretionary permits, if any, that are a condition precedent to issuance of a building permit for an additional dwelling unit; provided that, if the lot could lawfully be developed with more than one additional dwelling unit the lot shall, for the purposes of this Article, be deemed to contain one Developable Lot for each such additional dwelling unit.

Maximum Permissible Number of Dwelling Units - As of any given point in time, the total number of dwelling units that, according to AQMP Table E-6, are forecasted to be in the Ojai Valley on January 1 of the second succeeding calendar year. For example, AQMP Table E-6 forecasts that there will be 11,044 dwelling units in the Ojai Valley on January 1, 1992. Hence, the Maximum Permissible Number of Dwelling Units for any given point of time in 1990 is 11,044. The second succeeding calendar year is selected in recognition of the fact that it takes approximately one year to complete a dwelling unit after the requisite permits have been issued.

Ojai Valley - The area comprised of all those areas referred to in AQMP Table E-6 as the "Ojai GA," "Ojai NGA," "Ventura River GA," and "Ventura River NGA," and depicted on AQMP Figure E-1 as the "Growth Area" and the "Nongrowth Area" for "Ojai" and "Ventura River Valley."

Residential Permit - A ministerial permit issued by the Planning Director pursuant to Section 8112-6.

Sec. 8112-3 - Limitations on Issuance of Building Permits

Notwithstanding any other provisions of this Code or of any other ordinance or resolution of the County, no building permit may be applied for or issued for the construction or

county of ventura

September 8, 2016

Friends of the Ventura River
Mr. Rob Woods
235 West Santa Clara Street
Ventura CA 93001

Subject: Request for Review of New Project Application
Planned Development Permit Case No. PL16-0118
5085 Crooked Palm Road, Ventura area
Assessor's Parcel Numbers (see attached list)

Dear Mr. Woods:

The Planning Division has received the following new land use project application:

The applicant requests that a Planned Development Permit be granted to authorize the establishment of a parking/storage facility and a Contractor Service and Storage Yard located at 5085 Crooked Palm Road in the Industrial North Ventura Avenue Area Plan land use designation and the M3 Zone Designation commonly known as the PetroChem site. No site improvements are proposed. Five existing buildings on the property would be used as part of the Contractor Service and Storage Yard use located on the south portion of the site which is 17.6 acres. The buildings include a 14,267.5 sq. ft warehouse, a 3,788 sq. ft. warehouse, a 1,478 sq. ft. office, and a 12,498 sq. ft. warehouse which will be rehabilitated and a proposed 900 sq. ft. covered equipment area. The northern 19 acres would be used as the vehicle holding area and has no structures. The site has 5 driveways with direct access to Crooked Palm Road. Water is provided by the City of Ventura and waste water is handled by the Ojai Sanitation District.

The following is an excerpt of the project description provided by the applicant.

The Applicant proposes the following operations under this PDP:

- Transportation Services (Vehicle Holding Lot); and
- Contractor's Service & Storage Yard.

Transportation Services

The Applicant is proposing to utilize an approximate 19 acre area of the site for a Transportation Services/Vehicle Holding Lot. Ventura County receives large shipments of vehicles for retail dealers at the Port Hueneme harbor. The proposed Transportation Services/Vehicle Holding Lot will allow for the short-term storage of passenger vehicles before they are delivered to various auto dealerships in Ventura County.



The cars are offloaded at the Port Hueneme harbor and would be delivered to the site via auto transporter trucks. They will be stored on the Holding Lot for approximately fourteen to ninety days depending on market conditions. Prior to leaving the site, most vehicles will be prepared to be delivered to the dealerships by removing transportation packaging, rinsing, adding floor mats and off the shelf parts.

Contractor's Service & Storage Yard

The Applicant is proposing to utilize an approximate 17.6 acre area of the site as a Contractors Service and Storage Yard. There are five existing buildings on the site that will be rehabilitated for storage, equipment maintenance, administration, and tenant use. Tenants will include general contractors, oilfield support operations, and the fishing industry. Potential tenants will lease space for the storage of equipment, roll-off bins, building materials, pipe and commercial fishing equipment. The Applicant is also proposing to include parking for trucking companies and municipalities. The Applicant is not including food trucks as part of this application.

3.2 Water Supply:

The facility water is supplied by the City of Ventura. The site currently consumes roughly one (1) hundred cubic feet (HCF) of water per month. Please see attached water bill. The Applicant is proposing to continue service with the City.

3.3 Sewage Disposal:

There is existing sewage disposal service provided by Ojai Sanitation. The Applicant is proposing to continue using the existing restrooms for tenants.

3.4 Groundwater Resources:

Groundwater Quantity: The Contractors Service & Storage Area does not use water as part of daily operations. The Transportation Services Area uses minimal water for vehicle rinsing. Water is generally used for existing restrooms and dust control. No increase in groundwater usage is proposed for the Project; therefore no impacts to groundwater quantity are expected.

Groundwater Quality: No change to water use is proposed; therefore, no impacts to groundwater quality are expected.

3.5 Surface Water Quality:

---The project will not add any impervious surface area. No impacts to surface water quality are expected as a result of this project.

Enclosed for your review are the following documents:

- Plans
- Location Map

Please review the project application materials included with this request, and provide information regarding concerns you may have about the proposed project.

Provide any comments or questions to me no later than September 28, 2016. If you have questions or need additional time to review the project, please contact me at 805-654-2467 or kristina.boero@ventura.org prior to the requested response date. The Planning Division will consider a non-response to this letter as an indication that the agency you represent does not wish to comment on the proposed development at this time. Please contact the case planner if you wish to be sent copies of formal correspondence regarding the project, a notice informing you of the opportunity to comment on the draft environmental document for this project (if one is prepared), and/or a notice of the public hearing.

Sincerely,



Kristina Boero, Associate Planner
Commercial and Industrial Permits Section Ventura County Planning Division

Encl.: Project Application Materials

REMEDIAL ACTION COMPLETION CERTIFICATION

March 12, 2012

File #05021

Mr. John Moeller
Petrochem Development 1, LLC
6591 Collins Drive, Suite E11
Moorpark, CA 93021

FUELING FACILITY — USA PETROCHEMICAL PLANT, 4777 CROOKED PALM DRIVE, VENTURA

This letter confirms the completion of a site investigation and corrective action for the underground storage tanks located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank site is in compliance with the requirements of the Health and Safety Code (HSC) Section 25299.37, subdivisions (a) and (b) and with corrective action regulations adopted pursuant to HSC Section 25299.77 and that no further action related to the petroleum release(s) at the site is required.

Please note that claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund that are more than 365 days (one year) after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to HSC Section 25299.57, subdivision (k) (reopened UST case); or

- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

This notice is issued pursuant to HSC, Section 25299.37, subdivision (h).

If you have any questions, please call Dave Salter at 805/662-6512.



WILLIAM C. STRATTON, DIRECTOR
ENVIRONMENTAL HEALTH DIVISION
RESOURCE MANAGEMENT AGENCY

c: Mr. Charles Miller, Petrochem Development 1, LLC

C05021

Case Closure Summary

Leaking Underground Fuel Storage Tank Program

Date: 02/15/2012

I. Agency Information

Agency name: Ventura County Environmental Health	Address: 800 South Victoria Avenue
City/State/ZIP: Ventura, CA 93009-1730	Phone: 805.662.6511
Responsible staff person: David C. Salter	Title: Environmental Health Specialist III

II. Case Information

Site facility name: Fueling Facility – USA Petrochemical Plant				
Site facility address: 4777 Crooked Palm Road, Ventura				
RB LUSTIS Case No: 05021	Local Case No: C05021	LOP Case No: C05021		
URF filing date 09/15/05	SWEEPS No: N/A			
Responsible Parties	Addresses	Phone Numbers		
John L. Moeller	Petrochem Development 1, LLC	805 299-8200		
	6591 Collins Drive, Suite E11			
	MOORPARK, ca 93021			
Tank No.	Size in Gal	Contents	Closed In-place/Removed	Date
The USTs associated with the fueling facility on the Petrochemical site were removed before the release that precipitated this LUFT case was discovered. This case addresses contamination discovered during removal of 3 fuel dispenser islands pertaining to the former fueling facility.				

III. Release and Site Characterization Information

Cause and type of release: Unknown			
Site characterization complete?	Yes	Date approved by oversight agency	09/08/11
Monitoring Wells installed?	Yes	Number	18
		Proper screened interval?	Yes
Shallowest GW depth bgs:	3.71	Deepest depth:	19.72
		Flow direction	SW @ ~ 0.005 ft/ft
Most sensitive current use: facility is inactive			
Are drinking water wells affected?	No	Aquifer name:	NA
Is surface water affected?	No	Nearest/affected SW name	NA
Off-site beneficial use impacts (addresses/locations): None			
Report(s) on file?	Yes *	Where are reports filed?	VCEHD LUFT Files
Treatment and Disposal of Affected Material			
Material	Amount (Include units)	Action (Treatment or Disposal w/Destination)	Date
Soil	±800 yd ³ *	Aerated on site. COCs in confirmation samples all ND	06/29/05
Soil	±3,200 yd ³ *	Aerated on site. COCs in confirmation samples all ND	06/14/06
	* Excavated soil piles were combined prior to confirmation sampling		

Case Closure Summary

Leaking Underground Fuel Storage Tank Program

III. Release and Site Characterization Information (Continued)

Maximum Documented Contaminant Concentrations - - Before and After Cleanup									
Contaminant	Soil (ppm)		Water (ppb)		Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gasoline)	14,300	10,000	17,000	ND	Benzene	368	138	4,200	ND
MTBE	21	ND	320	27	Toluene	3,990	497	500	ND
DIPE	ND	ND	ND	ND	Ethylbenzene	557	140	1800	ND
TBA	ND	ND	ND	ND	Xylenes	2,850	779	840	ND
ETBE	ND	ND	ND	ND	ethanol	ND	ND	ND	ND
TAME	ND	ND	ND	ND	TPH (diesel)	9,489	2,340	1700	ND

All "Before" concentrations are the maximums detected. Water "After" concentrations are the maximums detected in the 4th quarter 2010 samples, the most recent samples collected. Soil "After" concentrations are the maximums detected in final confirmation samples collected from the excavation on November 10, 2010.


This site experienced 9 remedial and/or assessment events which resulted in installation of 5 monitoring wells, 2 piezometers, 13 borings, and 85 "grab" samples. Approximately 3,000 cubic yards of contaminated soil were excavated and stockpiled on site. Other than natural attenuation, the excavated soil experienced no active remedial efforts. COC concentrations in soil have decreased 30% (TPHg) to 100% (MTBE). COCs in water have decreased from 92% (MTBE) to 100% (all other COCs). Final confirmation samples from the soil stockpile were all ND.

A health based risk assessment using the maximum detects in the most recent groundwater samples and the Maximum detects in the final excavation confirmation samples calculated a risk of 9.3×10^{-7} and a hazard index of 1.4×10^{-2} for a residential scenario. Both results are acceptable.

IV. Closure

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan?		Yes
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan?		Yes
Do cleanup levels exceed Regional Board requirements?	No	Identify: NA
Rationale for exceeding RB requirements: NA.		
Does corrective action protect public health for current land use?		Yes
Site management requirements: None		
Should corrective action be reviewed if land use changes? No		
Monitoring wells Decommissioned?	No	Number Decommissioned: 0 Number Retained 18
List enforcement actions taken: None		List enforcement actions rescinded: None

VI. Local Agency Representative Data

Name: David C. Salter	Title: Environmental Health Specialist III
Signature: 	Date: 03/10/12

VI. RWQCB Notification

Date Submitted to RB Executive Officer:	RB Response:	
RWQCB Staff Name:	Title:	Date:
Additional Comments, Data, Etc.		

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file. (8/94)

**LUFT SITE CORRECTIVE ACTION/
CLOSURE CHECKLIST**

SITE ID: C05021

SITE NAME: U S A Petrochemical Plant – former fueling facility

SITE LOCATION: 4777 Crooked Palm Drive, Ventura, California

GROUNDWATER SITE – RWQCB OVERSIGHT
 SOIL ONLY SITE – VCEHD ONLY

EDF UP TO DATE?
 MTBE SAMPLING CONDUCTED? IF NOT, WHY?
 MTBE IN GROUNDWATER?
 MTBE IN SOIL?
 NO MTBE IN SOIL OR GROUNDWATER?

LIST OF LAND OWNERS RECEIVED?
 SINGLE PROPERTY OWNER
 NOTIFICATION SENT TO LAND OWNERS BY R.P.? DATE: NA
 30-DAY COMMENT PERIOD (UNLESS NOTIFIED BY PROPERTY OWNERS)

RBCA CONDUCTED ON RESIDUAL CONTAMINATION – SUMMARY ATTACHED
 PASSES RESIDENTIAL?
 PASSES COMMERCIAL?
 DOES NOT PASS RBCA?

SITE VISIT
BY: D C SALTER
DATE: 09/08/08

ENCLOSURES: CLOSURE JUSTIFICATION, CASE CLOSURE SUMMARY

<input checked="" type="checkbox"/>	PROJECT MANAGER	<u>[Signature]</u>	DATES: <u>02/22/12</u>
<input checked="" type="checkbox"/>	TECHNICAL REVIEW	<u>[Signature]</u>	<u>3/6/12</u>
<input checked="" type="checkbox"/>	MANAGER APPROVAL	<u>[Signature]</u>	<u>3/6/12</u>

COMMENTS:
Petrochem Development 1, LLC, the Responsible Party, is the sole owner of the subject property.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

Via Electronic Mail

Mr. John Moller
Managing Member
Petrochem Development I, LLC
6591 Collins Drive, E-11
Moorpark, CA 93021

Re: Final Cleanup Report Former Tank G Area Former USA Petrochem Refinery 4777 Crooked Palm Road, Ventura, CA

Dear Mr. John Moller,

Thank you for working with the U.S. Environmental Protection Agency Region 9 (USEPA) to address the cleanup of polychlorinated biphenyls found at the former Petrochem Refinery located at 4777 Crooked Palm Road, Ventura, CA 93021 (site). USEPA hereby accepts the subjects April 27, 2017 *Final Cleanup Report Former Tank G Area* (closure report) as a demonstration that Petrochem Development I, LLC (Petrochem) has complied with the USEPA approved PCB cleanup requirements. USEPA specified the cleanup requirements in the February 16, 2016 approval letter *Submittal of PCB Cleanup Plan Former USA Petrochem Refinery*. USEPA acknowledged the site is still undergoing remediation efforts in and around the former compressor building as well PCB investigations of other potentially contaminated areas. This letter applies to the Former Tank G area only.

USEPA accepts the data and analyses presented as adequate to support our decision for no further regulatory action in the Former Tank G area only.

The USEPA thanks Petrochem for a complete and timely implementation of the approved cleanup plan. If any questions regarding this letter please contact George Randell at 415.972.3439. Thank you for your cooperation.

Sincerely,

George Randell

George Randell, Environmental Engineer
Land Division

County of Ventura
Planning Director Hearing
PL16-0118

Exhibit 9, Attachment 4 - April 27, 2017 Letter from the United States Environmental Protection Agency

Final Cleanup Report Former Compressor Building

**Former USA Petrochem Facility
4777 Crooked Palm Road
Ventura, California**



Prepared for:

**Petrochem Development I, LLC
6591 Collins Drive, #E11
Moorpark, CA 93021**

July 12, 2018

**County of Ventura
Planning Director Hearing
PL16-0118**

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Attachment A

Data Validation

Attachment B

Laboratory Analytical Reports



Executive Summary

The former USA Petrochem facility located at 4777 Crooked Palm Road, Ventura, California has been subject to various decommissioning, demolition and cleanup activities. Polychlorinated Biphenyls (PCBs) were identified during decommissioning of the former Compressor Building previously operated by the Shell Chemical Company. A formal investigation was launched, resulting in the development and implementation an iterative, phased cleanup plan that was submitted to, and approved by, the USEPA. The cleanup plan was designed to determine the source, extent and location of PCBs, and was revised and updated over the course of the investigation as samples were collected and additional materials or areas of concern were identified. PCBs were ultimately identified in a variety of matrices, including in residues on building materials, in piping, on equipment, asphalt, and concrete, and in soil and groundwater samples collected proximate to the former Compressor Building location. PCB concentrations in some matrices were above action levels established in the cleanup plan. These concentrations were managed, remediated and subject to proper waste classification and disposal as described in the report below.

The source of the PCBs present at the former Compressor Building has been determined to be legacy contamination from the historical operations of the Compressor Building associated with agricultural chemical manufacturing by the Shell Chemical Company.

The PCB investigation and cleanup efforts were performed in phases. Prior to demolition, building materials and equipment were investigated and sampled to identify PCBs. The investigation expanded as the building was demolished and cleared away, exposing asphalt, concrete, soil and shallow groundwater. Remediation and waste management protocols identified in the approved cleanup plan were implemented throughout these phases.

PCBs identified in soil at concentrations in excess of action levels resulted in the areal and/or vertical expansion of the investigation areas as described in this report. The PCB investigation and remediation of the Compressor Building is considered complete as documented below.

It is important to note that the primary focus of the work performed at the Compressor Building centered on the identification and management of PCBs. PCBs are subject to regulatory oversight, direction and management of the USEPA (Region 9).

At the time of this report, the PCB investigation is now complete and EPA is being petitioned to accept a no further action determination for PCB contamination at the former Compressor Building.

In addition to PCBs, other constituents of concern (petroleum hydrocarbons, cadmium and lead) were identified at certain locations in soil or groundwater during the PCB cleanup. These compounds were investigated and remediated concurrently with the PCB remediation work. These contaminants have been successfully remediated and no further action appears to be required. However, these contaminants will be subject to other lead agency oversight and direction (i.e., State agencies).



1.0 Introduction

1.1 Background

Following the initial discovery of PCB contamination at the former Compressor Building in October 2013, samples were collected in 2014 from the loose soil in the building crawl space and exterior perimeter of the building that revealed the presence of PCBs in excess of the EPA Regional Screening Level (RSL).¹ Based on these initial characterization results, a *PCB Cleanup Plan* was prepared and submitted to USEPA Region 9 (EPA) in July 2015. A revised *PCB Cleanup Plan* (Revision 1), based on EPA comments, was approved by EPA August 26, 2015, and work was initiated in October 2015.²

The *PCB Cleanup Plan* described an iterative approach to address PCB contamination at the Compressor Building site. To-date, five addenda have been published for the *PCB Cleanup Plan* and have been authorized by EPA. The work described in each of these addenda **has been addressed prior to publication of this Final Cleanup Report:**

1. An interim cleanup activity was initially performed to remove Bulk PCB Remediation Waste (loose soil and gross residues) to permit subsequent characterization sampling of porous and non-porous surfaces underlying these materials. This work was completed in February 2016. See Section 2.5, below, for further details regarding the interim cleanup activity.
2. A limited characterization sampling effort focusing on porous coatings (i.e., paint) on non-porous surfaces (metal) was conducted following the interim gross residue removal described above. The intent of this sampling was to determine if paint present on metal surfaces throughout the Compressor Building possessed PCB contamination warranting further decontamination or offsite disposal. This sampling showed that the painted steel diamond plate floor coverings contained PCB residues up to 4.62 mg/kg. Remaining samples of other painted metal surfaces did not contain PCBs. These findings were documented in *Addendum No. 1 (Rev 2)* to the *PCB Cleanup Plan* dated April 13, 2016.

This painted steel diamond plate was removed and disposed offsite as non-hazardous PCB Remediation Waste at a municipal solid waste landfill during demolition in accordance with the *PCB Cleanup Plan*. Other painted metal was salvaged as scrap metal during demolition. These activities are described below in Section 3.4.1.

3. Corrugated asbestos-cement panels (Transite™) present on the exterior and roof of the Compressor Building was evaluated by wipe sampling to determine if PCB impacts were present. No PCBs were found and these materials subsequently underwent asbestos abatement and offsite disposal during the interim cleanup activity described in item one above. *Addendum No. 2 (Rev 1)* dated December 1, 2015 documented these findings.
4. Oil contained in the two remaining compressors inside the Compressor Building was sampled and the interior surfaces of the compressors were wipe sampled to assess if PCBs were present. No PCBs were found and no further decontamination of the compressor interiors was determined to be required. This work was documented in *Addendum No. 3* to the *PCB Cleanup Plan* November 17, 2015.

¹ *PCB Investigation Report, Compressor Building Soil, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, CA, Dudek, October 2014.*

² *PCB Cleanup Plan, Former Compressor Building, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, California, Revision 1 dated July 14, 2015.*



Additional evaluation of oily residues contained within compressor flywheel bearings contained in separate housings from the main compressors was performed during demolition. PCBs were found during these evaluations and were subsequently removed and disposed during demolition as documented in Section 3.4.2, below.

5. A number of pipes were identified throughout the Compressor Building that required evaluation to determine if they contained PCB residues. As an alternative to sampling the interiors of pipes prior to demolition, Destrier proposed to inspect pipes as they were demolished and processed for removal from the facility during demolition. This proposal was documented in *Addendum No. 4* to the *PCB Cleanup Plan* dated November 11, 2015.

During demolition, pipes were visually inspected and those that contained oily material were segregated and sampled to ascertain if the pipe(s) contained PCBs. Some pipes were found to contain PCBs during these evaluations and were subsequently removed and disposed during demolition as documented below in Section 3.4.3.

6. *Addendum No. 5* to the *PCB Cleanup Plan* was submitted to, and approved by, EPA in May 2016. This addendum included a plan for PCB sampling and analysis to characterize the soil, concrete and asphalt (porous) surfaces that were decontaminated during the interim cleanup activity described above. This characterization effort also addressed waste profiling and characterization for paint-related cadmium (Cd) and lead (Pb) contaminants present on these surfaces at the Compressor Building. The post-decontamination characterization was conducted in May and June 2016. Results from this characterization sampling was reported to EPA via a subsequent revision (Revision 2) to Addendum No. 5.³



Former Compressor Building

³ Addendum No. 5, *PCB Cleanup Plan, Former Compressor Building, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, California, Revision 2*, Destrier, Inc., dated August 11, 2016.



1.2 Purpose

In addition to the results of the post-decontamination characterization conducted in May and June 2016 described above, *Addendum No. 5 (Rev 2)* also provided a remediation plan and disposal recommendations to address the PCB, Cd and Pb contaminated areas identified during characterization sampling, a plan to demolish the Compressor Building and surrounding features to provide access to remediation areas, further confirmation sampling plans for areas to be remediated, and a plan for the further characterization of soil underlying the Compressor Building. Demolition and remediation in accordance with Revision 2 was performed between September 2016 and September 2017. This *Final Cleanup Report* documents these activities and presents the findings of the confirmation sampling activities performed during remediation.



*Compressor Building Floor Deck
(Note remaining compressors)*

1.3 Project Cleanup Levels

1.3.1 PCB Cleanup Levels

EPA publishes risk-based screening levels for PCBs for both residential and industrial land use scenarios. PCB cleanup levels for this project for materials to remain on site are based on the EPA Regional Screening Level (RSL) for the residential scenario of 0.24 mg/kg.⁴

References to regulatory sections or Subparts provided herein refer to the Toxic Substances Control Act (TSCA), 40 CFR Part 761, *Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions* unless otherwise specified.

⁴ United States Environmental Protection Agency Regions 3, 6, and 9 Regional Screening Levels for Chemical Contaminants at Superfund Sites; <http://www.epa.gov/risk/regional-screening-table> (Accessed 01/21/2016).



1.3.2 Cadmium and Lead Cleanup Levels

In addition to PCBs, elevated concentrations of cadmium (Cd) and lead (Pb) were found in samples collected by Destrier in 2015 to evaluate waste profile characteristics of the waste materials that would be generated and disposed offsite during cleanup operations.⁵ These samples were analyzed for PCBs, Total Petroleum Hydrocarbons (TPH), Volatile Organic Compounds (VOCs), and CAM17 metals⁶. Additional extraction and analysis of PCBs and certain metals constituents were also performed to determine if federal Toxicity Characteristic Leaching Procedure (TCLP) or California Soluble Threshold Limit Concentration (STLC) criteria may have been exceeded for these constituents.⁷

The results of these analyses demonstrated that the remediation waste contained concentrations of Cd and Pb in excess of California hazardous waste criteria (TTLIC and/or STLC). ***These metals constituents were ascertained to be the result of peeling and disturbed paint present in the Compressor Building structure. No other constituents were found to exceed California or federal hazardous waste criteria.***

The project cleanup levels for Cd and Pb for materials to remain on site are based on the California Department of Health Services (DTSC) screening levels of 5.2 mg/kg and 80 mg/kg for unrestricted/residential use, respectively.⁸

1.3.3 Groundwater Screening Levels

Analytical results for groundwater were compared to the RWQCB Tier 1 ESLs for groundwater.⁹ See Section 4.8 for further details.

1.4 Site Description

The Compressor Building (the building, the site) is located on property composed of approximately 94 acres at 4777 Crooked Palm Road in Ventura, California (see Figure 1). The building is situated in the middle of a former agricultural chemical plant (see Figure 2).

Collectively, the parcel contained a former petroleum refinery (petroleum refining units and associated former tank farms), and a former Shell Chemical Company agricultural chemical manufacturing facility (an ammonia plant, a nitric acid plant, a urea plant and associated tanks and vessels). The ammonia and urea plants were constructed in 1953. The nitric acid plant was added in 1970. The agricultural chemical plant was operated until the mid-1970s.

⁵ Addendum No. 5, PCB Cleanup Plan, Former Compressor Building, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, California, Revision 2, Destrier, Inc., dated August 11, 2016.

⁶ California Assessment Method, a suite of 17 specific metals constituents matching California-based hazardous waste disposal criteria (TTLIC and STLC), 22CCR §66261.24. CAM17 Metals includes Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Th, V, Z, and Hg.

⁷ Total metals constituents with concentrations ten times (10X) greater than their corresponding STLC criteria are generally analyzed for extractable (soluble) metals using the California Waste Extraction Test (WET) and evaluated against their STLC criteria for waste characterization purposes.

⁸ DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note Number 3, DTSC-modified Screening Levels (DTSC-SLs), June 2016.

⁹ Tier 1 Environmental Screening Levels (ESLs) for Groundwater, San Francisco Bay Regional Water Quality Control Board, February 2016 (Rev. 3).





Former USA Petrochem Refinery
4777 Crooked Palm Road
Ventura, California

Site Location Map

Source: USGS Ventura 7.5' Topographic Quad, 2012	Revision: 0	Date: 09/23/13	Figure: 1
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Former USA Petrochem Refinery
 4777 Crooked Palm Road
 Ventura, California

USA Petrochem Site Layout

Source: Google Earth Aug 2017	Revision: 1	Date: 02/26/18	Figure: 2
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The refinery crude oil processing units and tank farm were constructed around 1975, and oil processing ceased in 1984.¹⁰ The former refinery and refinery tank farm, and most features of the former agricultural chemical plant have been demolished, with the majority of remaining features to be demolished in future phases of work.

The Compressor Building was a steel-framed building with an elevated concrete floor deck located approximately six feet above the ground surface. Twelve large concrete equipment foundations were located within the building footprint. Two of the foundations contained large inactive air compressors (see photo below). The remaining foundations were bare, and it is uncertain what type of equipment or machinery was historically housed on these foundations. Information obtained from former plant personnel indicate there were a total of five compressors and an assortment of other mechanical equipment once operating in the building. The area immediately surrounding the Compressor Building included a large number of bare concrete foundations in an area partially paved with asphalt paving. Portions of the surrounding area consisted of unpaved bare soil. The former Shell Chemical Company ammonia processing unit was located immediately north of the Compressor Building. This structure consisted of a four story tall chemical manufacturing unit containing a variety of pipes and vessels supported within a structural steel framework.

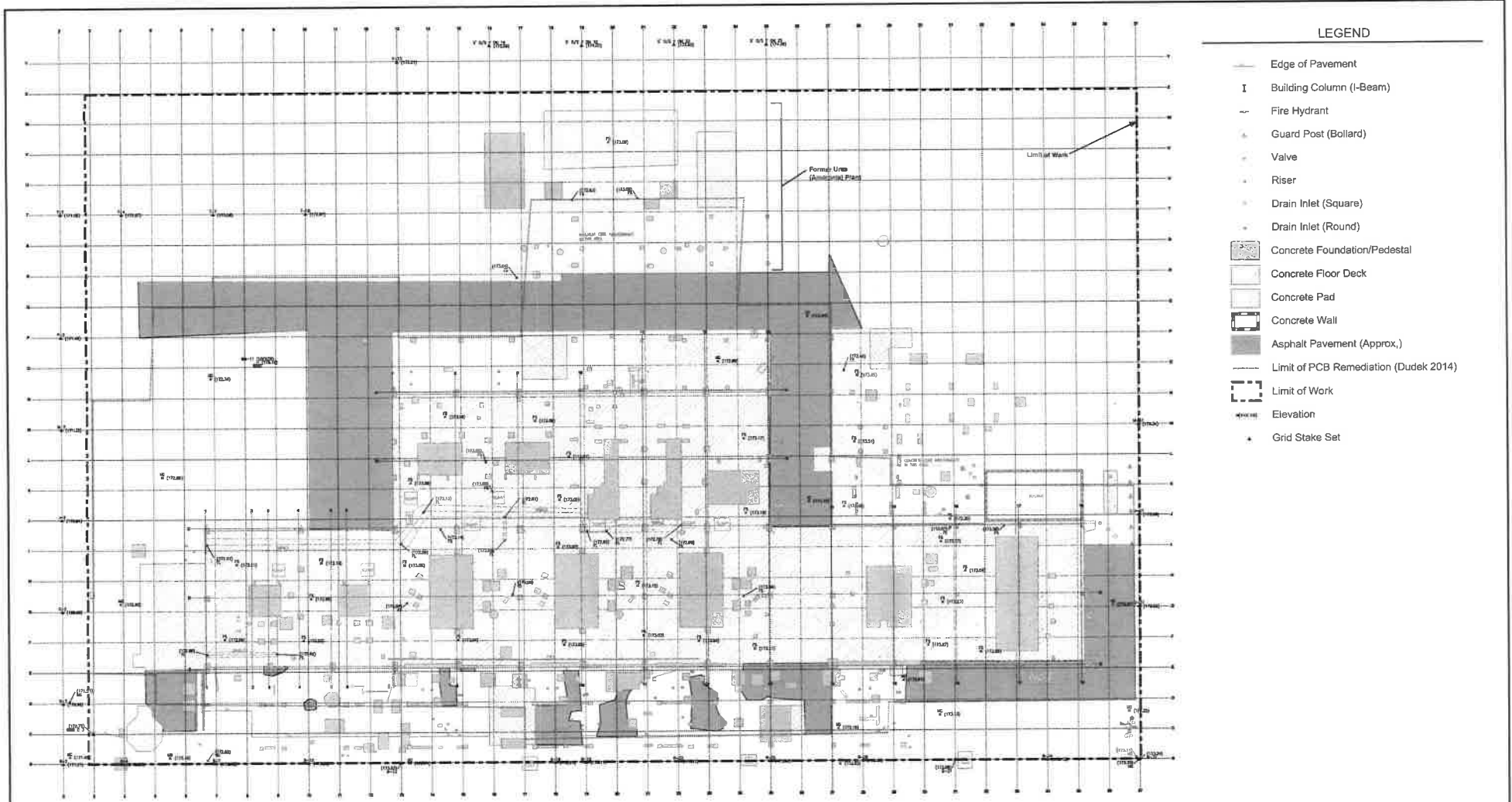
Figure 3 shows the layout of the ground floor level of the Compressor Building and surrounding area including the location of concrete foundations and asphalt paving.



Compressor No. 2

¹⁰ Preliminary Endangerment Assessment, Former USA Petroleum Facility, 4777 Crooked Palm Road, Ventura, California, Shaw Environmental, Inc., August 2005

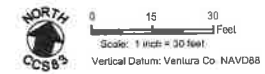




LEGEND

- Edge of Pavement
- I Building Column (I-Beam)
- Fire Hydrant
- ▲ Guard Post (Bollard)
- Valve
- Riser
- Drain Inlet (Square)
- Drain Inlet (Round)
- Concrete Foundation/Pedestal
- Concrete Floor Deck
- Concrete Pad
- Concrete Wall
- Asphalt Pavement (Approx.)
- - - Limit of PCB Remediation (Dudek 2014)
- Limit of Work
- Elevation
- Grid Stake Set

COMPRESSOR BUILDING GROUND LEVEL



	Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California		
	Compressor Building Ground Level Layout		
Source KDM Meridian Feb 2016	Revision 0	Date 07/05/16	Figure 3

2.0 Prior Characterization and Remediation Activities

2.1 Discovery of PCBs

Oily material, presumed to be compressor oil, was identified in an area under the Compressor Building crawl space during a site inspection by EPA in August 2013. The EPA responded with a request to describe “the source(s), identification, nature, and quantity of materials present in these areas”.¹¹

PCBs were unexpectedly discovered when the oily material was profiled for waste disposal. One waste profile sample obtained from a partially filled drum of oily material removed from the crawl space was found to contain 1,225 mg/kg Aroclor 1260. A profile sample collected from a roll-off bin containing sludge removed from sumps located in the crawl space contained 30 mg/kg Aroclor 1260. The remaining waste profile samples had no detectable concentrations of PCBs. EPA was notified of these findings. The oily material was removed in September and October 2013 and a summary of the removal and waste profiling activities that led to the discovery of PCBs at the Compressor Building was reported to EPA.¹²



*Oil Staining on Compressor No. 1
at Building Floor Deck Level
(part of original oily material cleanup)*



*Oil Staining on Compressor No. 1
Foundation in Crawl Space Below
(part of original oily material cleanup)*

¹¹ Request for Information Pursuant to Sections 308 and 311 of the Clean Water Act, 33 U.S.C. SS 1318 and 1321 for the USA Petroleum Refinery Site, Ventura County, CA, Information Request No. 3, USEPA Region IX Oil Program, undated document (email from Rachel Tennis 9/23/13).

¹² Response to USEPA Request for Information Pursuant to Sections 308 and 311 of the Clean Water Act, 33 U.S.C. SS 1318 and 1321 for the USA Petroleum Refinery Site, Ventura County, CA, Information Request No. 3, Destrier, Inc. Transmittal No. 334, October 25, 2013 (revised and excerpted per Transmittal 340 to EPA 12/3/13).



2.2 Initial PCB Investigation

An initial sampling plan was provided to EPA in December 2013 describing proposed sampling and analytical testing of compressor oils, oily residues, and loose soil around the base of the compressor foundations in attempt to identify the source and approximate extent of the PCBs detected in the waste material profile samples.¹³

An investigation based on the Dudek sampling plan was conducted in February 2014. The results of this investigation found the following conditions¹⁴:

- Limited samples of oil obtained from Compressor 2 found no detectable concentrations of PCBs;
- Oily residues collected from the remaining compressors and the concrete compressor foundations located in the elevated floor deck portion of the Compressor Building were found to contain PCBs in concentrations ranging from 0.55 mg/kg to 5.9 mg/kg (Aroclors 1254 and 1260). Note that the matrices contaminated with these residues primarily included painted and unpainted steel and concrete;
- Composite samples of loose soil found in proximity to the concrete compressor foundations in the crawl space area of the Compressor Building found PCBs concentrations ranging from 0.59 mg/kg to 22 mg/kg (Aroclor 1260).



Gross Residues in CrawlSpace
(Note Concrete-Filled Sump)

¹³ Initial Oil and Residue PCB Sampling Plan, Compressor Building, 4777 Crooked Palm Road, Ventura, CA, Dudek, December 2013.

¹⁴ Initial PCB Sampling Report, Compressor Building, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, CA, Dudek, February 2014.



2.3 Investigation of PCBs in Soil

The results of the February 2014 initial sampling prompted additional investigation of PCBs in the building crawl space. A series of iterative sampling events were conducted by Dudek between March and August 2014 to characterize the soil (loose sediments) present in the crawl space and surrounding the footprint of the Compressor Building. These sampling and investigation efforts were performed to characterize the extent of PCB-impacted soil (soil with a total PCB concentration >1 mg/kg) as required by §761.61(a)(2).¹⁵

The extent of PCB-contaminated soils (>1 mg/kg) extended approximately 15,900 square feet within and around the Compressor Building (see Figure 4). One area adjacent to the Compressor Foundation 2 was the only location where PCBs were identified at concentrations ≥ 50 mg/kg (and less than 500 mg/kg). This area covered approximately 484 square feet as illustrated on Figure 4.



*Dudek Crawl Space Soil Sampling
March 2014*

2.4 Interim Cleanup Activities

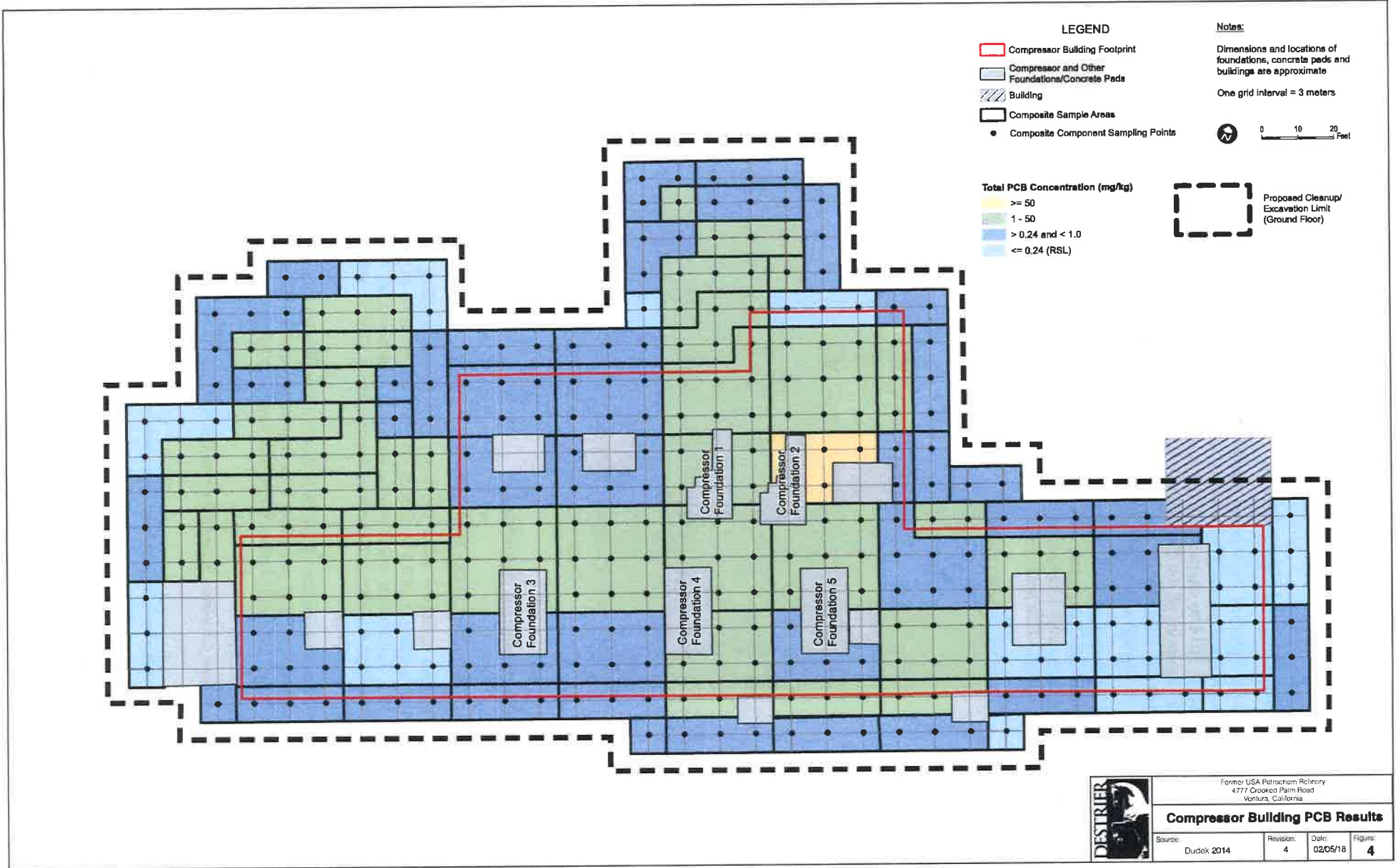
2.4.1 Bulk PCB Remediation Waste (Soil)

Composite samples collected from the loose soil in the building crawl space and exterior perimeter of the building in 2014 by Dudek revealed the presence of PCBs in excess of the EPA residential RSL. Subsequent waste profile sampling conducted by Destrier revealed that these wastes also exceeded California hazardous waste criteria (TTLC and/or STLC) for Cd and Pb (see Section 1.3.2, above).

The nature of the contamination (Bulk PCB Remediation Waste) found at that time was primarily in the form of very fine soil underlain by concrete pavement. In some areas surrounding the building, this Bulk PCB Remediation Waste was underlain by asphalt pavement or bare soil.

¹⁵ PCB Investigation Report, Compressor Building Soil, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, CA, Dudek, October 2014.





Former USA Petrochem Refinery
 4777 Crooked Palm Road
 Ventura, California

Compressor Building PCB Results

Source	Dudek 2014	Revision:	4	Date:	02/05/18	Figure:	4
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An interim cleanup operation was conducted between October 2015 and February 2016 to remove accumulations of this Bulk PCB remediation waste from the crawl space and building perimeter by scraping, shoveling, HEPA vacuuming, wet wiping and other similar methods. Areas underlain by concrete or asphalt were vacuumed clean. Areas underlain by bare soil around the perimeter of the building were vacuum-excavated approximately six inches deep. The removal of Bulk PCB Remediation Waste extended to the excavation limits shown on Figure 4 (based on the 2014 Dudek sampling).



*Loose Soil in Crawl Space
(Bulk PCB Remediation Waste)*



*Detail of Loose Soil
Note Concrete Slab Below*

2.4.2 Decontamination of Gross Residues

In addition to the loose, soil-like Bulk PCB Remediation Waste present throughout the Compressor building, various oily residues were also found on porous and non-porous substrates throughout the Compressor Building. Visible oily residues were present primarily on surfaces in the floor deck level of the building above the crawl space. Oily residues (non-liquid PCB wastes) sampled in February 2014 contained PCB concentrations ranging from 0.55 mg/kg to 5.9 mg/kg. However, due to the limited number of samples collected from these residues, these materials were presumed to contain >50 mg/kg PCBs for purposes of disposal.¹⁶

Gross accumulations of these materials were removed during the interim cleanup. Non-liquid PCBs were primarily removed by manually wiping or scraping. Additionally, oil-stained surfaces were swabbed with a solvent (PODF)¹⁷ or cleaned using the “double wash/rinse” method defined in Subpart S.¹⁸ Miscellaneous porous materials potentially contaminated with PCBs such as wood, foam and fiberglass insulation, and plastic and rubber items such as hoses and gaskets were removed and directly disposed offsite in a hazardous waste landfill in lieu of characterization or decontamination.¹⁹

¹⁶ §761.61(a)(5)(i)(B)(2)(i)

¹⁷ §761.79(c)(2)(i)

¹⁸ §761.79(c)(2)(ii)

¹⁹ §761.61(a)(5)(iii), §761.61(a)(5)(i)(B)(2)(i) & §761.61(a)(5)(i)(B)(2)(iii)



2.4.3 Management of Wastes Generated During Interim Cleanup

PCB concentrations of Bulk PCB Remediation Waste and gross residues removed during the interim cleanup operation were based on sample results obtained by Dudek during site characterization events in 2014. During this characterization, the Bulk PCB Remediation Waste was found to exceed 50 mg/kg PCBs in one limited area in the crawl space of the Compressor Building (see Section 2.4). This area was cleaned separately and the waste from this area was segregated and disposed as PCB waste (≥ 50 mg/kg). The remainder of the Bulk PCB Remediation Waste in the crawl space was found to be less than 50 mg/kg and was designated for disposal as < 50 mg/kg PCBs. The gross residues (oily residues) found in the Compressor Building underwent limited sampling during the Dudek characterization efforts. These samples were less than 50 mg/kg but based on the limited number of samples, these wastes were disposed as PCB waste (presumed ≥ 50 mg/kg).²⁰



*Decontamination of Gross Residues
in Floor Deck Area During Interim Cleanup
(note painted steel diamond plate floor coverings)*

For materials that may have potentially remained on site during demolition (e.g., soil and asphalt) Cd and Pb analytical results were compared to the corresponding project cleanup standards for these constituents (see Section 1.3.2). Materials that were intended to be disposed offsite during demolition were evaluated for Cd and Pb concentrations in relation to California and federal hazardous waste classification criteria (TTLC, STLC and TCLP).

Based on these waste profiling results, two waste streams were identified for the wastes generated during the interim cleanup. The first waste stream was Bulk PCB Remediation Waste < 50 mg/kg PCBs removed from the crawl space during the interim cleanup. This waste stream was found to exceed California hazardous waste criteria for Cd and Pb and was therefore characterized as **Non-RCRA Hazardous Waste Solid (Cd, Pb)** under California rules.

²⁰ §761.61(a)(5)(i)(B)(2)(i)



The second waste stream consisted of materials known or presumed to exceed 50 mg/kg PCBs. Bulk PCB Remediation Waste found by Dudek to exceed 50 mg/kg PCBs and gross residues decontaminated during the interim cleanup were disposed under this waste stream. This waste stream also exceeded California hazardous waste criteria for Cd and Pb.

These wastes were transported for offsite (California) hazardous waste disposal at the Waste Management Kettleman Hills Landfill under profile numbers CA608682 and CA608683, respectively. Approximately 236.7 tons of *Non-RCRA Hazardous Waste Solid (Cd, Pb)* was generated under profile CA608682 and approximately 8.14 tons of *Bulk PCB Remediation Waste ≥50 mg/kg (TSCA)* was generated under profile CA 608683 during the interim cleanup operation.

2.5 Soil and Asphalt Characterization

2.5.1 Soil and Asphalt Sampling

Following the interim cleanup activity described in Section 2.5, perimeter soil and asphalt areas were characterized using a three meter (3 m), square-based grid system overlain over the former footprint of the Compressor Building based on the procedures for characterizing a PCB Remediation Waste site described in Subpart N.²¹ This characterization work was conducted in May and June 2016 and reported in Revision 2 to Addendum No. 5 of the *PCB Cleanup Plan*.²²

2.5.2 Soil and Asphalt PCB Characterization Results

One hundred eighty-five discrete surface soil and asphalt samples were collected from the perimeter of the Compressor Building (97 soil samples and 88 asphalt samples). Additionally, nineteen randomly selected duplicate samples were collected (9 soil and 10 asphalt).

Eighty-three of the 185 sample locations exceeded the project action level for PCBs (45%). Thirty-nine of the 185 locations exceeded the TSCA High-Occupancy criteria of 1.0 mg/kg (21%). PCB concentrations ranged from 0.00604 mg/kg to 43.7 mg/kg. No samples contained ≥50 mg/kg PCBs. All samples with detectable concentrations of PCBs contained PCB 1260. Two samples also contained PCB 1242 and five samples also contained PCB 1248.

Figure 5 illustrates the PCB results for the perimeter soil and asphalt samples.

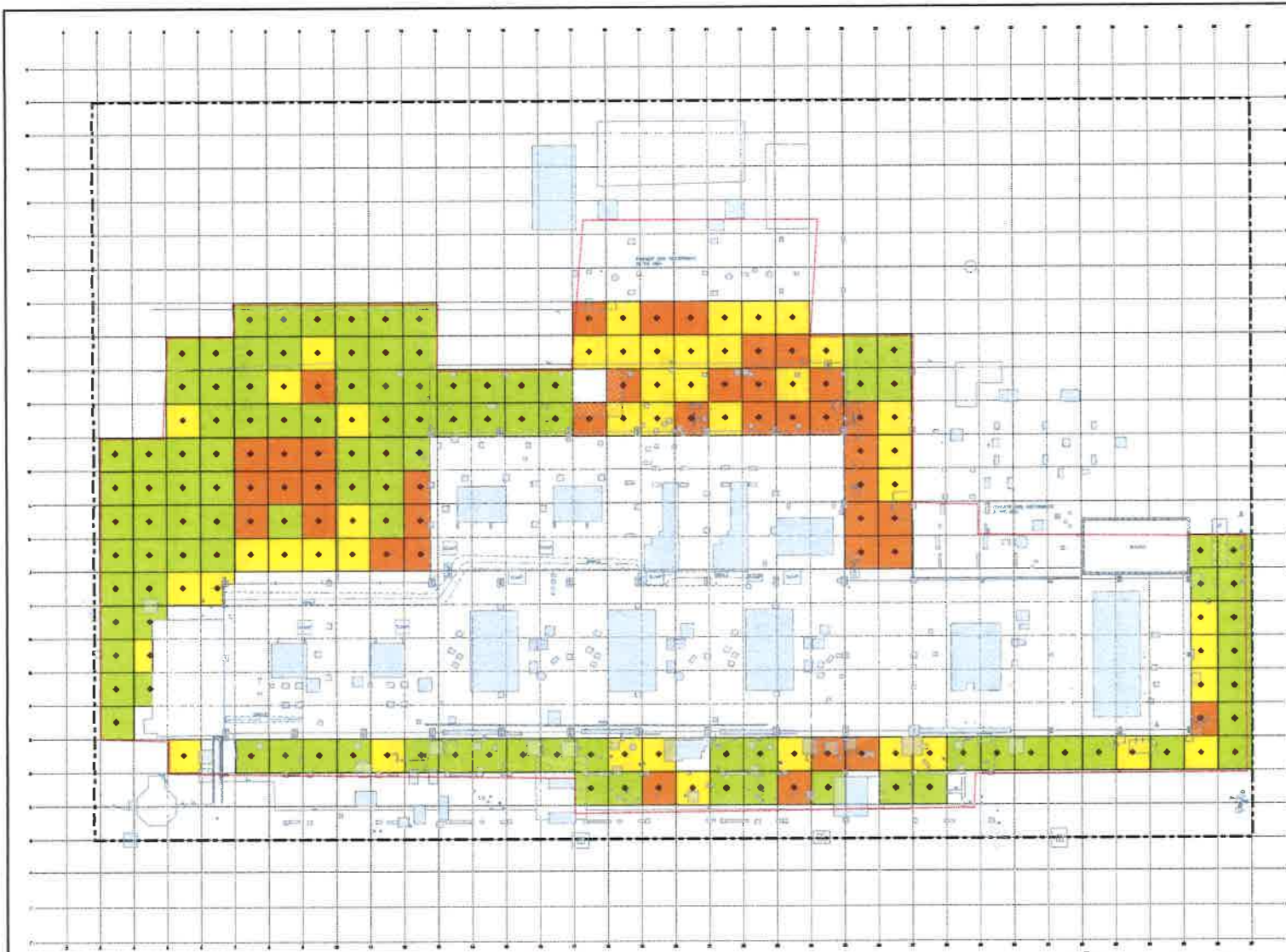
2.5.3 Soil and Asphalt Cd and Pb Characterization Results

Waste profiling performed prior to the interim cleanup activity revealed that gross residues contained concentrations of Cd and Pb in excess of California hazardous waste criteria (TTLC and/or STLC). These metals constituents were ascertained to be the result of peeling and disturbed paint present in the Compressor Building structure (see Section 1.3.2). Accordingly, a subset of the samples scheduled for PCB analysis during the 2016 characterization program were selected for Cd and Pb analysis to characterize these contaminants (in materials that may remain on site such as soil) as well as to establish waste profile characteristics for any materials that may be subsequently excavated and disposed offsite. Initially 10% of the perimeter soil and asphalt samples were randomly selected for Cd and Pb analysis (19 samples plus 2 duplicates). Of these 21 samples, 5 were soil samples and 16 were asphalt samples.










²¹ §761.61(a)(2) and §761.280-761.298

²² Addendum No. 5, *PCB Cleanup Plan, Former Compressor Building, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, California, Revision 2*, Destrier, Inc., dated August 11, 2016.







LEGEND

-  Concrete Foundation/Pedestal (Former)
-  Concrete Pad (Former)
-  Concrete Wall (Former)
-  Original Limit of Work
-  Limit of PCB Remediation (Dudek 2014)
-  Soil/Asphalt Sample Location
-  Sample Result < 0.24 mg/kg PCBs
-  Sample Result ≥ 0.24 mg/kg PCBs
-  Sample Result ≥ 1.0 mg/kg PCBs

Notes: Results shown on this figure represent samples collected during characterization sampling conducted in May and June 2016. These results were originally reported in Addendum No. 5, PCB Cleanup Plan, Former Compressor Building, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, California, Revision 2, dated August 11, 2016.

COMPRESSOR BUILDING GROUND LEVEL


 Scale: 1 inch = 30 feet
 Vertical Datum: Ventura Co. NAVD88
 Grid Interval = 3 meters

	Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California		
	Perimeter Soil and Asphalt PCB Characterization Results		
	Source:	Revision:	Date:
KDM Meridian Feb 2016	0	02/12/18	Figure 5

Cd results obtained from the 21 samples analyzed ranged from 0.5 mg/kg to 7.34 mg/kg. Only one of these results exceeded the project cleanup criteria for Cd (sample MN25.5). This sample location was subsequently addressed during soil remediation (see Section 5.2.1). **All of the Cd results from this characterization activity were below state and federal waste classification criteria for Cd.** No additional analyses or extractions for Cd were performed since none of the results exceeded 10X STLC for Cd.

Upon receipt of initial Pb results, a large number of additional samples were selected for Pb analysis to provide additional data regarding waste profile characteristics and in-situ characterization of Pb in soil. Of the total 204 samples collected from the perimeter soil and asphalt (185 locations plus 19 duplicates), 164 were ultimately selected for total Pb analysis (150 locations plus 14 duplicates; 106 soil and 58 asphalt).



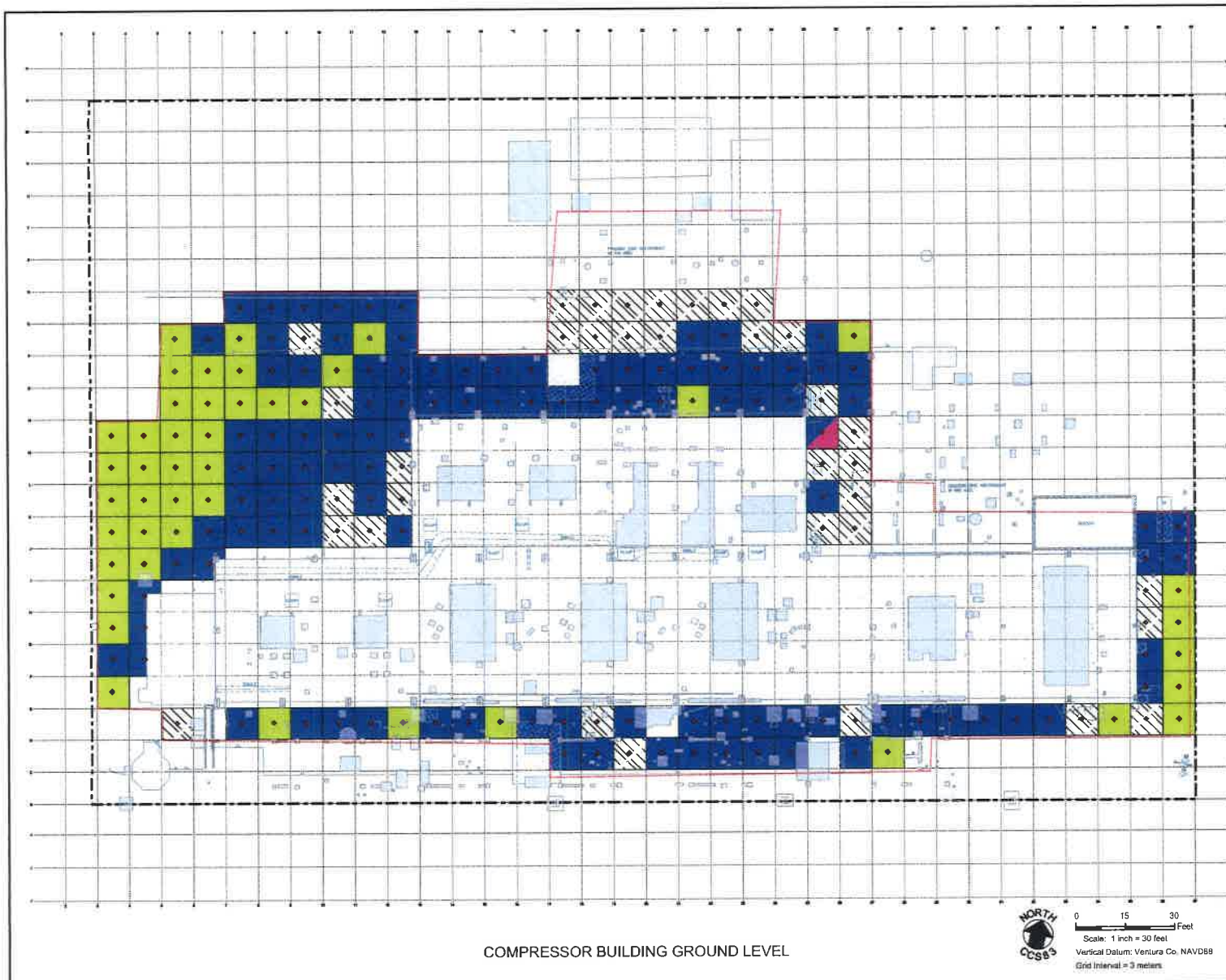
Asphalt Sample Collection

Total Pb analyses for **asphalt** samples resulted in concentrations ranging from 21.3 mg/kg to 9,860 mg/kg. Forty-four of the 58 asphalt samples (76%) exceeded the project action level and seven (12%) exceeded the 1,000 mg/kg TTLC. The majority of the asphalt samples analyzed for total Pb exceeded 10X STLC (50 of 58; 86%). STLC Pb analysis performed on ten of the original fifteen asphalt samples randomly selected for Cd and Pb analysis all were in excess of the 5 mg/l STLC Pb criterion. Federal TCLP Pb hazardous waste criteria (5.0 mg/l) were not exceeded for any of the limited number of asphalt samples analyzed.

Total Pb analysis performed on **soil** samples showed concentrations ranging from 9.2 mg/kg to 6,400 mg/kg. Twenty-one samples (20%) exceeded TTLC Pb criteria, seventy-two samples (68%) exceeded the project action level, and seventy-eight samples (76%) exceeded 10X STLC. STLC Pb analyses were performed on five soil samples (four samples and one duplicate). Two of the four sample locations (plus one duplicate) exceeded the STLC Pb California hazardous waste criterion. Federal TCLP Pb hazardous waste criteria were not exceeded for any of the twelve samples analyzed.

Figure 6, below, shows the Cd and Pb results for the perimeter soil and asphalt samples in graphical format.





COMPRESSOR BUILDING GROUND LEVEL



0 15 30 Feet
 Scale: 1 inch = 30 feet
 Vertical Datum: Ventura Co. NAVD89
 Grid Interval = 3 meters

LEGEND

- Concrete Foundation/Pedestal (Former)
- Concrete Pad (Former)
- Concrete Wall (Former)
- Original Limit of Work
- Limit of PCB Remediation (Dudek 2014)
- Soil/Asphalt Sample Location
- Sample Result < 80 mg/kg Pb
- Sample Result ≥ 80 mg/kg Pb
- No Pb Analysis Performed
- Sample Result ≥ 5.2 mg/kg Cd

Notes: Results shown on this figure represent samples collected during characterization sampling conducted in May and June 2016. These results were originally reported in Addendum No. 5, PCB Cleanup Plan, Former Compressor Building, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, California, Revision 2, dated August 11, 2016.



Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California			
Perimeter Soil and Asphalt Cd and Pb Characterization Results			
Source KDM Meridian Feb 2016	Revision 0	Date 02/12/18	Figure 6

2.6 Concrete Characterization Sampling

2.6.1 Concrete Sampling Methodology

Three discrete concrete areas of the Compressor Building were addressed: the monolithic concrete compressor and equipment foundations, ground-level concrete in the crawl space and around the building perimeter, and the elevated concrete floor deck.²³

The twelve monolithic, three-dimensional compressor and equipment foundations that rose from the crawl space area and penetrated the floor deck were the most highly impacted with oily residues prior to decontamination during the interim cleanup operation. These foundations required adapting a coordinate-based random sampling approach that addressed the three-dimensional shape of the foundation monoliths to obtain representative samples from the four vertical sides and the horizontal top surface.²⁴

The concrete present at ground level in the crawl space area of the building and the two-dimensional, elevated building floor deck area were also characterized to evaluate PCB concentrations. The concrete surfaces in these areas appeared to be most highly impacted nearest the concrete equipment foundations and appeared less impacted (stained or damaged) further away from these foundations. These surfaces were also decontaminated during the interim cleanup activity. Based on these observations, a characterization sampling approach using a modified (wider spaced) six meter grid-based approach was used rather than the 3 m grid prescribed in Subpart N based on the fact that concrete was scheduled to be removed and disposed offsite during demolition rather than to remain on site.²⁵



Perimeter Soil Sampling

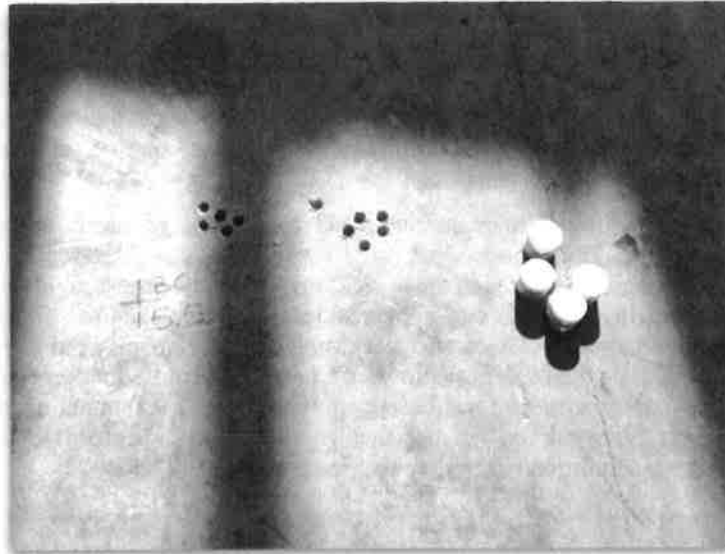
²³ Addendum No. 5, PCB Cleanup Plan, Former Compressor Building, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, California, Revision 2, Destrier, Inc., dated August 11, 2016.

²⁴ §761.280(c)(2)

²⁵ §761.61(a)(2) and §761.280-761.298



Concrete samples were collected using the methods described in *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs)*.²⁶ A hammer drill and disposable steel masonry bits were used to obtain a cluster of surface samples 3/4 inch (1.91 cm) in diameter and approximately 1 inch (2.5 cm) deep.²⁷



Typical Concrete Sampling Location

2.6.2 Concrete PCB Characterization Results

Fifty-six discrete concrete samples and six random duplicates were collected from the twelve existing concrete equipment foundations located in the Compressor Building. Twelve of the 56 sample locations contained PCB 1260 in excess of the project action level (21%). Seven of the 56 locations exceeded the TSCA High-Occupancy criteria of 1.0 mg/kg (12.5%). One of the sample locations collected from the north face of Foundation “L”, *FNDL-N*, exceeded 50 mg/kg. Concentrations ranged from ND >0.017 mg/kg to 291 mg/kg. Of the twelve individual foundations sampled, five foundations contained one or more samples that exceeded project action levels.

Concrete samples were collected from a total of fifty-three discrete crawl space and perimeter concrete locations (ground level). Six random duplicates were also collected. Thirty-two of the 53 locations sampled (60%) exceeded the project action level of 0.24 mg/kg for PCB 1260. Seventeen locations exceeded the TSCA High-Occupancy criteria of 1.0 mg/kg (32%). Additionally, three of these samples exceeded 50 mg/kg. PCB concentrations ranged from <0.17 mg/kg to 672 mg/kg.

²⁶ *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs)*, USEPA Region I, SDMS DocID 484692, May 2011.

²⁷ §761.286



Twenty-eight discrete concrete samples and three duplicates were collected from the Compressor Building (elevated) floor deck locations. Eleven of the 28 locations (39%) were found to exceed project action levels for PCB 1260 (eleven samples and one duplicate). One sample exceeded the TSCA High-Occupancy criteria of 1.0 mg/kg. PCB concentrations ranged from 0.00558 mg/kg to 1.27 mg/kg. Figure 7 illustrates the ground level concrete PCB sampling results (crawl space, perimeter and equipment foundations).



Concrete Hammer Drill Sampling

2.6.3 Concrete Cd and Pb Characterization Results

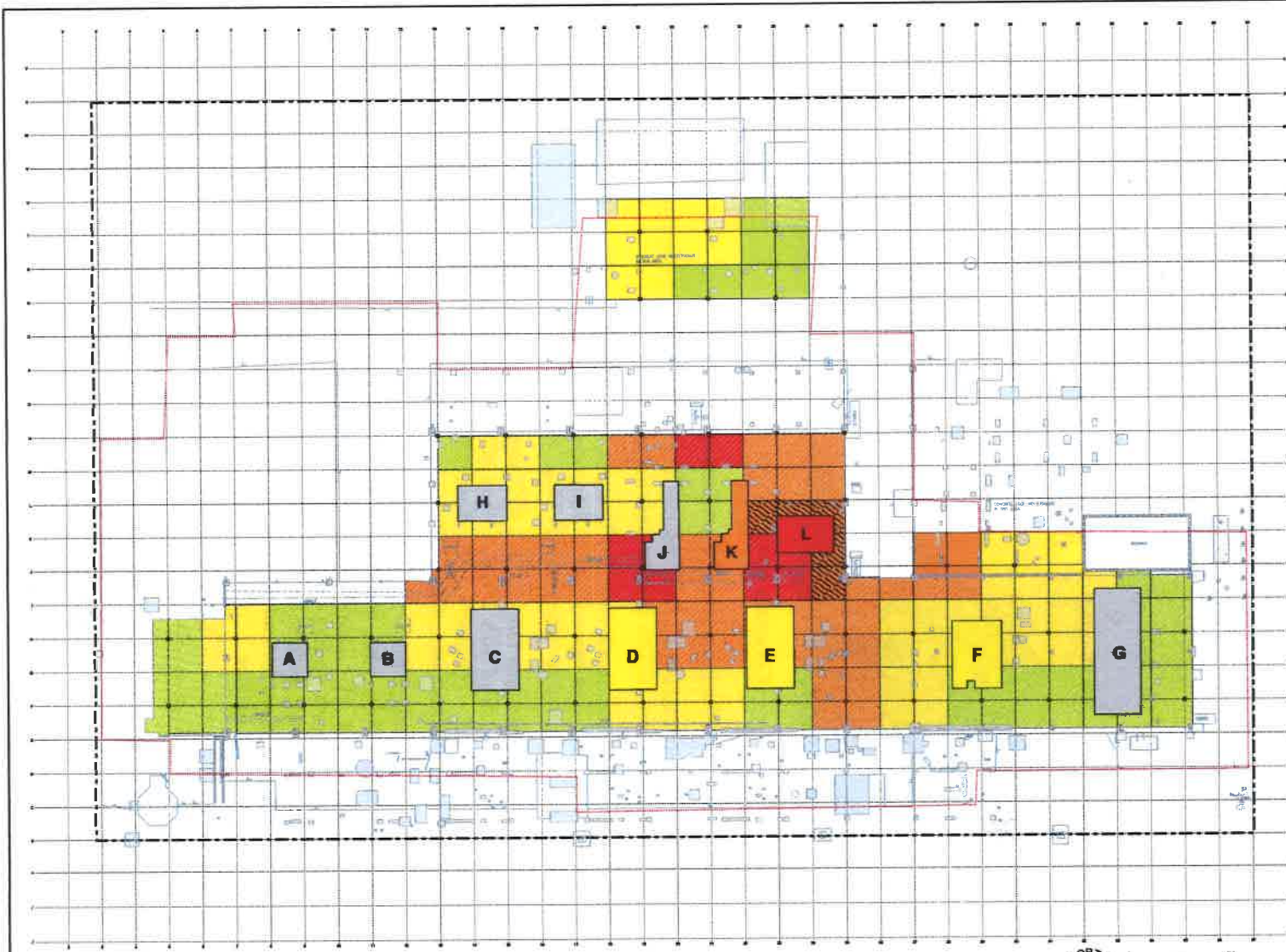
Ten percent of the concrete samples were randomly selected for Cd and Pb analysis for purposes of waste profile classification (fifteen samples and two duplicates).

Concrete Cd concentrations ranged from 0.472 mg/kg to 3.12 mg/kg. ***None of the concrete samples exceeded project cleanup criteria or hazardous waste classification criteria for Cd.*** Additionally, no concrete samples exceeded 10X STLC for Cd.

Concrete total Pb concentrations ranged from 4.67 mg/kg to 286 mg/kg. Five of the fifteen samples tested for Pb exceeded 10X STLC criteria and were scheduled for subsequent STLC extraction and Pb analysis. The four highest concentration crawlspace concrete samples were also scheduled for TCLP extraction and Pb analysis if adequate sample volume remained.

STLC Pb concentrations ranged from <0.045 mg/l to 3.16 mg/l. TCLP Pb concentrations were all <0.45 mg/l. ***Based on these data, none of the concrete samples exceeded hazardous waste classification criteria for Pb.*** Additionally, these results demonstrated that Cd and Pb contamination resulting from peeling and disturbed paint present in the Compressor Building structure had been adequately decontaminated from concrete surfaces during the interim cleanup — ***therefore, no further characterization of Cd or Pb was scheduled for soil under the building slab and foundations*** (see Section 3.2, below).





LEGEND

- Concrete Foundation/Pedestal (Former)
- Concrete Pad (Former)
- Concrete Wall (Former)
- Original Limit of Work
- Limit of PCB Remediation (Dudek 2014)
- Concrete Sample Location
- G** Concrete Equipment Foundation ID
- Sample Result < 0.24 mg/kg PCBs
- Sample Result ≥ 0.24 mg/kg PCBs
- Sample Result ≥ 1.0 mg/kg PCBs
- Sample Result ≥ 50 mg/kg PCBs
- Expanded Buffer ≥ 50 mg/kg PCBs*

Notes: Results shown on this figure represent samples collected during characterization sampling conducted in May and June 2016. These results were originally reported in *Addendum No. 5, PCB Cleanup Plan, Former Compressor Building, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, California, Revision 2*, dated August 11, 2016.

*Portions of the crawlspace concrete slab area designated for TSCA disposal was expanded north and east of foundation "L" to ensure adequate removal of concrete potentially ≥ 50 mg/kg PCBs.

COMPRESSOR BUILDING GROUND LEVEL

Scale: 1 inch = 30 feet

 Vertical Datum: Ventura Co. NAVD88

 Grid Interval = 3 meters

	Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California		
	Concrete PCB Characterization Results (Ground Level)		
	Source: KDM Meridian Feb 2016	Revision: 0	Date: 02/05/16

3.0 Demolition Waste Management

3.1 Introduction

Demolition and remediation commenced in accordance with *Addendum No. 5 (Revision 2)* of the *PCB Cleanup Plan* on September 12, 2016. Demolition of the Compressor Building and surrounding structures was completed in November 2016.

Demolition of the Compressor Building and adjacent ammonia plant was performed using “machine demolition” methods. Hydraulic excavators equipped with hydraulic demolition attachments such as concrete breakers and shears were used to methodically demolish the structural steel framework and concrete features of the building.



Compressor Building Demolition

3.2 Concrete Waste Management

Characterization sampling of the concrete equipment foundations, concrete crawlspace and perimeter slabs, and concrete floor deck resulted in a significant number of samples in each area that exceeded the 0.24 mg/kg PCB action level. Additionally, one concrete equipment foundation sample (FNDL-N), and three concrete crawlspace samples (CS-J19, CS-J23, and CS-N21) exceeded 50 mg/kg PCBs (see Figure 7, above).

Areas affected by PCBs ≥ 50 mg/kg were determined on the basis of the *area of inference* of the samples as described in Subpart O.²⁸ Furthermore, the crawlspace concrete slab area surrounding concrete equipment foundation “L” was expanded to include an additional buffer area north and east of sample location CS-J23 to ensure adequate removal of concrete exceeding 50 mg/kg PCBs.

Cd and Pb sampling results showed that the concrete passed California and federal hazardous waste classification criteria for these constituents.

²⁸ §761.283(d)



Based on these results, all concrete waste to be generated during the subsequent demolition and remediation phase was designated for off site disposal (vs. remaining on-site).

Concrete containing ≥ 50 mg/kg PCBs was removed and transported offsite for disposal at the Waste Management Kettleman Hills Landfill using the pre-existing waste profile CA608683 (see Section 2.5.3, above).

Remaining concrete (< 50 mg/kg PCBs) was transported and disposed offsite at the Waste Management Simi Valley Landfill as non-hazardous construction and demolition debris under profile 624797CA. This included areas where concrete results were ≥ 0.24 mg/kg PCBs and < 50 mg/kg PCBs and areas where concrete results exceeded project action levels for Pb (but were less than California and federal hazardous waste classification criteria). Other potentially contaminated materials were segregated during demolition as described below.

Approximately 5,278 tons of waste concrete and debris were removed and disposed offsite during this first phase of demolition and remediation.



Concrete Demolition

3.3 Soil and Asphalt Waste Management

Soil and asphalt PCB characterization results showed that approximately 45% of the sampled locations exceeded the project action level for PCBs however none of the samples contained ≥ 50 mg/kg PCBs.

All of the Cd results from the 2016 characterization activity were below state and federal waste classification criteria for Cd. Pb analyses confirmed that the majority of soil and asphalt samples exceeded project action levels and many samples exceeded California hazardous waste criteria (TTLC and STLC). None of the samples exceeded the federal TCLP hazardous waste standards.

Based on these results, soil and asphalt scheduled for excavation and removal during the subsequent demolition and remediation were classified as Bulk PCB Remediation Waste < 50 mg/kg PCBs and Non-RCRA (California) Hazardous Waste Solids (Pb) based on TTLC and STLC Pb results. The pre-existing Waste Management Kettleman Hills Landfill waste profile CA608682



matched these criteria (see Section 2.5.3, above). Approximately 1,529 tons of contaminated soil and asphalt were removed and disposed offsite during the first phase of remediation.



Painted Steel Diamond Plate
Staged for Disposal

3.4 Management of Other PCB Waste

3.4.1 Disposal of Painted Steel Diamond Plate

During the initial sampling of painted porous and non-porous surfaces described in the *PCB Cleanup Plan Addendum No. 1*, only one painted surface contained detectable concentrations of PCBs: painted steel diamond plate covering floor openings in the Compressor Building floor deck.

Follow up additional sampling of this location, and three additional floor plate locations throughout the building following solvent wiping of these surfaces revealed that the painted floor plate samples consistently demonstrated the presence of low-concentration PCBs in various areas of the building. All sample results demonstrate that the “as found” PCB concentrations of the paint on the non-porous surface of the floor plates was <50 mg/kg but greater than the project action level. Therefore, the painted floor plates were presumed to be PCB Remediation Waste for the purposes of further decontamination or offsite disposal.

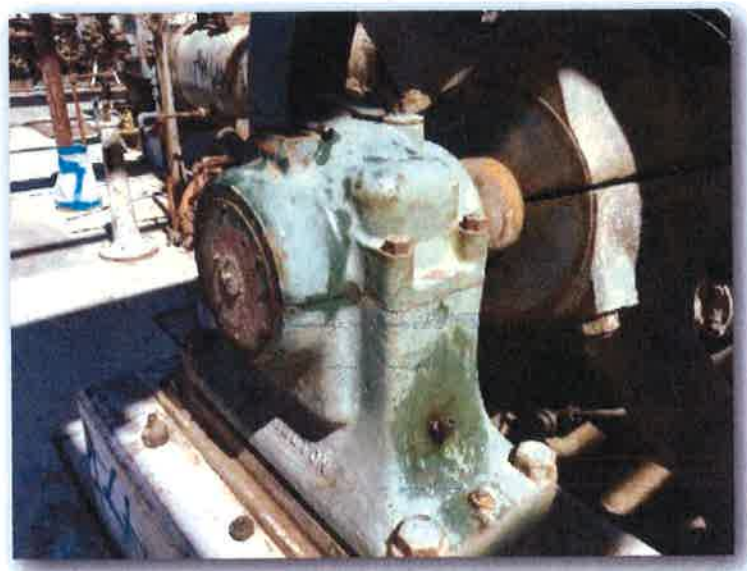
Painted steel diamond plate was removed and segregated during demolition of the Compressor Building in accordance with *PCB Cleanup Plan Addendum No. 1*. Approximately 25 tons of steel plate was transported and disposed offsite at the Waste Management Simi Valley Landfill as non-hazardous construction and demolition debris under profile 624797CA during demolition.



3.4.2 Compressor Flywheel Bearings

Oil contained in the two remaining compressors present in the Compressor Building was sampled and the interior surfaces of the compressors were wipe sampled to assess if PCBs were present during the 2015 site characterization described in *Addendum No. 3* to the *PCB Cleanup Plan*. No PCBs were found and no further decontamination of the compressor interiors was determined to be required.

During demolition it was determined that additional evaluation of oily residues contained within compressor flywheel bearings housings separate from the main compressors was warranted since these housings had not been evaluated during the original sampling event.



Compressor Flywheel Bearing Housing

Two oil samples were collected from the compressor flywheel bearing housings (one from each compressor) September 22, 2016. Oil samples were obtained by draining residual oil into 40 ml, unpreserved “VOA” vials. Sample *COMPBEAR-01* (from Compressor No. 1) contained **4.99 mg/kg PCB 1242** and **1.42 mg/kg PCB 1260**. Sample *COMPBEAR-02* (Compressor No. 2) contained **0.511 mg/kg PCB 1242**. Table 1, below, lists the results of these samples.

Table 1: Compressor Flywheel Bearing PCB Sample Results (mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260
L861638-01	COMPBEAR-01	<1	<1	<1	4.99	<1	<1	1.42
L861638-02	COMPBEAR-02	<1	<1	<1	0.511	<1	<1	<1



The compressor flywheel bearings and housings were removed and segregated during demolition. Upon demolition, the compressor flywheel bearing housings were found to contain a very small amount of remaining free-flowing oil and this was collected using granular oil sorbent. The housings and approximately one cubic foot of oily sorbent generated during demolition were transported and disposed offsite at the Waste Management Simi Valley Landfill as non-hazardous construction and demolition debris under profile 624797CA.

3.4.3 Inspection and Disposition of Piping

Addendum No. 4 to the *PCB Cleanup Plan* proposed an approach to inspect pipes as they were demolished. This inspection was intended to visually identify any pipes that appeared to contain oily material.

During demolition only one pipe was identified to contain oily material. This pipe was located immediately under the elevated concrete floor deck and ran from the east end of the building westward to the two remaining compressors. The eastern end of the pipe was terminated in a banjo fitting typically used as a fill port. Some oily residue was found leaking from this end of the pipe and was collected using granular sorbent.



Suspect Pipe and Sorbent

One sample of the oily sorbent was collected September 22, 2016. This sample was found to contain **5.54 mg/kg PCB 1260** (see Table 2, below). The pipe was removed and segregated during demolition. A small amount of remaining free-flowing residues were drained into a sorbent bed upon removal of the pipe.

Table 2: Oily Piping PCB Sample Results (mg/kg)

Laboratory ID (Batch--Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260
L861647-01	PIPESORB-01	<0.348	<0.348	<0.348	<0.348	<0.348	<0.348	5.54



The pipe and the sorbent were subsequently transported and disposed offsite at the Waste Management Simi Valley Landfill as non-hazardous construction and demolition debris under profile 624797CA.

3.4.4 Oil-Stained Surfaces

Painted steel surfaces were decontaminated during the interim gross residue removal described in Section 2.5.2. Following this decontamination effort, paint present on metal surfaces throughout the Compressor Building was sampled and the findings were documented in *Addendum No. 1 (Rev 2)* to the *PCB Cleanup Plan* (see Section 1.1, above).

However, one area of the Compressor Building consisting of an oil-stained arched column was only able to be partially cleaned due to its location high in the building and the inability to be safely accessed from the ground level or from the elevated concrete floor deck. This column (Column "C12") was removed during demolition and segregated pending sampling and analysis.



Wipe Sampling Column C12

Four randomly located surface wipe samples were collected from oil-stained surfaces on Column C12 pursuant to the *standard wipe test* methods specified in Subpart P and §761.61(c).²⁹ Two of the samples contained detectable concentrations of PCBs ranging from 0.600 to 5.68 $\mu\text{g}/100\text{cm}^2$ PCB 1260. The wipe sample results met the numerical criterion of $\leq 10 \mu\text{g}/100 \text{cm}^2$ permitting transportation and disposal offsite at the Waste Management Simi Valley Landfill as non-hazardous construction and demolition debris under profile 624797CA.³⁰

Table 3, below, presents the analytical results from the wipe sampling of Column C12.

²⁹ §761.123 (Standard Wipe Test)

³⁰ §761.(b)(3)(i)(A) & §761.79(a)



*Table 3: Column C12 PCB Wipe Sample Results
($\mu\text{g}/100\text{ cm}^2$)*

Laboratory ID (Batch-- Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260
L866134-01	CLMWIPE-01	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.600
L866134-02	CLMWIPE-02	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	5.68
L866134-03	CLMWIPE-03	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
L866134-04	CLMWIPE-04	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500



4.0 PCB Remediation and Sampling

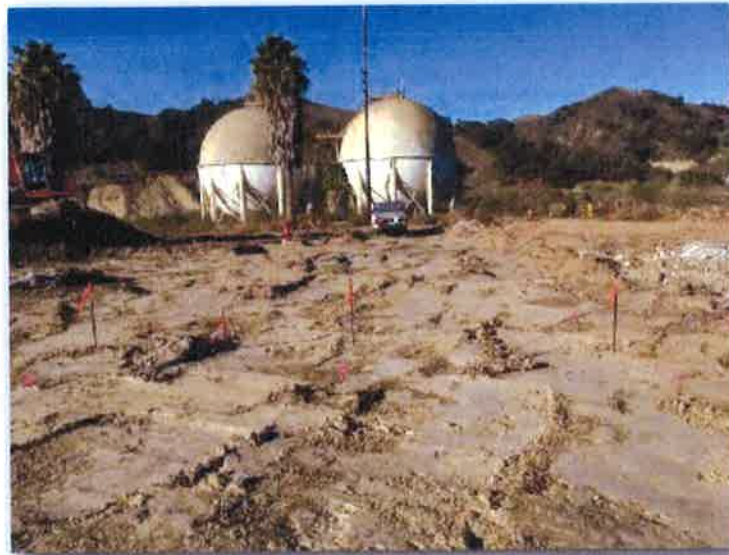
4.1 PCB Sampling Methodology

4.1.1 PCB Composite Sampling of Perimeter Soil and Asphalt Areas

Perimeter samples were collected from areas surrounding the former building. Some of these areas were formerly paved with asphalt and others were bare soil. The perimeter grid locations were excavated approximately one-foot (0.3 m) below surrounding grade prior to confirmation sampling.

Post excavation PCB sampling and analysis was performed within each 3 meter perimeter soil and asphalt excavation area in accordance with §761.283(b). Soil composite samples were collected in a square, 1.5 meter grid pattern.

PCB samples were composited according to the procedures described in §761.289(b)(1)(i). A maximum of four individual sub-samples were included in each composite sample set for each 3 meter excavation area. If concrete pedestals, pipes, guard posts or other physical obstructions were present within an excavation grid, fewer sub-samples may have been collected within that grid.



Typical Perimeter Sampling Layout

Individual sub-samples were collected by gloved hand using disposable plastic spoons and placed in disposable resealable plastic bags. Individual sub-sample locations were marked in the field using surveyor whisks or flagging at each sampling location. Composite samples were collected by mixing the sub-samples thoroughly in the plastic bag then dispensing the resultant composite sample into a 2 oz glass jar.

Duplicate composite samples were collected at a frequency of 10%. The duplicate sample locations were selected using a random number generator (random.org). The duplicate sample were collected by dispensing two aliquots of the mixed composite sample into separate glass sample jars.



Initial *Perimeter* composite samples were labeled with the prefix “COMP” followed by the grid location designation (e.g., *COMP-EF36.5* indicating a composited sample set collected at the midpoint between grid locations E and F, and 36 and 37). Duplicate sample numbers were labeled using a surrogate grid location “XY” followed by surrogate grid numbers beginning with “37.5”.

Sample jars were wrapped in bubble wrap sleeves and placed in individual resealable plastic bags. Samples were immediately chilled to 4°C using water ice and placed in a reusable cooler provided by the laboratory. No other preservatives were used. Samples were shipped via Federal Express to ESC Lab Sciences in Mount Juliet, Tennessee. Samples were submitted for PCB analysis by gas chromatography using EPA Method 8082.

Figure 8 shows the layout of the initial PCB remediation and sampling plan including the *Perimeter* samples.



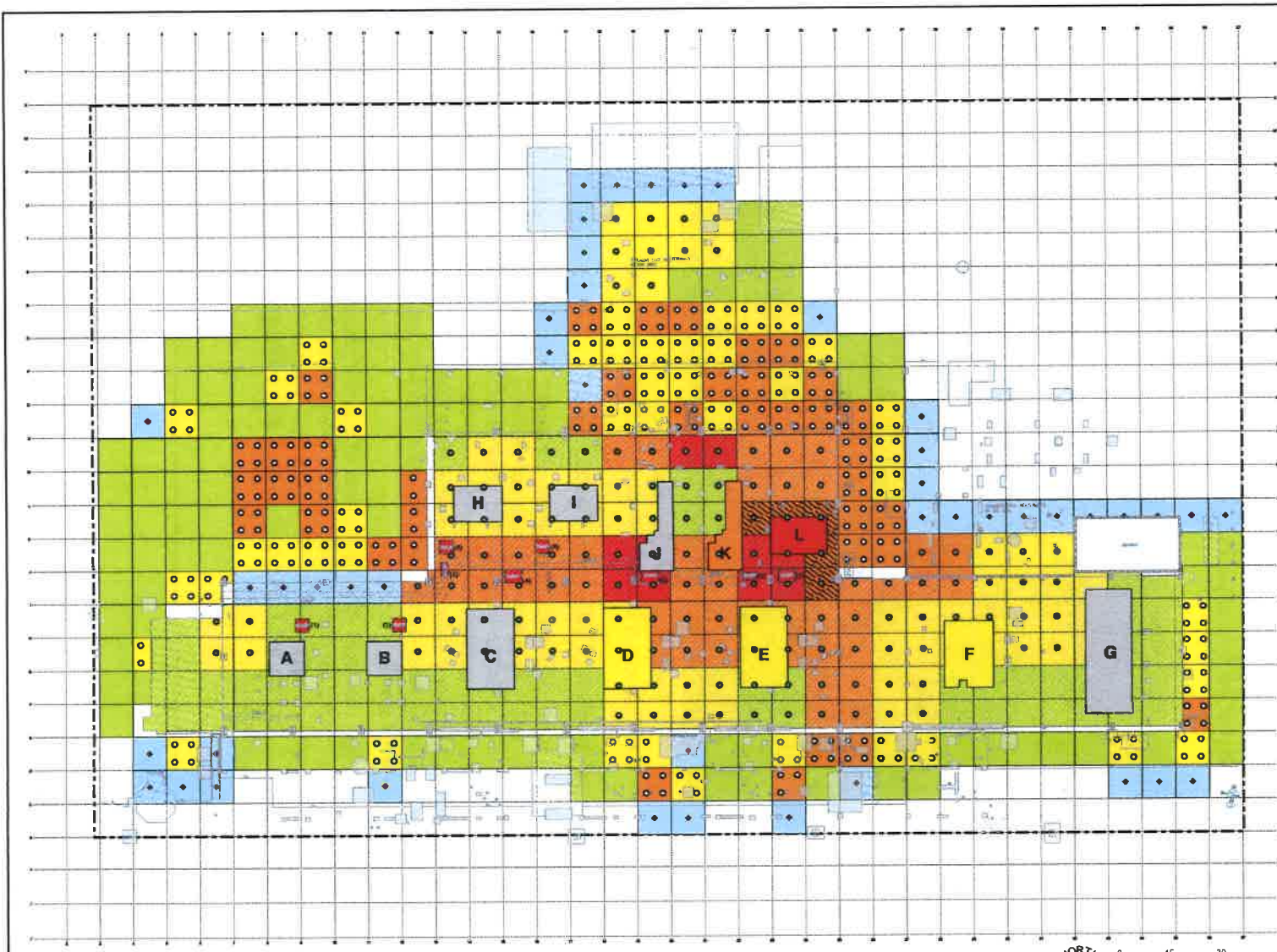
Typical *Under Slab* Sampling Layout
(Depth Approx. 3' Below Grade Due to Thick Concrete Slab)

4.1.2 PCB Characterization of Soil Under Paved Areas

Under Slab samples were collected from areas formerly covered by concrete slabs and pavements, particularly under the former Compressor Building crawlspace slab. These samples were collected from the soil surface exposed after demolition without performing additional soil excavation as in the perimeter samples noted above. Note that some areas under the Compressor Building had reinforced concrete slabs approximately three feet thick; samples in these areas are at that depth while samples from regular slab-on-grade locations are approximately six inches (0.1 m) below surrounding grade.

Characterization sampling consisted of the collection of discrete characterization samples within a 3 meter grid pattern. Samples were collected from areas where crawlspace concrete samples exceeded the project action levels (see Section 2.7.2). Soil samples were collected in the same manner as described in Section 4.1.1, above (however, single discrete samples were collected rather than composite samples).





LEGEND

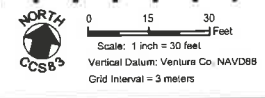
- Concrete Foundation/Pedestal (Former)
- Concrete Pad (Former)
- Concrete Wall (Former)
- Original Limit of Work
- Concrete Equipment Foundation ID
- Concrete Filled Sump
- Sample Results Below Project Action Levels
- Sample Result ≥ 0.24 mg/kg PCBs
- Sample Result ≥ 1.0 mg/kg PCBs
- Sample Result ≥ 50 mg/kg PCBs
- Expanded Buffer ≥ 50 mg/kg PCBs*
- Additional (Step Out) Sampling Location
- Proposed PCB Characterization Sample
- Proposed PCB Confirmation Samples
1.5m Composite Sample Set
(One set per original 3m grid cell)

Notes: Results shown on this figure represent samples collected during characterization sampling conducted in May and June 2016. These results were originally reported in Addendum No. 5, PCB Cleanup Plan, Former Compressor Building, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, California, Revision 2, dated August 11, 2016.

Some grid cells in the crawspace area that were below project action levels were scheduled for confirmation sampling due to their proximity to adjacent areas above project action levels (see samples shown in green squares).

*Portions of the crawspace concrete slab area designated for TSCA disposal was expanded north and east of foundation "L" to ensure adequate removal of concrete potentially ≥ 50 mg/kg PCBs.

COMPRESSOR BUILDING GROUND LEVEL



	Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California			
	Compressor Building Initial PCB Remediation and Sampling Plan			
	Source:	Revision:	Date:	Figure:
	KDM Meridian Feb 2016	0	02/12/18	8

The *Under Slab* characterization samples were labeled by grid location (e.g., sample *JK27.5* is located between grid columns J and K and rows 27 and 28). These grid locations correspond to the original post-decontamination (May-June 2016) sampling locations.

Figure 8, above, shows the layout of the initial PCB remediation and sampling plan including the *Under Slab* samples.

4.1.3 Step-Out Sampling

Evaluation of the original perimeter soil and asphalt results revealed that a number of perimeter sample locations were not adequately bounded by “clean” samples for PCBs at the outer horizontal boundary of the sampling grid (see Figure 8). Based on this evaluation, additional “step-out” surface soil sampling was performed to identify or confirm the horizontal extent of PCB concentrations in shallow soil that exceed project action levels. Discrete step-out characterization samples were collected in the same manner as described in Section 4.1.2. The *Step-Out* characterization samples were labeled by grid location in the same manner as the *Under Slab* samples described in Section 4.1.2.

The initial *Step-Out* PCB samples are shown on Figure 8, above.



Typical Concrete Filled Sump

4.1.4 Removal and Characterization of Concrete-filled Sumps

During the initial work to remove oily liquids and residues noted during the August 2013 site inspection by USEPA, nine in-ground sumps containing oily liquid and sludge were identified in the crawl space of the Compressor Building. Oily liquid and sludge was removed from these sumps in September 2013 and the sumps were subsequently filled with concrete. The presence of PCBs in the Compressor Building oily waste samples was not known at the time, therefore, no PCB characterization sampling was conducted prior to filling the sumps with concrete.

The concrete filled sumps were removed once they were accessible during demolition of the building. Because the sumps could not be adequately characterized in accordance with Subpart N having been filled with concrete prior to sampling, the concrete was presumed to be > 50 mg/kg



PCBs and was disposed at the Waste Management Kettleman Hills Landfill as hazardous (TSCA) waste using existing profile CA608683.³¹

A single soil sample was collected below each of the sumps pursuant to Subpart N. Soil samples were collected using methods similar to those described in Section 4.1.2. *Sump* samples were labeled with the prefix "SUMP" followed by the sump number. Some *Sump* sample locations were the same as *Under Slab* sample grid locations and are referenced by the grid location only (see tables below).

Due to the depth of the sumps, some samples were retrieved from an excavator bucket. The locations of the concrete filled sumps are shown on Figure 8, above.



Concrete-Filled *Sump-01* During Removal

4.1.5 Re-Excavation Protocols

Where soil sample results exceeded the 0.24 mg/kg PCB project action level, the corresponding grid location was scheduled for additional excavation and re-sampling. Five rounds of re-excitation was performed for PCB locations exceeding project action levels in some locations.

Re-excitation of affected grid locations was performed in approximately one-foot lifts (each re-excitation was approximately one foot deeper than the prior excavation). *Re-Excavation* samples were collected in the same manner as described in Section 4.1.2. The Step-Out characterization samples were labeled by grid location preceded by a prefix such as "ReEx1-" denoting the re-excitation event "round". Duplicate re-excitation sample numbers were labeled using a surrogate grid location "YZ" followed by surrogate grid numbers beginning with "1.5".

The results of each re-excitation round are described below in Sections 4.3 to 4.5.

³¹ §761.61(a)(5)(i)(B)(2)(i)



4.2 Initial (First Round) PCB Remediation and Sampling Results

4.2.1 Initial Perimeter Soil and Asphalt PCB Excavation and Sampling

The initial *Perimeter* soil samples were collected from areas surrounding the former building shown on Figure 8. Some of these areas were formerly paved with asphalt and others were bare soil. The perimeter grid locations were excavated during demolition approximately one-foot (0.3 m) below surrounding grade prior to confirmation sampling.

Post-demolition *Perimeter* sampling was conducted in six sampling events between October 26 and December 13, 2016. *Perimeter* composite samples were collected from 83 locations surrounding the former building (83 samples plus 9 duplicates). Seven initial *Perimeter* samples exceeded project action levels. These seven samples ranged from **0.24 mg/kg** to **2.59 mg/kg**. PCB species found included one sample containing PCB 1242 (0.24 mg/kg), one sample containing PCB 1254 (0.275 mg/kg), and the remaining five samples containing PCB 1260.³²

Figure 9 and Table 4 show the results of the initial *Perimeter* soil samples.



Typical *Under Slab* Samples
(Vicinity of Grid I-L/20-24; Also Note *Sumps -06 & -07*)

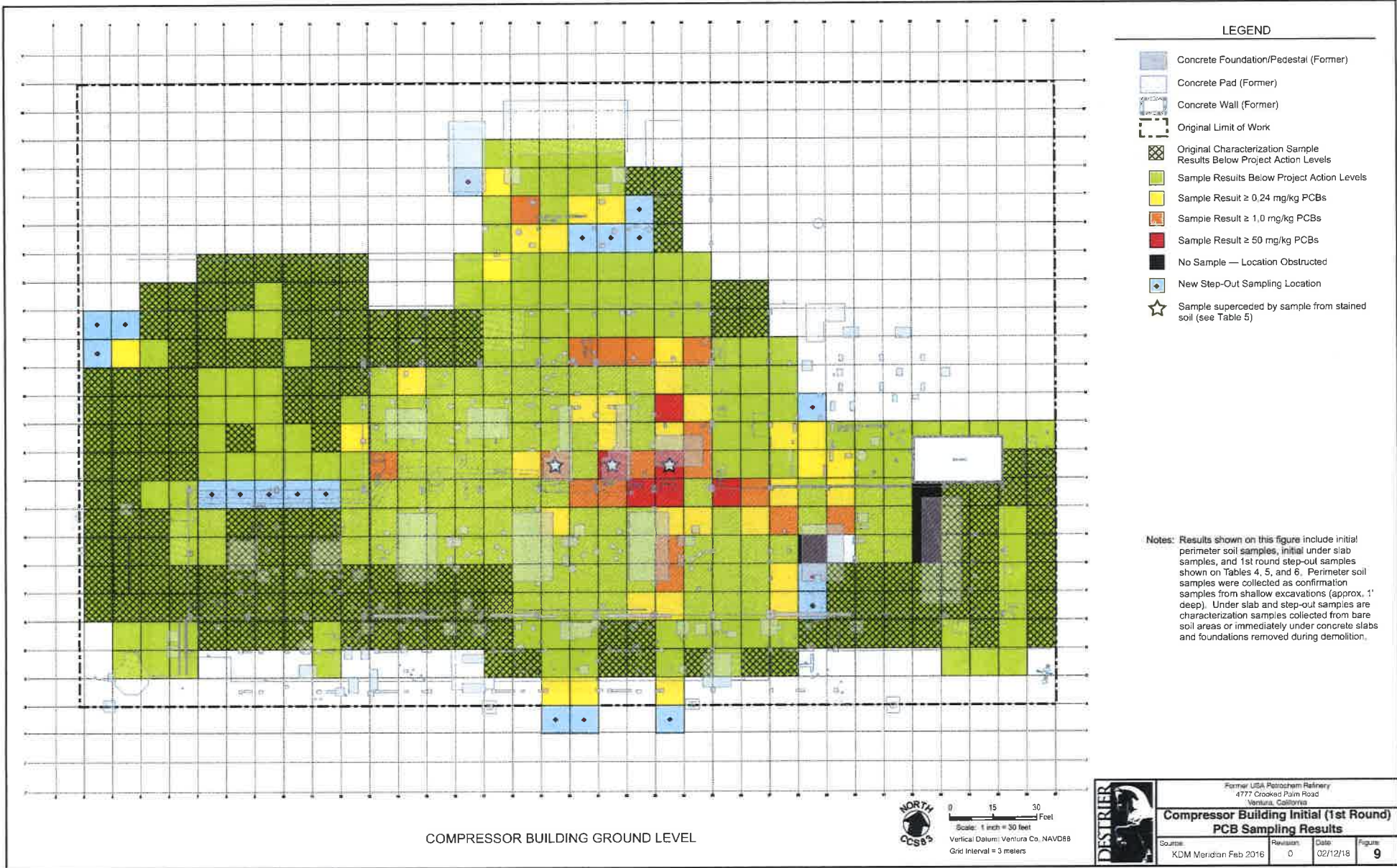
4.2.2 Initial PCB Characterization of Soil Under Paved Areas

Initial *Under Slab* samples were collected from 153 locations (153 samples plus 15 duplicates) formerly covered by concrete slabs and pavements, particularly under the former Compressor Building crawlspace slab. Initial post-demolition *Under Slab* sampling was conducted in seven sampling events between October 27 and December 7, 2016.












Forty-five samples exceeded project action levels (42 locations plus 3 duplicate samples). Sample concentrations exceeding project action levels ranged from **0.256 mg/kg** to **2,380 mg/kg**.

³² Note that weathering of PCBs in soil samples can make differentiation difficult as it may cause shifting of the individual congener ratios. Correspondence with Jarred Willis, ESC Lab Sciences, February 11, 2016.






LEGEND

-  Concrete Foundation/Pedestal (Former)
-  Concrete Pad (Former)
-  Concrete Wall (Former)
-  Original Limit of Work
-  Original Characterization Sample Results Below Project Action Levels
-  Sample Results Below Project Action Levels
-  Sample Result ≥ 0.24 mg/kg PCBs
-  Sample Result ≥ 1.0 mg/kg PCBs
-  Sample Result ≥ 50 mg/kg PCBs
-  No Sample — Location Obstructed
-  New Step-Out Sampling Location
-  Sample superseded by sample from stained soil (see Table 5)

Notes: Results shown on this figure include initial perimeter soil samples, initial under slab samples, and 1st round step-out samples shown on Tables 4, 5, and 6. Perimeter soil samples were collected as confirmation samples from shallow excavations (approx. 1' deep). Under slab and step-out samples are characterization samples collected from bare soil areas or immediately under concrete slabs and foundations removed during demolition.

COMPRESSOR BUILDING GROUND LEVEL



 0 15 30 Feet

 Scale: 1 inch = 30 feet

 Vertical Datum: Ventura Co. NAVD83

 Grid Interval = 3 meters


	Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California			
	Compressor Building Initial (1st Round) PCB Sampling Results			
	Source: KDM Meridian Feb 2016	Revision: 0	Date: 02/12/18	Figure: 9

Table 4: Initial Perimeter Soil PCB Confirmation Sample Results (mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L869209-29	COMP-CD19.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	0.012	
L869209-30	COMP-CD20.5	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	
L869209-31	COMP-CD23.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.104	
L878937-17	COMP-DE5.5	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	0.0152	
L869209-32	COMP-DE11.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.0089	
L869209-33	COMP-DE18.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	0.212	
L869209-34	COMP-DE19.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	0.00643	
L869209-35	COMP-DE23.5	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	
L869209-36	COMP-DE24.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	
L869209-37	COMP-DE25.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.0154	
L869209-38	COMP-DE26.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	
L869209-39	COMP-DE27.5	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	0.00696	COMP-XY37.5
L869209-40	COMP-XY37.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	0.0163	COMP-DE27.5
L878937-18	COMP-DE33.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	
L878937-19	COMP-DE35.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	
L878937-20	COMP-EF35.5	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.131	
L878937-21	COMP-FG35.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	0.00745	
L872210-11	COMP-GH4.5	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	
L878937-22	COMP-GH35.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.121	
L878937-23	COMP-HI35.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	
L872210-12	COMP-IJ5.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	
L872210-13	COMP-IJ6.5	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.149	
L872210-14	COMP-JK7.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.00526	
L872210-15	COMP-JK8.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	0.00603	
L872210-16	COMP-JK9.5	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	
L872210-17	COMP-JK10.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	0.0479	
L872210-18	COMP-JK11.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	
L872210-19	COMP-JK12.5	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	COMP-XY38.5
L872210-20	COMP-XY38.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	COMP-JK12.5
L875648-11	COMP-JK25.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	
L875648-12	COMP-JK26.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	

Color Codes:  ≥ 0.24 mg/kg PCB  ≥ 1.0 mg/kg PCB  ≥ 50 mg/kg PCB



Table 4: Initial Perimeter Soil PCB Confirmation Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L872210-31	COMP-KL7.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	
L872210-32	COMP-KL9.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.0285	COMP-XY39.5
L872210-33	COMP-XY39.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.0107	COMP-KL9.5
L872210-34	COMP-KL10.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.0287	
L872210-35	COMP-KL12.5	<0.0188	<0.0188	<0.0188	0.24	<0.0188	<0.0188	0.0705	
L875648-13	COMP-KL25.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	0.0143	
L875648-14	COMP-KL26.5	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	
L872210-36	COMP-LM7.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	COMP-XY40.5
L872210-37	COMP-XY40.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	COMP-LM7.5
L872210-38	COMP-LM8.5	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	
L872210-39	COMP-LM9.5	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	
L872210-40	COMP-LM12.5	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	0.0809	
L875648-15	COMP-LM25.5	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	
L875648-16	COMP-LM26.5	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	
L872210-54	COMP-MN7.5	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	0.0237	
L872210-55	COMP-MN8.5	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	0.125	
L872210-56	COMP-MN9.5	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	0.0905	
L875648-17	COMP-MN25.5	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	
L875648-18	COMP-MN26.5	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	
L870562-31	COMP-NO5.5	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	
L870562-32	COMP-NO10.5	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	
L871382-11	COMP-NO17.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.0779	
L871382-12	COMP-NO18.5	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	0.0335	
L871382-13	COMP-NO19.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	0.163	
L871382-14	COMP-NO20.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	1.49	
L871382-15	COMP-NO21.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	1.28	
L871382-16	COMP-NO22.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	2.59	
L871382-17	COMP-NO23.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	0.465	
L871382-18	COMP-NO24.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	1.3	
L875648-19	COMP-NO25.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.0538	COMP-XY41.5
L875648-26	COMP-XY41.5	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	0.0431	COMP-NO25.5

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



Table 4: Initial Perimeter Soil PCB Confirmation Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L875648-20	COMP-NO26.5	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	
L870562-33	COMP-OP8.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	COMP-XY42.5
L870562-34	COMP-XY42.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	COMP-OP8.5
L870562-35	COMP-OP9.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	
L871382-19	COMP-OP18.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.00533	
L871382-20	COMP-OP19.5	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	
L871382-31	COMP-OP20.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.00578	
L871382-32	COMP-OP21.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.00678	COMP-XY43.5
L871382-33	COMP-XY43.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.00967	COMP-OP21.5
L871382-34	COMP-OP22.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	COMP-XY44.5
L871382-35	COMP-XY44.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	COMP-OP22.5
L871382-36	COMP-OP23.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.00768	
L871382-37	COMP-OP24.5	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	
L870562-36	COMP-PQ9.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	
L871382-38	COMP-PQ17.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	
L871382-39	COMP-PQ18.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	0.0334	<0.0182	
L871382-40	COMP-PQ19.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.0329	<0.0181	
L871382-51	COMP-PQ20.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	
L871382-52	COMP-PQ21.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	
L871382-53	COMP-PQ22.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.0108	<0.0185	
L871382-54	COMP-PQ23.5	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	
L871382-55	COMP-PQ24.5	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	0.0771	<0.0176	
L871382-56	COMP-QR17.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.275	<0.0185	COMP-XY45.5
L871382-57	COMP-XY45.5	<0.018	<0.018	<0.018	<0.018	<0.018	0.0407	<0.018	COMP-QR17.5
L871382-58	COMP-QR18.5	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	
L871382-59	COMP-QR19.5	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	0.0377	<0.0184	
L871382-60	COMP-QR20.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	
L871382-64	COMP-QR21.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	
L871382-65	COMP-QR22.5	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	
L871382-66	COMP-QR23.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



Five samples contained PCB 1254 (0.311 mg/kg to 1.84 mg/kg); the remaining forty samples contained PCB 1260. Of the 45 samples that exceeded project action levels, 17 were greater than 1 mg/kg. Five of these samples exceeded 50 mg/kg (4 locations plus one duplicate).

Figure 9 and Table 5 illustrate the results of the initial Under Slab soil samples.

4.2.3 Initial PCB Step Out Sample Results

Forty-four initial *Step-Out* samples were collected over six sampling events between October 26 and December 13, 2016 (40 samples plus 4 duplicates). Seven initial *Step-Out* sample locations exceeded project action levels (7 samples, no duplicates). PCB concentrations in the seven samples that exceeded project action levels ranged from **0.265 mg/kg** to **0.736 mg/kg**. One sample contained PCB 1254 (0.514 mg/kg) and the remaining five six samples contained PCB 1260. Figure 9 and Table 6 illustrate the results of the initial *Step-Out* soil samples.

4.2.4 PCB Sampling of Visibly Stained Areas

Visible staining was observed in a number of areas under the center of the former Compressor Building following demolition of the overlying slabs and foundations. Samples were collected from seven of these oil-stained areas December 7, 2016. These samples duplicated previously collected *Under Slab* samples but are listed on Table 5 using the prefix *Stain* to differentiate them from the other grid-based *Under Slab* samples.³³

Five of the seven *Stain* samples exceeded project action levels. Four samples exceeded 1 mg/kg PCB 1260 and three of these exceeded 50 mg/kg PCB 1260. One of these samples, *STAIN-JK21.5*, contained PCB 1260 in excess of **49,000 mg/kg** at a depth of approximately three feet below the surrounding ground surface. This is the peak concentration found during the project.

One of the *Stain* samples was collected from an underground cast iron pipe running east-west adjacent to former equipment foundation "L" (*FNDL*, see Figure 7 and Section 2.7, above). This pipe appeared to be a sewer pipe. This sample (*FNDL PIPE*) contained **374 mg/kg PCB 1260**. This sample location corresponds to grid IJ23.5. Further samples of other stained areas including this pipe alignment are described below in Sections 4.3, 4.4, and 4.7.



Oil-Stained Soil Encountered During Initial *Under Slab* Sampling



Detail of Staining

³³ Because the grid-based sampling preceded the collection of *Stain* samples from identified oil-stained soil within the corresponding grid locations, the higher value of these two samples was used for Figure 9. Table 6 lists both sets of samples.



Table 5: Initial Under Slab Soil PCB Characterization Sample Results (mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L877594-01	EF18.5	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	0.0215	
L877594-02	EF19.5	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	
L877594-03	EF20.5	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	XY70.5
L877594-04	XY70.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	EF20.5
L877594-05	EF21.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	
L877594-10	EF22.5	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	0.292	
L877594-15	EF23.5	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.414	
L877594-06	EF24.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.185	
L877594-07	EF25.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.152	
L877594-08	EF26.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	0.194	
L877594-09	EF27.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.769	
L873380-05	FG18.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	
L873380-06	FG19.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.0296	
L873380-07	FG20.5	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	0.044	
L873380-08	FG21.5	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	
L877594-16	FG22.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.178	
L877594-17	FG23.5	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	4.72	
L877594-11	FG24.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.182	
L877594-12	FG25.5	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	0.0522	
L877594-13	FG26.5	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	0.157	
L877594-14	FG27.5	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	0.356	
L873380-01	GH6.5	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	
L873380-02	GH7.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	
L873380-09	GH12.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.0674	
L873380-10	GH13.5	<0.0284	<0.0284	<0.0284	<0.0284	<0.0284	<0.0284	0.0876	
L875661-01	GH14.5	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	
L873380-11	GH15.5	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	
L873380-12	GH16.5	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	
L873380-13	GH17.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
L875661-02	GH18.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	0.0189	
L873380-14	GH19.5	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	0.0133	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



Table 5: Initial Under Slab Soil PCB Characterization Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L873380-15	GH20.5	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	0.0174	
L873380-16	GH21.5	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	XY71.5
L873380-17	XY71.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.0184	GH21.5
L877594-18	GH22.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	0.0177	
L877594-19	GH23.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	7.27	
L877594-20	GH24.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.142	
L877594-21	GH25.5	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	0.0437	
L877594-22	GH26.5	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	0.0138	
L877594-23	GH27.5	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	0.156	
L877594-24	GH30.5	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	0.0336	
L877594-25	GH31.5	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	0.0418	
L873380-03	HI6.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.0166	
L873380-04	HI7.5	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	0.0117	
L873380-18	HI12.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	0.0282	
L873380-19	HI13.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	0.0582	
L875661-03	HI14.5	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	
L873380-20	HI15.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	0.0236	
L873380-21	HI16.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.0111	
L873380-22	HI17.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.0263	
L875661-04	HI18.5	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	0.0108	
L873380-23	HI19.5	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	0.973	
L873380-24	HI20.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.0168	
L873380-25	HI21.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	XY72.5
L873380-26	XY72.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	HI21.5
L877594-26	HI22.5	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	
L877594-27	HI23.5	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	0.878	
L877594-28	HI24.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	0.341	
L877594-29	HI25.5	<0.0223	<0.0223	<0.0223	<0.0223	<0.0223	<0.0223	0.0965	
L877594-30	HI26.5	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.225	XY73.5
L877594-31	XY73.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	0.266	HI26.5
L877594-32	HI27.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	2.1	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



Table 5: Initial Under Slab Soil PCB Characterization Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L877594-33	HI28.5	<0.0291	<0.0291	<0.0291	<0.0291	<0.0291	<0.0291	0.0722	
L877594-34	HI29.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	4.42	
L877594-35	HI30.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.177	
L877594-53	HI31.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.0378	
L875232-01	IJ12.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.0467	
L875232-02	IJ13.5	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	0.0412	
L875232-03	IJ14.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	0.0859	
L875232-04	IJ15.5	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	0.185	
L875232-05	IJ16.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.138	
L875232-06	IJ17.5	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	0.194	XY74.5
L875232-07	XY74.5	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	0.175	IJ17.5
L873391-01	IJ18.5	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	0.181	
L873391-02	IJ19.5	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	0.0355	
L875232-08	IJ20.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	12.2	
L875232-09	IJ21.5	<0.0985	<0.0985	<0.0985	<0.0985	<0.0985	<0.0985	2.63	
L869213-01	IJ22.5	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	2385	
L869213-02	IJ23.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	103	
L869213-03	IJ24.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	0.193	
L877594-36	IJ25.5	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	59.3	
L877594-37	IJ26.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	1.14	XY75.5
L877594-38	XY75.5	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	0.324	IJ26.5
L877594-39	IJ27.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.282	
L877594-40	IJ28.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	0.0608	XY76.5
L877594-41	XY76.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.129	IJ28.5
L877594-42	IJ29.5	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	0.514	
L877594-43	IJ30.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.0885	
L877594-44	IJ31.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	0.0326	XY77.5
L877594-45	XY77.5	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	0.0135	IJ31.5
L875232-11	JK13.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	2.44	
L875232-12	JK14.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.0524	
L875232-13	JK15.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	0.175	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



Table 5: Initial Under Slab Soil PCB Characterization Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L875232-14	JK16.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.178	
L875232-15	JK17.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	0.14	
L873391-03	JK18.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.423	
L875232-18	JK19.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.119	
L875232-16	JK20.5	<0.0237	<0.0237	<0.0237	<0.0237	<0.0237	<0.0237	0.0492	
L875232-17	JK21.5	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	0.787	
L869213-04	JK22.5	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	5.48	
L869213-05	JK23.5	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	3.01	
L869213-06	JK24.5	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	2.48	
L877594-46	JK27.5	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	
L877594-47	JK28.5	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	0.291	
L877594-48	JK29.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.884	XY78.5
L877594-49	XY78.5	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.256	JK29.5
L877594-50	JK30.5	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	0.0122	
L877594-51	JK31.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.0893	XY84.5
L877594-52	XY84.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	0.121	JK31.5
L875232-19	KL13.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	0.0889	XY79.5
L875232-20	XY79.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.0369	KL13.5
L875232-21	KL14.5	<0.0444	<0.0444	<0.0444	<0.0444	<0.0444	<0.0444	<0.0444	
L875232-22	KL15.5	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	XY80.5
L875232-23	XY80.5	<0.0237	<0.0237	<0.0237	<0.0237	<0.0237	<0.0237	0.00937	KL15.5
L875232-24	KL16.5	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	0.0101	
L875232-25	KL17.5	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	0.033	
L875232-26	KL18.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.05	
L875232-27	KL19.5	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	0.0904	
L875232-28	KL20.5	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	0.0967	
L875232-10	KL21.5	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	0.291	
L869213-07	KL22.5	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	0.198	
L869213-08	KL23.5	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	0.689	
L869213-09	KL24.5	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	1.25	
L875232-29	LM13.5	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	0.0195	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



Table 5: Initial Under Slab Soil PCB Characterization Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L875232-30	LM14.5	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	
L875232-31	LM15.5	<0.0223	<0.0223	<0.0223	<0.0223	<0.0223	<0.0223	0.0131	
L875232-32	LM16.5	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	0.0415	
L875232-33	LM17.5	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	0.0762	
L875232-34	LM18.5	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	0.118	
L875232-35	LM19.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.0971	XY81.5
L875232-36	XY81.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.118	LM19.5
L875232-38	LM20.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	0.623	
L875232-44	LM21.5	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	0.553	
L875232-37	LM22.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.178	
L875661-05	LM23.5	<1.79	<1.79	<1.79	<1.79	<1.79	<1.79	52.1	XY82.5
L875661-06	XY82.5	<3.55	<3.55	<3.55	<3.55	<3.55	<3.55	100	LM23.5
L875661-07	LM24.5	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	0.495	
L875232-45	MN13.5	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	0.00858	
L875232-39	MN14.5	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	0.513	
L875232-40	MN15.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	0.0986	
L875232-46	MN16.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.0384	
L875232-47	MN17.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.133	
L875232-41	MN18.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.116	
L875232-42	MN19.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.227	
L873391-04	MN20.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	
L873391-05	MN21.5	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	0.0144	
L875232-43	MN22.5	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	0.0897	
L875661-08	MN23.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.743	
L875661-09	MN24.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	XY83.5
L875661-10	XY83.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	MN24.5
L873380-27	RS18.5	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	0.853	<0.0174	
L873380-28	RS19.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.374	<0.0193	
L873380-29	ST18.5	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	1.84	<0.0176	
L873380-30	ST19.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	0.149	<0.0204	
L873380-31	ST20.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	0.442	<0.0195	

Color Codes:  ≥ 0.24 mg/kg PCB  ≥ 1.0 mg/kg PCB  ≥ 50 mg/kg PCB



Table 5: Initial Under Slab Soil PCB Characterization Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L873380-32	ST21.5	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	0.311	<0.0177	
L873380-33	TU18.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.19	<0.0181	
L873380-34	TU19.5	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	0.1	<0.0174	
L873380-35	TU20.5	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	0.0894	<0.0179	
L873380-36	TU21.5	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	0.0252	<0.0212	
L877604-01	STAIN-JK19.5	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	3.46	
L877604-02	STAIN-JK20.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	0.153	
L877604-03	STAIN-JK21.5	<7830	<7830	<7830	<7830	<7830	<7830	49100	
L877604-04	STAIN-JK22.5	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	0.466	
L877604-05	STAIN-JK23.5	<18	<18	<18	<18	<18	<18	193	
L877604-06	STAIN-L20	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.00954	
L869213-10	FNDL PIPE	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	374	Also "IJ23.5"

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



Table 6: Initial PCB Step-Out Sample Results
(mg/kg)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L869206-04	BC19.5	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	0.336	
L869206-05	BC20.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	0.435	
L869206-08	BC23.5	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	0.736	
L869206-13	CD4.0	<0.0173	<0.0173	<0.0173	<0.0173	<0.0173	<0.0173	0.0887	
L869206-14	CD5.0	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.0366	
L869206-15	CD6.0	<0.0173	<0.0173	<0.0173	<0.0173	<0.0173	<0.0173	0.0293	
L869206-19	CD11.0	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.0468	
L878932-01	CD25.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	0.0142	
L878932-08	CD33.5	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	0.0179	XY62.5
L878932-09	XY62.5	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	0.0173	CD33.5
L878932-10	CD34.5	<0.0172	<0.0172	<0.0172	<0.0172	<0.0172	<0.0172	0.00587	
L878932-11	CD35.5	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	0.0401	
L869206-25	DE4.5	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	<0.0171	0.125	
L878932-12	DE6.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.132	
L869206-26	DE20.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.0539	
L875657-08	KL27.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	0.549	
L875988-06	KL28.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	0.265	
L875988-07	KL29.5	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	0.102	
L875988-08	KL30.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	0.0497	
L875988-09	KL31.5	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	
L875988-10	KL32.5	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	
L875988-01	KL33.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	XY63.5
L875988-02	XY63.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	KL33.5
L875988-03	KL34.5	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	
L875988-04	KL35.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.18	
L875988-05	KL36.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	0.0371	
L875657-07	LM27.5	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	
L875657-05	MN27.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	0.0206	XY64.5
L875657-06	XY64.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	MN27.5
L870144-11	NO4.5	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	0.461	
L875657-04	NO27.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



Table 6: Initial PCB Step-Out Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L870144-12	OP17.5	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	
L870144-05	PQ16.5	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	0.0074	
L870144-10	QR16.5	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	
L875657-01	QR24.5	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	
L870144-26	RS17.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	
L873387-01	ST17.5	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	0.017	<0.0218	XY68.5
L873387-02	XY68.5	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	0.04	<0.0214	ST17.5
L873387-03	TU17.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.514	<0.0189	
L873387-04	UV17.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	0.0351	<0.0178	
L873387-05	UV18.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	0.152	<0.0178	
L873387-06	UV19.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.00982	<0.0185	
L873387-08	UV20.5	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	0.00547	<0.0176	
L873387-09	UV21.5	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



4.2.5 Tar-Like Material

In addition to the stained soil samples described above, a small (approx. one cubic foot) amount of tar-like material was discovered in the vicinity of grid LM12.5. This material appeared to be consistent with heavy hydrocarbons such as crude oil residue. One sample was collected from this material and submitted to the laboratory for PCB analysis (sample *TAR-01*, laboratory sample number L871380-01). The results of this sample analysis indicated a concentration of **0.0071 mg/kg PCB 1254** (estimated concentration below the Reporting Limit). Based on these results the small amount of tar-like material was disposed along with waste asphalt as Non-RCRA Hazardous Waste under profile CA608682 (see Section 3.3, above).



Tar-Like Material in Vicinity of Grid LM12.5

4.3 Second Round PCB Remediation and Sampling Results

The combination of *Perimeter*, *Under Slab*, *Step-Out*, and *Stain* samples collected during the initial round of PCB sampling comprised 304 samples (including 28 duplicates) over 276 discrete grid locations. A total of 57 locations were found to exceed project action levels and were scheduled for re-excavation. Based on these locations, an additional 19 second round step-out sample locations were also scheduled for investigation to evaluate previously un-sampled adjacent grid locations for potential PCB contamination.

The second round of PCB re-excavation and sampling was conducted in sixteen discrete sampling events between December 13, 2016 and June 14, 2017. Re-excavation and sampling was performed on the 57 locations found during the initial round of sampling to have exceeded project action levels. In addition, five grid locations were added based on observations of visible staining during excavation (described below). Finally, nineteen additional *Step-Out* samples were also collected during round two. In total, 94 samples were collected from 81 discrete grid locations during the second round (81 samples plus 8 duplicates and 5 added stained locations).



Seventeen sample locations were found to exceed project action levels — thirteen *Re-Excavation* samples and four round two *Step-Out* locations. PCB results exceeding action levels ranged from **0.309 mg/kg** to **280 mg/kg PCB 1260**. Five samples exceeded 1 mg/kg and one sample exceeded 50 mg/kg.



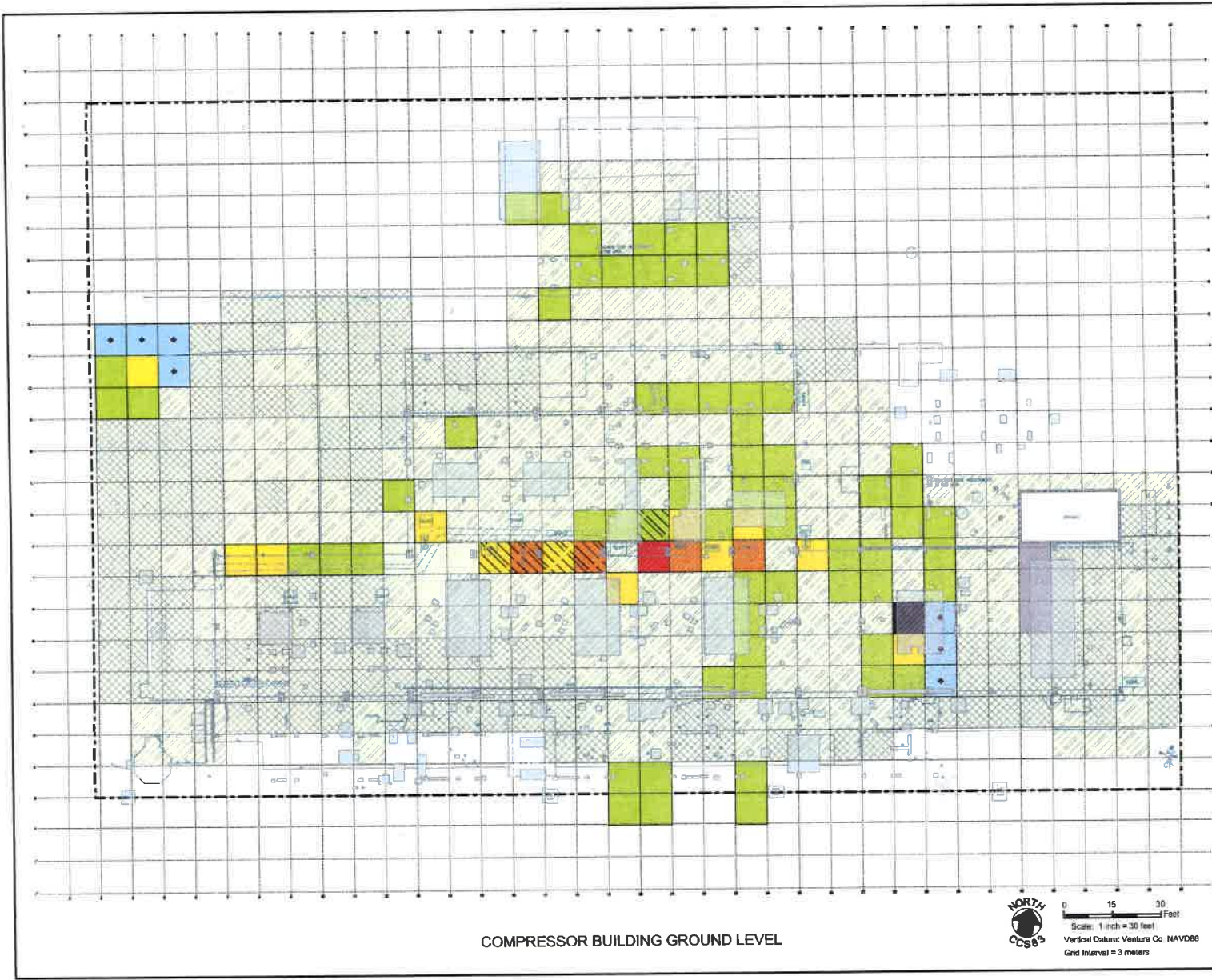
Round 2 Sampling Trench
(Sample IJ17.5 in Foreground; *FNDL PIPE* Visible in Background)

Regarding the five re-excavation locations added based on observations of staining, four of these locations were coincident with the further exposure of the underground cast iron sewer pipe first identified during the collection of sample *FNDL PIPE* described in Section 4.2.4, above. These four locations, grid cells IJ15.5 through IJ 18.5, were excavated approximately 5.0' below the surrounding natural grade to remove the pipe and its sandy bedding. The soil and bedding immediately surrounding the pipe appeared visibly stained (brownish black; consistent with a sewer pipe). These four sample locations exceeded the project action levels (**0.692 mg/kg** to **1.45 mg/kg PCB 1260**) and were scheduled for additional re-excavation.

The fifth location, grid cell JK20.5, was over excavated approximately 4.0' deep to remove visible evidence of oil-stained soil. The corresponding *Re-Excavation* sample was below project action levels (ND<0.021 mg/kg).

Figure 10 and Table 7 present the second round PCB results.






LEGEND

- Concrete Foundation/Pedestal (Former)
- Concrete Pad (Former)
- Concrete Wall (Former)
- Original Limit of Work
- Original Characterization Sample Results Below Project Action Levels
- Prior Round(s) Sample Results Below Project Action Levels
- No Sample — Location Obstructed
- Sample Results Below Project Action Levels
- Sample Result ≥ 0.24 mg/kg PCBs
- Sample Result ≥ 1.0 mg/kg PCBs
- Sample Result ≥ 50 mg/kg PCBs
- New Step-Out Sampling Location
- Additional (Discretionary) Sampling Location*

Notes: Results shown on this figure include 1st round re-excavation soil samples and 2nd round step-out samples shown on Table 7.

*Additional discretionary samples added to address field observations of staining or suspect piping. See text for further details. Note that these five samples were categorized as "Re-Ex2" samples.

COMPRESSOR BUILDING GROUND LEVEL



 Scale: 1 inch = 30 feet

 Vertical Datum: Ventura Co. NAVD88

 Grid Interval = 3 meters


	Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California			
	Compressor Building 2nd Round PCB Sampling Results			
	Source:	Revision:	Date:	Figure:
KDM Meridian Feb 2016	0	02/12/16	10	

Table 7: Second Round PCB Sample Results
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L879276-05	AB19.5	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	0.0331	YZ51.5
L879276-06	YZ51.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.0312	AB19.5
L879276-07	AB20.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	0.0441	
L879276-11	AB23.5	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	0.0933	
L878962-03	REEX1-BC19.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	
L878962-04	REEX1-BC20.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	0.0301	
L878962-07	REEX1-BC23.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	0.0358	
L908243-01	REEX1-EF22.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
L908243-02	REEX1-EF23.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	0.052	
L903835-01	REEX1-EF27.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	REEX1-YZ6.5
L903835-02	REEX1-YZ6.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	REEX1-EF27.5
L896396-02	EF28.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	
L913342-01	REEX1-FG23.5	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	
L903835-03	REEX1-FG27.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	0.0827	
L896396-03	FG28.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.669	
L913342-02	REEX1-GH23.5	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	
L908243-03	REEX1-HI19.5	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	0.856	
L913342-03	REEX1-HI23.5	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	
L913342-04	REEX1-HI24.5	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	
L903835-05	REEX1-HI26.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	REEX1-YZ7.5
L903835-06	REEX1-YZ7.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	REEX1-HI26.5
L903835-07	REEX1-HI27.5	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	0.0334	
L903835-08	REEX1-HI29.5	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.0363	
L896396-10	IJ7.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	0.313	
L896396-11	IJ8.5	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	0.868	
L896396-12	IJ9.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.0753	
L896396-13	IJ10.5	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	0.0225	
L896396-14	IJ11.5	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	0.0463	
L916120-10	REEX1-IJ15.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	0.703	
L916120-11	REEX1-IJ16.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	1.07	
L916120-12	REEX1-IJ17.5	<0.0213	<0.0213	<0.0213	<0.0213	<0.0213	<0.0213	0.692	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



Table 7: Second Round PCB Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L916120-13	REEX1-IJ18.5	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	1.45	
L916120-01	REEX1-IJ20.5	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	280	
L916120-02	REEX1-IJ21.5	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	<0.0208	36.7	
L916120-03	REEX1-IJ22.5	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	0.333	Also "SUMP-06"
L916120-04	REEX1-IJ23.5	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	6.1	Also "SUMP-07"
L910305-01	REEX1-IJ25.5	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	0.467	
L903835-09	REEX1-IJ26.5	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	
L903837-01	REEX1-IJ27.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	0.0089	
L903837-02	REEX1-IJ29.5	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	0.172	
L905336-02	REEX1-JK13.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	0.52	
L908243-04	REEX1-JK18.5	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	
L913342-05	REEX1-JK19.5	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	0.166	
L913342-06	REEX1-JK20.5	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	
L916120-05	REEX1-JK21.5	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	0.679	
L916120-06	REEX1-JK22.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.00823	REEX1-YZ8.5
L916120-07	REEX1-YZ8.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	REEX1-JK22.5
L916120-08	REEX1-JK23.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.596	
L916120-09	REEX1-JK24.5	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	<0.0205	0.0218	
L903837-03	REEX1-JK28.5	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	
L903837-04	REEX1-JK29.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.0125	
L905336-01	REEX1-KL12.5	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	
L910305-02	REEX1-KL21.5	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	
L910305-03	REEX1-KL23.5	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	0.00989	
L910305-04	REEX1-KL24.5	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	
L903837-05	REEX1-KL27.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	
L903837-06	REEX1-KL28.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	REEX1-YZ9.5
L903837-07	REEX1-YZ9.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	REEX1-KL28.5
L910305-05	REEX1-LM20.5	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	
L910305-06	REEX1-LM21.5	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	
L910305-07	REEX1-LM23.5	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	0.0142	
L910305-08	REEX1-LM24.5	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



Table 7: Second Round PCB Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L896396-04	LM28.5	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	0.0177	
L905336-03	REEX1-MN14.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	
L910305-09	REEX1-MN23.5	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	
L896396-06	NO3.5	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	0.0115	YZ55.5
L896396-07	YZ55.5	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	0.0171	NO3.5
L896602-17	REEX1-NO4.5	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	REEX1-YZ10.5
L896602-18	REEX1-YZ10.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	0.00612	REEX1-NO4.5
L904053-01	REEX1-NO20.5	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	
L905050-01	REEX1-NO21.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	
L904053-03	REEX1-NO22.5	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	
L904053-04	REEX1-NO23.5	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	0.015	
L904053-05	REEX1-NO24.5	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	
L896396-08	OP3.5	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	0.0185	
L896396-09	OP4.5	<0.0173	<0.0173	<0.0173	<0.0173	<0.0173	<0.0173	0.309	
L896602-25	REEX1-QR17.5	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	
L879288-09	REEX1-RS18.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	0.0657	
L879288-10	REEX1-RS19.5	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	
L879293-01	RS20.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.129	<0.0185	
L879293-02	RS21.5	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	0.104	<0.0186	
L879293-03	RS22.5	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	
L879288-12	REEX1-ST18.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.0438	
L879288-13	REEX1-ST20.5	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	
L879288-14	REEX1-ST21.5	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	0.00709	REEX1-YZ4.5
L879288-15	REEX1-YZ4.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.0137	REEX1-ST21.5
L879293-13	ST22.5	<0.0176	<0.0176	<0.0176	<0.0176	<0.0176	0.13	<0.0176	
L879293-14	TU16.5	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	0.0336	<0.0177	
L879288-16	REEX1-TU17.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	0.0746	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB

Note: Samples without "ReEx1" prefix are Step-Out Samples



4.4 Third Round PCB Remediation and Sampling Results

The third round of PCB remediation and sampling was performed in eight sampling events between March 30 and June 29, 2017. Twenty-nine sample locations (29 samples plus 4 duplicates) were addressed during Round Three: seventeen locations that exceeded project action levels during Round Two, seven additional step-out locations, and five additional re-excavation locations based on further evidence of staining.

Nine locations (9 samples plus one duplicate) exceeded project action levels. Sample results exceeding action levels ranged from **0.39 mg/kg** to **4.84 mg/kg PCB 1260**. Nine of the ten samples exceeding project action levels were greater than 1 mg/kg. All of the samples exceeding action levels consisted of *Re-Excavation* samples, no *Step-Out* samples were affected.



Staining Observed Prior to Round 3
(Vicinity Grid IJ19.5/Sump-05)

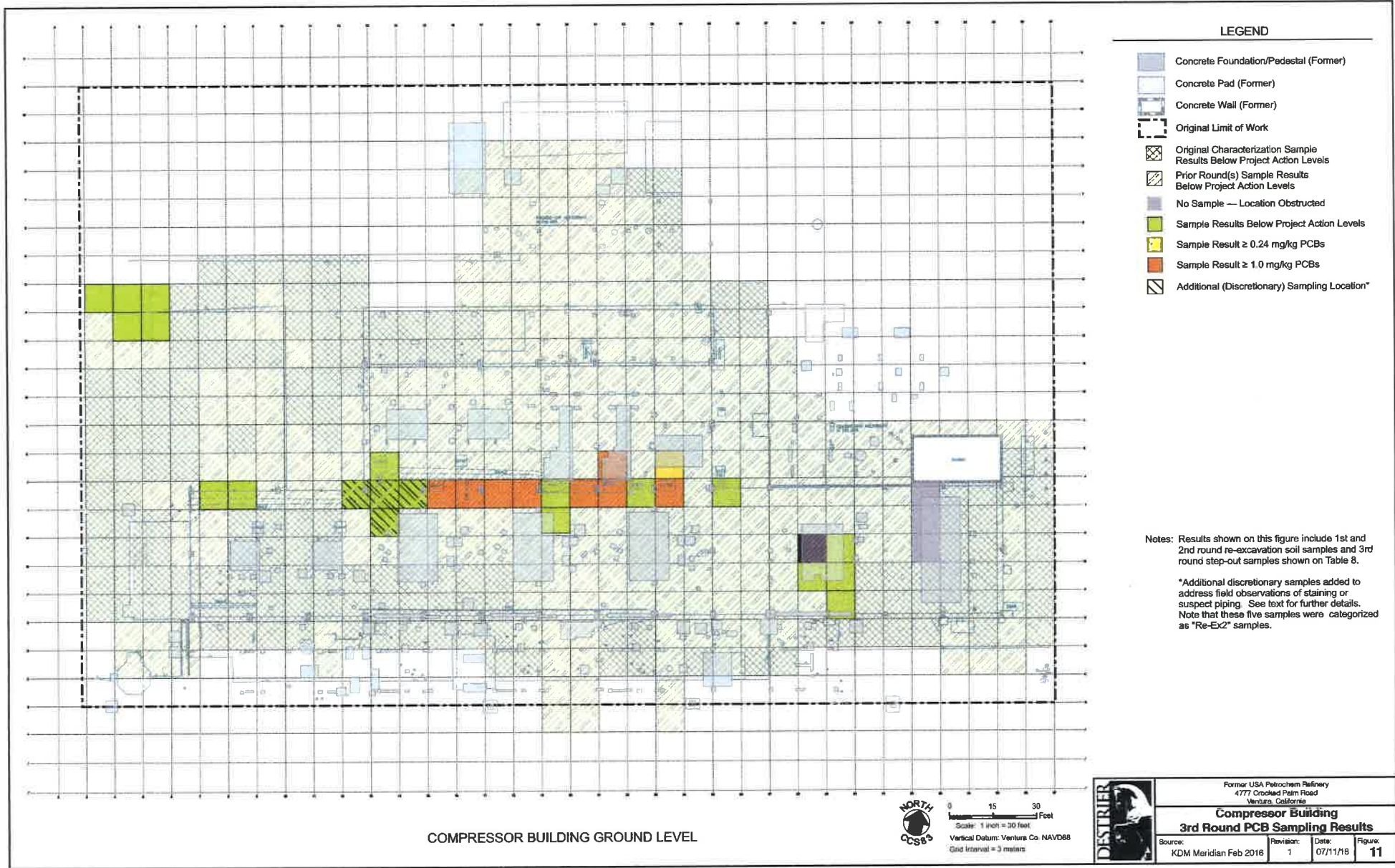
The five additional *Re-Excavation* samples added due to observations of staining included four additional samples associated with the cast iron sewer pipe. Samples IJ12.5 through 14.5 followed the remaining alignment of the pipe as it was exposed traveling westward. Sample HI13.5 was located where the pipe turned southwest at a “wye” and ended. No further evidence of the pipe was observed past these grid locations. All four of the samples associated with the cast iron sewer pipe were found to be below project action levels.

The fifth *Re-Excavation* sample added during this event, sample *REEX2-IJ19.5*, was associated with the re-excavation of the location of sump number five (*SUMP-05*). This sample is discussed below in Section 4.6.

Portions of the Round Three excavation in the IJ and JK rows encountered shallow groundwater. Details are discussed further in Section 4.8.

Figure 11 and Table 8 illustrate the third round PCB results.





LEGEND

- Concrete Foundation/Pedestal (Former)
- Concrete Pad (Former)
- Concrete Wall (Former)
- Original Limit of Work
- Original Characterization Sample Results Below Project Action Levels
- Prior Round(s) Sample Results Below Project Action Levels
- No Sample — Location Obstructed
- Sample Results Below Project Action Levels
- Sample Result ≥ 0.24 mg/kg PCBs
- Sample Result ≥ 1.0 mg/kg PCBs
- Additional (Discretionary) Sampling Location*

Notes: Results shown on this figure include 1st and 2nd round re-excavation soil samples and 3rd round step-out samples shown on Table 8.

*Additional discretionary samples added to address field observations of staining or suspect piping. See text for further details. Note that these five samples were categorized as "Re-Ex2" samples.

COMPRESSOR BUILDING GROUND LEVEL

NORTH
 Scale: 1 inch = 30 feet
 Vertical Datum: Venture Co. NAVD88
 Grid Interval = 3 meters

	Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California		
	Compressor Building 3rd Round PCB Sampling Results		
	Source:	Revision:	Date:
KDM Meridian Feb 2016	1	07/11/16	Figure 11

Table 8: Third Round PCB Sample Results
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L903841-01	EF29.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	0.0247	
L903835-04	REEX1-FG28.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	0.00796	
L903841-02	FG29.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	0.053	
L903841-03	GH29.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.0149	YZ59.5
L903841-04	YZ59.5	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.0206	GH29.5
L919844-16	REEX2-HI13.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	0.0679	
L910301-01	REEX2-HI19.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	
L899618-15	REEX1-IJ7.5	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	
L899618-16	REEX1-IJ8.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	
L919844-01	REEX2-IJ12.5	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	
L919844-02	REEX2-IJ13.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.124	
L919844-03	REEX2-IJ14.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.0107	
L919844-04	REEX2-IJ15.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	2.34	
L919844-05	REEX2-IJ16.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	4.07	
L919844-06	REEX2-IJ17.5	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	3.02	
L919844-07	REEX2-IJ18.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	2.72	
L919844-08	REEX2-IJ19.5	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	0.189	Also "SUMP-05"
L919844-09	REEX2-IJ20.5	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	3.47	REEX2-YZ23.5
L919844-10	REEX2-YZ23.5	<0.0239	<0.0239	<0.0239	<0.0239	<0.0239	<0.0239	3.08	REEX2-IJ20.5
L919844-11	REEX2-IJ21.5	<0.0222	<0.0222	<0.0222	<0.0222	<0.0222	<0.0222	2.86	
L919844-12	REEX2-IJ22.5	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	Also "SUMP-06"
L919844-13	REEX2-IJ23.5	<0.0232	<0.0232	<0.0232	<0.0232	<0.0232	<0.0232	2.59	Also "SUMP-07"
L913346-01	REEX2-IJ25.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	
L906263-01	REEX2-JK13.5	<0.0213	<0.0213	<0.0213	<0.0213	<0.0213	<0.0213	0.00703	REEX2-YZ22.5
L906263-02	REEX2-YZ22.5	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	REEX2-JK13.5
L919844-14	REEX2-JK21.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	4.84	
L919844-15	REEX2-JK23.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	0.39	
L899618-17	REEX1-OP4.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	REEX1-YZ18.5
L899618-18	REEX1-YZ18.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	REEX1-OP4.5
L899617-07	OP5.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.108	
L899617-08	PQ3.5	<0.0172	<0.0172	<0.0172	<0.0172	<0.0172	<0.0172	0.103	
L899617-09	PQ4.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	
L899617-10	PQ5.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB



4.5 Fourth and Fifth Round PCB Remediation and Sampling Results

The fourth round of PCB remediation and sampling focused on the nine locations found to exceed project action levels during Round Three. Round Four sampling was performed in one event on July 18, 2017. Groundwater was encountered during Round Four (see Section 4.8 for further details).

Round Four sampling consisted of 9 sample locations (9 samples plus 1 duplicate). Five samples exceeded project action levels (4 sample locations plus 1 duplicate). PCB concentrations in the samples that exceeded project action levels ranged from **0.268 mg/kg** to **1.08 mg/kg PCB 1260**. Two locations exceeded 1 mg/kg.

Round Four sampling results are included on Figure 12 and Table 9, below.

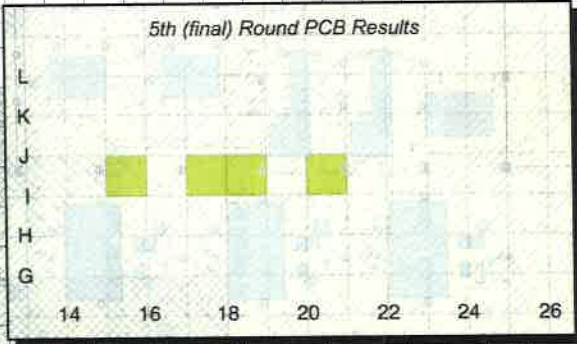


Round Four Excavation

The fifth and final round of PCB remediation and sampling was conducted on August 2, 2017. Groundwater was also encountered during Round Five (see Section 4.8). Round Five consisted of re-excavation sampling of the four locations found to exceed project action levels during Round Four. Five samples were collected (4 sample locations plus 1 duplicate). All of the samples were below project action levels.


Round Five sampling results are included on Figure 12 and Table 10, below.





- LEGEND**
- Concrete Foundation/Pedestal (Former)
 - Concrete Pad (Former)
 - Concrete Wall (Former)
 - Original Limit of Work
 - Original Characterization Sample Results Below Project Action Levels
 - Prior Round(s) Sample Results Below Project Action Levels
 - No Sample — Location Obstructed
 - Sample Results Below Project Action Levels
 - Sample Result ≥ 0.24 mg/kg PCBs
 - Sample Result ≥ 1.0 mg/kg PCBs

Notes: Results shown on this figure include 4th and 5th (final) round re-excavation soil samples shown on Tables 9 and 10.



 0 15 30 Feet

 Scale: 1 inch = 30 feet

 Vertical Datum: Ventura Co. NAVD88

 Grid Interval = 3 meters


	Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California			
	Compressor Building 4th and 5th (final) Round PCB Sampling Results			
Source:	Revision:	Date:	Figure:	
KDM Meridian Feb 2016	1	07/11/18	12	

Table 9: Fourth Round PCB Sample Results
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L923454-01	REEX3-IJ15.5	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	1.04	
L923454-02	REEX3-IJ16.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	
L923454-03	REEX3-IJ17.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	0.435	
L923454-04	REEX3-IJ18.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.268	
L923454-05	REEX3-IJ20.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	0.611	REEX3-YZ25.5
L923454-06	REEX3-YZ25.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	1.08	REEX3-IJ20.5
L923454-07	REEX3-IJ21.5	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	
L923454-08	REEX3-IJ23.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.048	Also "SUMP-07"
L923454-09	REEX3-JK21.5	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	0.0309	
L923454-10	REEX3-JK23.5	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	0.0678	

Color Codes: ≥ 0.24 mg/kg PCB ≥ 1.0 mg/kg PCB ≥ 50 mg/kg PCB

Table 10: Fifth (Final) Round PCB Sample Results
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L926766-01	REEX4-IJ15.5	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	0.0276	
L926766-02	REEX4-IJ17.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	0.0131	
L926766-03	REEX4-IJ18.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.119	
L926766-04	REEX4-IJ20.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.0312	REEX4-YZ26.5
L926766-05	REEX4-YZ26.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.0457	REEX4-IJ20.5



4.6 Concrete-Filled Sumps PCB Remediation and Sampling Results

4.6.1 Initial (First Round) Sump PCB Remediation and Sampling

The removal and subsequent confirmation sampling of the nine concrete-filled sumps described in Section 4.1.4 was performed over three events between April 26 and June 14, 2017. Ten samples were collected (9 samples plus 1 duplicate).

Four of the nine sump locations exceeded project action levels. PCB concentrations ranged from **0.317 mg/kg** to **6.1 mg/kg PCB 1260** (see Table 11, below). Figure 13 illustrates the sump sampling locations and results.



Sump-07 (foreground) and *Sump-06* (drums)
During Round One
(Note staining in adjacent soil)

4.6.2 Second Round Sump PCB Remediation and Sampling

The four sump locations found to exceed project action levels during Round One were re-excavated and re-sampled in three events between May 1 and June 29, 2017. Five samples were collected (4 sample locations plus one duplicate).










Two of the four locations exceeded action levels. The sample associated with *Sump 05* contained **0.627 mg/kg PCB 1260** and the *Sump 07* sample contained **2.59 mg/kg PCB 1260**. These results are shown on Table 12 and Figure 13, below.

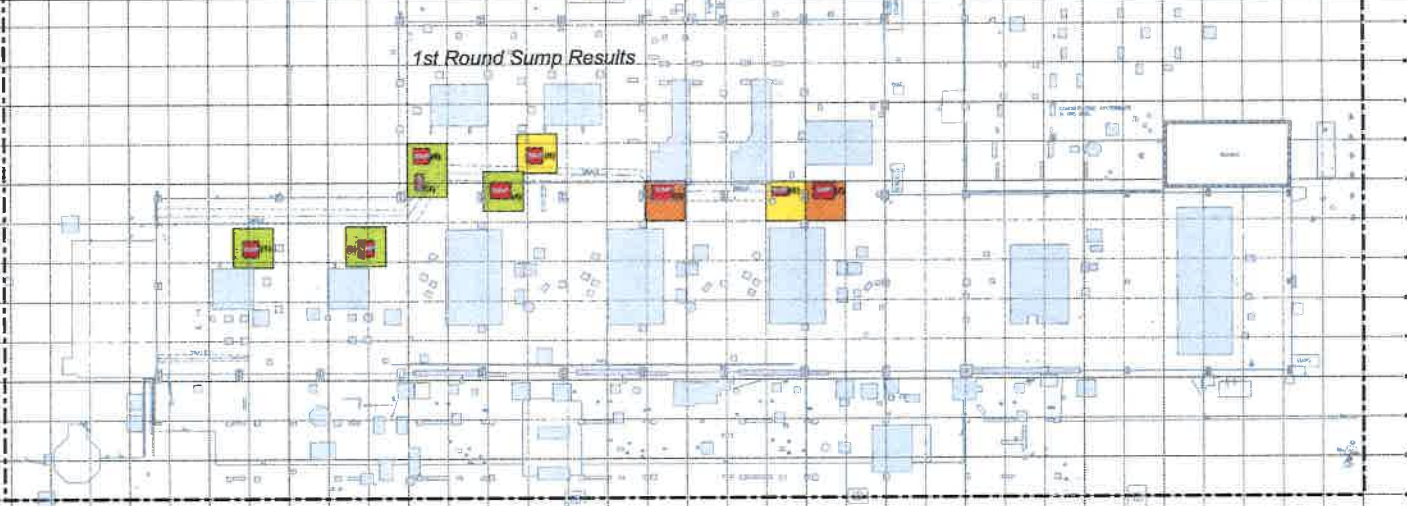
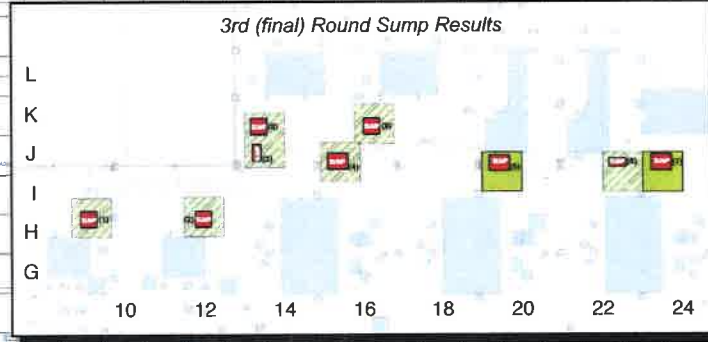
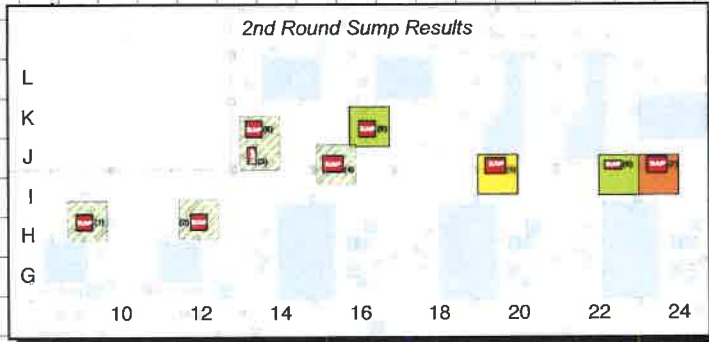
4.6.3 Third (Final) Round Sump PCB Remediation and Sampling

The two remaining sump locations exceeding project action levels were re-excavated and re-sampled on June 29 and July 18, 2017. One sample was collected from each sump location — both samples were below project action levels (see Table 13 and Figure 13, below).



LEGEND

-  Concrete Foundation/Pedestal (Former)
-  Concrete Pad (Former)
-  Concrete Wall (Former)
-  Original Limit of Work
-  Concrete Filled Sump
-  Prior Round(s) Sample Results Below Project Action Levels
-  Sample Results Below Project Action Levels
-  Sample Result ≥ 0.24 mg/kg PCBs
-  Sample Result ≥ 1.0 mg/kg PCBs



Notes: Results shown on this figure include 1st, 2nd and 3rd round concrete-filled sump soil samples shown on Tables 11, 12, and 13.

COMPRESSOR BUILDING GROUND LEVEL



0 15 30 Feet
 Scale: 1 inch = 30 feet
 Vertical Datum: Ventura Co. NAVD88
 Grid interval = 3 meters



Former USA Petrochem Refinery
 4777 Crooked Palm Road
 Ventura, California

Compressor Building Concrete-Filled Sumps Sampling Results

Source: KDM Meridian Feb 2016	Revision: 1	Date: 07/11/18	Figure: 13
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Table 11: Initial (1st Round) Concrete-Filled Sumps Sample Results (mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L905335-01	SUMP-01	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	0.0197	
L905335-02	SUMP-02	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.011	
L905335-03	SUMP-03	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.164	
L905335-04	SUMP-04	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	0.107	SUMP-10
L908281-01	SUMP-05	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	<0.0207	1.13	
L916120-03	Re-Ex1-IJ22.5 (SUMP-06*)	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	0.333	
L916120-04	Re-Ex1-IJ23.5 (SUMP-07*)	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	6.1	
L905335-05	SUMP-08	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	
L905335-06	SUMP-09	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	0.317	
L905335-07	SUMP-10	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.0998	SUMP-04

* Refer to Grid Sample Noted – Separate “Sump” Sample Not Collected

Table 12: Second Round Concrete-Filled Sumps Sample Results (mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L916126-01	REEX1-SUMP-05	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	0.627	
L919844-12	Re-Ex2-IJ22.5 (SUMP-06*)	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	
L919844-13	Re-Ex2-IJ23.5 (SUMP-07*)	<0.0232	<0.0232	<0.0232	<0.0232	<0.0232	<0.0232	2.59	
L906260-01	REEX1-SUMP-09	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	REEX1-SUMP-11
L906260-02	REEX1-SUMP-11	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	REEX1-SUMP-09

* Refer to Grid Sample Noted – Separate “Sump” Sample Not Collected

Table 13: Third (Final) Round Concrete-Filled Sumps Sample Results (mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Duplicate Sample ID
L919844-08	REEX2-IJ19.5 (SUMP-05*)	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	0.189	
L923454-08	REEX3-IJ23.5 (SUMP-07*)	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.048	

* Refer to Grid Sample Noted – Separate “Sump” Sample Not Collected



4.7 Additional PCB Remediation Details

4.7.1 Typical Remedial Excavation Depths

As noted in Section 4.1.1, initial *Perimeter* excavations consisted of asphalt-paved areas (removed during demolition) and bare soil areas. Concrete pedestals, pipes, guard posts or other physical obstructions were removed during demolition to the extent possible to facilitate confirmation sampling. Generally, initial *Perimeter* excavations were approximately one-foot deep relative to surrounding grade.

Perimeter Step-Out sampling locations were generally not excavated prior to sampling. Therefore, *Step-Out* sampling results are representative of post-demolition, relatively undisturbed surface soil locations.

Under Slab characterization samples were also not specifically excavated prior to initial sampling. However, demolition of concrete footings and foundations both created disturbed soil conditions and left significant voids — initial *Under Slab* samples in these locations were often up to 3.5' below surrounding grade.



Typical Perimeter Sampling Grid
in Former Asphalt Covered Area
(Approx. 1' Below Grade)

Initial *Sump* samples were collected below the bottom of sumps as they were removed during demolition. These initial samples ranged from approximately 3' to 5' feet below surrounding grade.

Re-Excavation samples were collected from re-excavations of *Perimeter*, *Step-Out*, *Under Slab*, and *Sump* locations that exceeded project action levels. These re-excavations were advanced in approximate one-foot increments notwithstanding subsurface obstructions that may have required deeper demolition/excavation to access additional depths below the prior sampling locations.



As noted above, visibly stained soil was excavated and addressed during Rounds One, Two and Three. These excavations were associated either with visual observation of oil-stained soil or were associated with the *FNDL PIPE*. Oil-stained soil excavation and sampling was primarily conducted in the vicinity of grid cells JK19.5 to JK 23.5. Excavation and sampling associated with the *FNDL PIPE* was performed in an east-to-west sequence beginning with grid IJ23.5 and terminating at grids IJ12.5 and HI13.5 (Pipe Wye). This pipe was also coincident with the row of concrete-filled sumps beginning adjacent to *SUMP-07* and terminating westward at *SUMP-03* (reinforcing the observation that it may have been a sewer line associated with the sumps).



FNDL PIPE Prior to Round 2 Excavation
(Vicinity of IJ18.5)



FNDL PIPE Termination at Wye
(Vicinity of IJ13.5)

As a result of these observations, significant additional excavation was performed immediately prior to and during re-excavation sampling events on June 14 and June 29 (corresponding to Rounds 2 and 3). Excavation depths in the remediation excavation within rows IJ and JK were approximately 5.0' feet below grade during Round 2 and approximately 7.0' feet below grade during Round 3.



Staining Prior to Round 4 Excavation
(*FNDL PIPE* is below staining level in Row IJ trench)

4.7.2 Groundwater Intrusion Into Excavations

Shallow groundwater was encountered in the remediation excavation within rows IJ and JK beginning with Round 3 (June 29, 2017). The static groundwater elevation at this time was approximately 7.5' below surrounding grade (El. 165.0').



Shallow Groundwater in the Round 3 Excavation
(Vicinity of Rows IJ and JK)

Excavation of Round 4 locations in Rows IJ and JK was performed July 18, 2017. The majority of these excavations were below the water table. The soil encountered during these excavations was typical of river bottom sediments encountered elsewhere on the project site (black to grayish black silty sand with coarse gravel and cobbles (see photos below).



Round 4 Excavation
(IJ Row)



Detail of Soil From Round 4 Excavation



Following the Round 4 excavation, light non-aqueous phase liquid (LNAPL; “free product”) was observed on the surface of water within the remedial excavation July 19, 2017. The source of the LNAPL appeared to be in the vicinity of cell IJ19.5.

Sorbent pads were employed to collect the LNAPL and a grab sample of the surface of the water was obtained (see Section 4.8). Visible accumulations of LNAPL appeared to be successfully mitigated after an application of sorbent pads, however as a precaution, sorbent pads were employed through Round 5 on August 2, 2017.



Hydrocarbon Product After
Round 4 Excavation
(Vicinity of IJ19.5)



Sorbent Pads Used
After Round 4 Excavation



Round 5 Excavation



Round 5 Conclusion
(August 2, 2017)

Observations revealed that the LNAPL appeared only after disturbance of the saturated soil during excavation and was readily mitigated using sorbent pads. This suggests that the NAPL is relatively immobile *residual NAPL* held securely within the capillary pore space of the fine-grained, silty fraction of the saturated soil encountered below the water table.



4.7.3 Backfilling Deep Excavations

Following receipt of soil sampling data demonstrating all samples were below project action levels for PCBs following Round 5, additional excavation and benching was performed in the vicinity of Rows IJ and JK. This additional excavation was intended to provide a suitable trench configuration to permit backfilling saturated excavations. Additionally, benching of the excavation was performed to facilitate the installation of well points and soil borings to further investigate and remediate, if necessary, potential groundwater contamination following backfilling.

Backfilling the saturated zone was performed by first filling the deeper portions of the excavation with 4"-minus coarse gravel. This material was placed from the bottom of the excavation to approximately two feet above the static water level. Geotextile fabric was placed over the gravel fill prior to backfilling the remainder of the excavation to surrounding grade using native soil obtained from a shallow on-site borrow area (see Figure 2).

Figure 14 illustrates the approximate extent and depths of remedial excavations prior to backfilling.



Excavation and Benching After
Round 5 Excavation
(Looking East)



Excavation and Benching After
Round 5 Excavation
(Looking West)

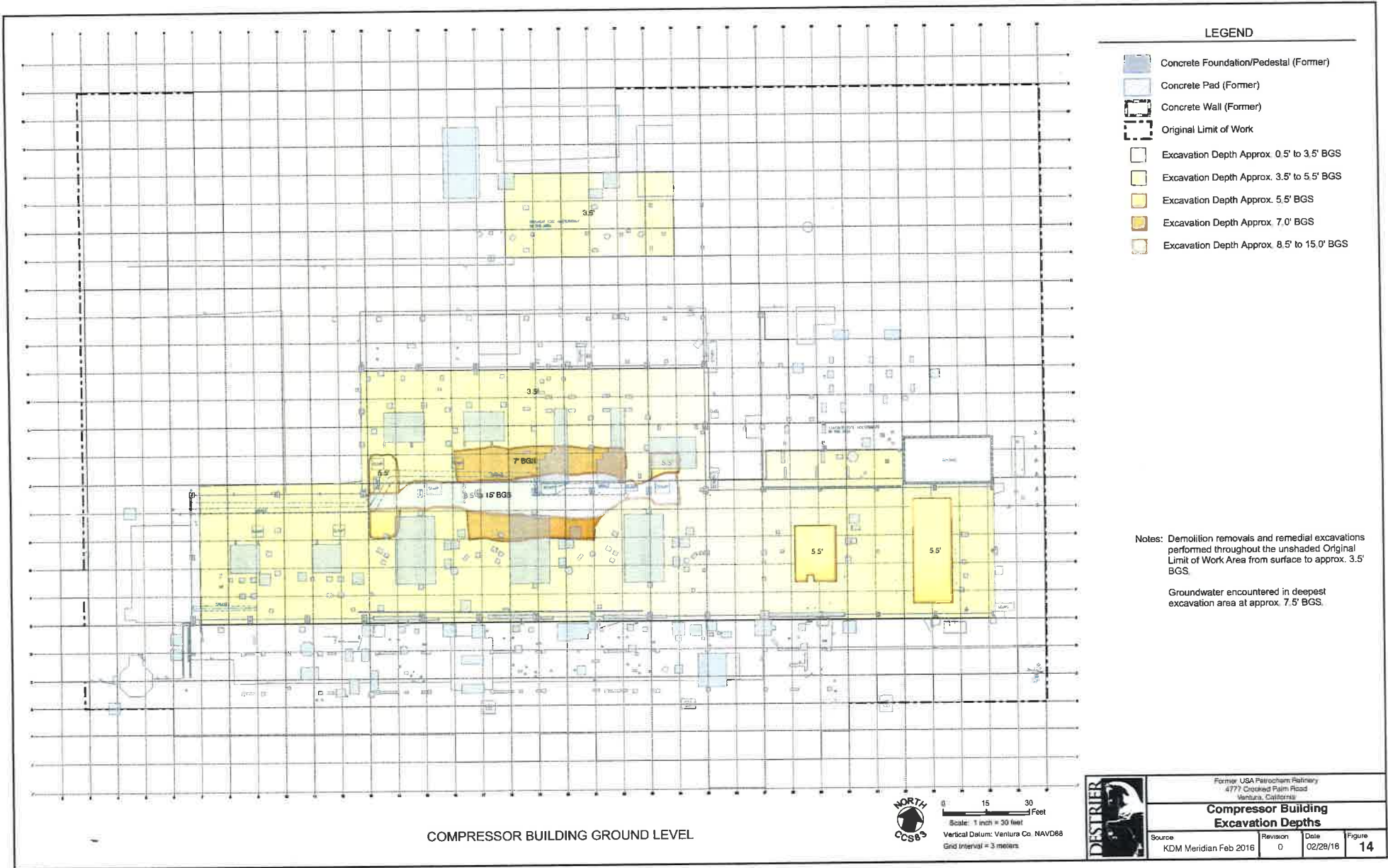


Coarse Gravel Fill



Geotextile Fabric Over Gravel





4.8 Groundwater PCB and TPH Sampling

4.8.1 Initial Grab Sampling

As described above, following the Round 4 excavation LNAPL was observed on the surface of water within the remedial excavation in the vicinity of cell IJ19.5. A single grab sample was obtained from the water surface using a disposable PTFE bailer. The sample was directly dispensed into a 40ml vials preserved with HCl and 100ml amber (unpreserved) containers provided by the laboratory.

Sample containers were wrapped in bubble wrap sleeves and placed in individual resealable plastic bags. Samples were immediately chilled to 4°C using water ice and placed in a reusable cooler provided by the laboratory. Samples were shipped via Federal Express to ESC Lab Sciences in Mount Juliet, Tennessee.

Samples were submitted for PCB analysis by gas chromatography using EPA Method 8082, Total Petroleum Hydrocarbons (TPH) analysis by gas chromatography using EPA Method 8015 (modified) and EPA Methods 3511/8015, Volatile Organic Compounds (VOC) analysis by gas chromatography/mass spectrometry using EPA Method 8260B, and Semi-Volatile Organic Compounds (SVOC) analysis by gas chromatography/mass spectrometry using EPA Method 8270C.

Sample results indicated the presence of PCBs, total petroleum hydrocarbons (TPH), acetone (a VOC), and a number of SVOC constituents.

PCB analysis revealed the presence of **0.0125 mg/l PCB 1260**. No other PCB species were found.

TPH analysis showed the presence of gasoline-range hydrocarbons (C₅-C₁₂) at a concentration of **0.0642 mg/l**, **0.0787 mg/l** diesel-range hydrocarbons (C₁₂-C₂₂), and **0.0457 mg/l** oil-range hydrocarbons (C₂₂-C₃₂). No C₃₂-C₄₀ range hydrocarbons were detected.

Acetone was found at a concentration of **0.011 mg/kg**. No other VOCs were detected.

SVOC analysis detected a number of constituents: Anthracene (**0.459 µg/l**), Fluoranthene (**1.50 µg/l**), Fluorene (**1.17 µg/l**), Phenanthrene (**2.7 µg/l**), Di-n-Octyl Phthalate (**18.3 µg/l**), Pyrene (**1.33 µg/l**), and 2,4-Dimethylphenol (**12.7 µg/l**). No other SVOCs were detected.

Analytical results were compared to the RWQCB Tier 1 ESLs for groundwater.³⁴ PCBs found in the grab sample (**12.7 µg/l PCB 1260**) exceeded the ESL criteria of 1.7×10^{-4} µg/l (aquatic environmental toxicity criterion). No other constituents detected exceeded the ESL criteria.³⁵

4.8.2 Installation and Sampling of Well Points

In the interest of evaluating potential remaining soil and groundwater contamination, a sampling program was implemented following backfilling and final grading of the Compressor Building site. The focus of this effort was primarily to evaluate PCB concentrations in groundwater to determine if the parameters of the *PCB Cleanup Plan* had been satisfied. Specifically, that no

³⁴ Tier 1 Environmental Screening Levels (ESLs) for Groundwater, San Francisco Bay Regional Water Quality Control Board, February 2016 (Rev. 3).

³⁵ Oil-range hydrocarbons are addressed in the ESLs as either hydrocarbon degradates or non-aqueous phase liquids (NAPL). If degradates are present, the ESLs stipulate that the diesel-range and oil-range values be added and compared to the diesel-range ESL (100 µg/l). Using this method, the additive diesel- and oil-range results would exceed the ESL criteria (0.1244 mg/l vs. 0.100 mg/l). However, since this sample was intended to directly evaluate the presence of LNAPL, the ESL criteria appear to be satisfied.



remaining 3 meter grid cells contained PCBs in excess of the project action levels (satisfied in Round 5) and that no residual PCB groundwater contamination was present in excess of project action levels.

In addition to groundwater sampling for PCB analysis, a secondary goal of this sampling effort was to evaluate TPH concentrations in groundwater. Finally, while soil sampling was not a primary concern given the prior satisfaction of *PCB Cleanup Plan* criteria during Round 5, soil samples were collected during the installation of well points to provide data regarding potential PCB hot spots should PCB contamination of groundwater be found.

A sampling program consisting of the installation of seven temporary well points and eight supplemental soil borings (push sampling) was implemented September 11 and 12, 2017.

Figure 15 illustrates the location of the well points and soil borings.

Temporary well points were installed using a Geoprobe™ Model 7822DT direct push drill rig. Borings were advanced (pushed) to approximately 8.0' below ground surface (BGS) followed by soil sampling using 3/4" x 48" polyethylene sample tubes to a total depth of approximately 15.0' BGS. Temporary well points were installed using 3/4" PVC well casing and 3/4" x 5' pre-pack well screen. Seven well points were installed. Eight soil borings were also installed using similar direct push and soil sampling techniques.

Table 14 provides a summary of the details of the well points and soil borings.

Soil samples were capped using plastic end caps lined with PTFE sheeting. Soil samples were labeled using the boring or well point designation (e.g., B8 or WP7) and the approximate depth of the sample (e.g., B8-12).

Groundwater sampling was performed using a peristaltic pump with disposable PTFE tubing. Samples were dispensed into 40ml VOA vials preserved with HCL and 100ml unpreserved amber bottles provided by the laboratory.

Both filtered and unfiltered groundwater samples were collected from each well point. Sample filtering was performed to evaluate if there were differences in filtered vs. unfiltered samples that would suggest that PCB contamination found in groundwater samples was attributable to PCBs sorbed onto soil particles rather than dissolved concentrations. Unfiltered groundwater samples were dispensed directly into containers from the peristaltic pump tubing. Filtered samples were obtained using a 1.0 micron filter installed in-line with the pump tubing.³⁶

Groundwater samples were labeled using the well point number (e.g., WP6) followed by "UW" or "FW" for unfiltered or filtered samples, respectively.

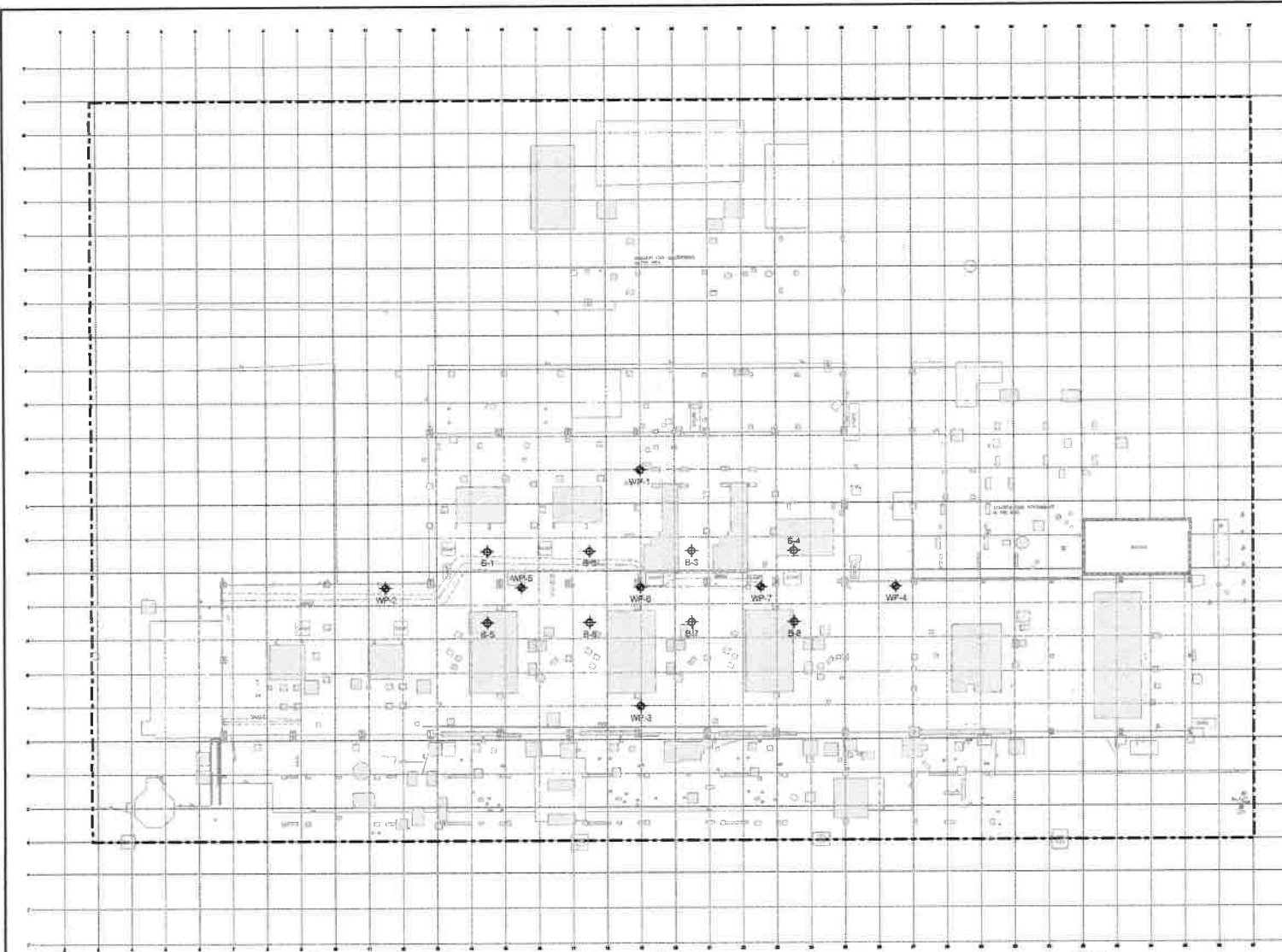
Sample containers were wrapped in bubble wrap sleeves and placed in individual resealable plastic bags. Samples were immediately chilled to 4°C using water ice and placed in a reusable cooler provided by the laboratory. Samples were shipped via Federal Express to ESC Lab Sciences in Mount Juliet, Tennessee.

Samples were submitted for PCB analysis by gas chromatography using EPA Method 8082 and Total Petroleum Hydrocarbons (TPH C₁₂-C₄₀) analysis by gas chromatography using EPA Method EPA Methods 3511/8015.







Soil borings and well points were abandoned immediately after sampling. Well casings were extracted from the well points and borings/well points were filled with bentonite chips and hydrated with tap water.

³⁶ Geotech dispos-a-filter™ Versapor® Filter Capsule






LEGEND

-  Concrete Foundation/Pedestal (Former)
-  Concrete Pad (Former)
-  Concrete Wall (Former)
-  Original Limit of Work
-  Well Point (Temporary)
-  Soil Boring (Push Sample)

Notes: Soil samples collected from soil borings and well points were not analyzed based on no PCBs detected in unfiltered groundwater samples collected from well points (see Section 4.8 for details).

COMPRESSOR BUILDING GROUND LEVEL



 0 15 30 Feet

 Scale: 1 inch = 30 feet

 Vertical Datum: Ventura Co. NAVD88

 Grid Interval = 3 meters



Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California			
Compressor Building			
Soil Boring and Well Point Locations			
Source	Revision	Date	Figure
KDM Meridian Feb 2016	0	02/28/18	15

Table 14: Summary of Well Points and Soil Borings

Well Point/ Boring	Grid Location	Total Depth (Feet BGS)	Screened Interval (Feet BGS)	Soil Sample Intervals (Feet BGS)	Groundwater Sample(s) Analyzed	Soil Sample(s) Analyzed
WP-1	M19	15.0'	10'-15'	10.0'/12.0'	Unfiltered	None
WP-2	IJ11.5	15.0'	10'-15'	10.0'/12.0'	Unfiltered	None
WP-3	F19	15.0'	10'-15'	11.8'	Unfiltered	None
WP-4	IJ26.5	15.0'	10'-15'	12.0'	Unfiltered	None
WP-5	IF15.5	15.0'	10'-15'	12.0'/15.0'	Unfiltered	None
WP-6	IJ19	15.0'	10'-15'	12.0'/15.0'	Unfiltered	None
WP-7	IJ22.5	15.0'	10'-15'	12.0'/15.0'	Unfiltered	None
B-1	JK14.5	15.0'		12.0'/15.0'		None
B-2	JK17.5	15.0'		12.0'/15.0'		None
B-3	JK20.5	15.0'		12.0'/15.0'		None
B-4	JK23.5	15.0'		12.0'/15.0'		None
B-5	HI14.5	15.0'		12.0'/15.0'		None
B-6	HI17.5	15.0'		12.0'/15.0'		None
B-7	HI20.5	15.0'		12.0'/15.0'		None
B-8	HI23.5	15.0'		12.0'/15.0'		None

The laboratory was instructed to “hold” the filtered groundwater samples and all of the soil samples pending analysis of the unfiltered groundwater samples. The need to analyze the filtered groundwater samples was obviated since the unfiltered groundwater samples were shown to be free from detectable concentrations of PCBs. Similarly, the absence of detectable concentrations of PCBs in the unfiltered groundwater samples eliminated the need to analyze any of the soil samples from the well points and soil borings. Therefore, the filtered groundwater samples and soil samples were not analyzed.

No PCBs were detected in the groundwater samples, therefore, the parameters of the *PCB Cleanup Plan* appear to be satisfied and ***no further action regarding PCBs appears to be required.***

Diesel-range TPH (C₁₂-C₂₂) concentrations in the unfiltered groundwater samples ranged from **0.224 mg/l** to **3.71 mg/l**. Oil-range TPH (C₂₂-C₄₀) concentrations ranged from **0.40 mg/l** to **7.64 mg/l**. These results are consistent with the presence of *residual NAPL* as noted above.

Tables 15 and 16 provide a summary of the PCB and TPH results from the unfiltered groundwater samples.



Table 15: Groundwater PCB Sampling Results
($\mu\text{g/l}$)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260
L936488-02	WP1-UW	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625
L936488-01	WP2-UW	<0.77	<0.77	<0.77	<0.77	<0.77	<0.77	<0.77
L936488-04	WP3-UW	<0.715	<0.715	<0.715	<0.715	<0.715	<0.715	<0.715
L936488-03	WP4-UW	<0.715	<0.715	<0.715	<0.715	<0.715	<0.715	<0.715
L936488-05	WP5-UW	<0.715	<0.715	<0.715	<0.715	<0.715	<0.715	<0.715
L936488-06	WP6-UW	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625
L936488-07	WP7-UW	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625	<0.625

Table 16: Groundwater TPH Sampling Results
(mg/l)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	C ₁₂ -C ₂₂ Hydrocarbons	C ₂₂ -C ₃₂ Hydrocarbons	C ₃₂ -C ₄₀ Hydrocarbons	Total C ₂₂ -C ₄₀ Hydrocarbons (TPH)
L936488-02	WP1-UW	0.464	0.309	0.0995	0.4085
L936488-01	WP2-UW	0.37	0.167	0.0545	0.2215
L936488-04	WP3-UW	0.587	0.618	0.213	0.831
L936488-03	WP4-UW	0.224	0.0889	0.0457	0.1346
L936488-05	WP5-UW	2.31	0.889	0.334	1.223
L936488-06	WP6-UW	3.71	5.32	2.32	7.64
L936488-07	WP7-UW	0.755	0.235	0.165	0.4



5.0 Cd and Pb Remediation and Sampling

5.1 Cd and Pb Sampling Methodology

5.1.1 Sampling Methods

Individual soil samples were collected by gloved hand using disposable plastic spoons and placed in disposable resealable plastic bags. Individual sub-sample locations were marked in the field using surveyor whisksers or flagging at each sampling location.

Duplicate samples were collected at a frequency of 10%. The duplicate sample locations were selected using a random number generator (random.org). The duplicate sample were collected by dispensing two aliquots of the mixed composite sample into separate glass sample jars. Duplicate sample numbers received a surrogate grid location "XY" followed by surrogate grid numbers beginning with "47.5".

Sample jars were wrapped in bubble wrap sleeves and placed in individual resealable plastic bags. Samples were immediately chilled to 4°C using water ice and placed in a reusable cooler provided by the laboratory. No other preservatives were used. Samples were shipped via Federal Express to ESC Lab Sciences in Mount Juliet, Tennessee. Samples were submitted for Cd and/or Pb analysis by inductively coupled plasma spectrometry using EPA Method 6010B.



Typical Soil Sample

Perimeter samples were collected from areas surrounding the former building. Some of these areas were formerly paved with asphalt and others were bare soil. The perimeter grid locations were excavated approximately one-foot (0.3 m) below surrounding grade prior to confirmation sampling. *Perimeter* samples were labeled with the prefix "METL" followed by the grid location designation (e.g., "METL-EF36.5" indicating a sample collected at the midpoint between grid locations E and F, and 36 and 37).



Perimeter soil and asphalt grid locations that exceeded project action levels during the May and June 2016 characterization effort (Section 2.6.3) were excavated to approximately one-foot (0.3 m) below surrounding grade. Concrete pedestals, pipes, guard posts and other physical obstructions were removed as necessary to complete the excavation work. These items were disposed offsite along with other concrete as described in Section 3.2, above.

Evaluation of the perimeter soil and asphalt Pb results revealed that a number of perimeter sample locations were not adequately bounded by “clean” samples for Pb at the outer horizontal boundary of the sampling grid. Based on this evaluation, additional *Step-Out* surface soil sampling was performed in 82 locations to identify or confirm the horizontal extent of Pb concentrations in shallow soil that exceed project action levels.

Concrete characterization sampling demonstrated that Cd and Pb contamination resulting from peeling and disturbed paint present in the Compressor Building structure had been adequately decontaminated from concrete surfaces during the interim cleanup — therefore, no *Under Slab* samples intended for further characterization of Cd or Pb was scheduled for soil under the building slab and foundations (see Section 2.7.3).

Characterization sampling results for soil and asphalt described in Section 2.6.3 revealed 140 discrete perimeter soil and asphalt grid locations that exceeded project action levels for Pb (some of these locations also exceeded action levels for PCBs). Additionally, one Cd sample location, *MN25.5*, exceeded project action levels but this location also exceeded the PCB and Pb criteria. These 140 cells were scheduled for additional excavation and re-sampling until the project action levels were met.

Figure 16 shows the layout of the initial Cd and Pb remediation and sampling plan.

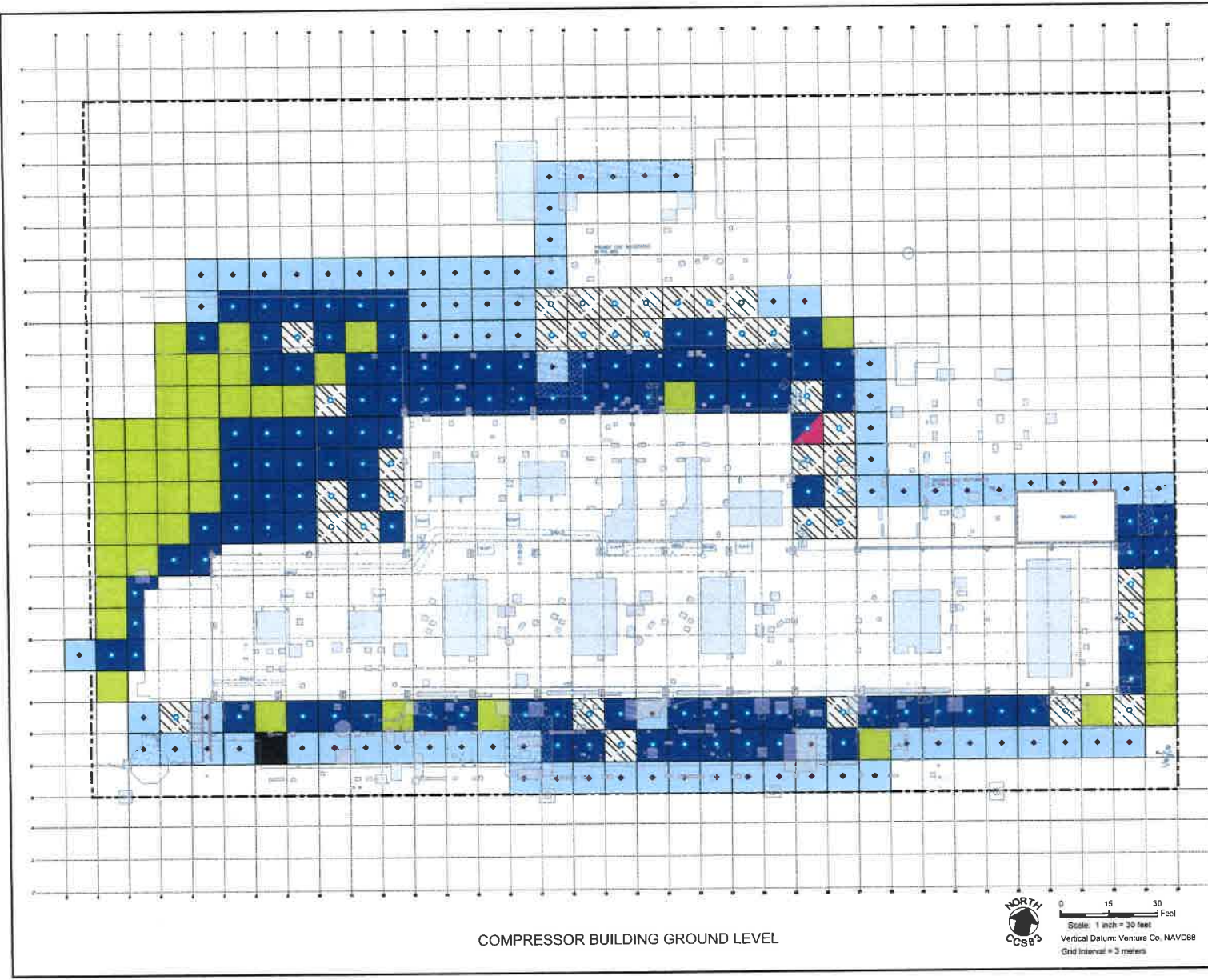
5.1.2 Re-Excavation Protocols

Where soil sample results exceeded the 80 mg/kg Pb project action level (or the 5.2 mg/kg Cd action level), the corresponding grid location was scheduled for additional excavation and re-sampling. Six additional rounds of re-excavation were performed for Pb locations exceeding project action levels in some locations.











Re-excavation of affected grid locations was performed in approximately one-foot lifts (each re-excavation was approximately one foot deeper than the prior excavation). *Re-Excavation* samples were collected in the same manner as described in Section 5.1.1. The *Re-Excavation* characterization samples were labeled by grid location preceded by a prefix such as “ReEx1-” denoting the re-excavation event “round”. Duplicate re-excavation sample numbers were labeled using a surrogate grid location “YZ” followed by surrogate grid numbers beginning with “1.5”.

The results of each re-excavation round are described below in Sections 5.2 to 5.7.






LEGEND


-  Concrete Foundation/Pedestal (Former)
-  Concrete Pad (Former)
-  Concrete Wall (Former)
-  Original Limit of Work
-  Sample Results Below Project Action Levels
-  Sample Result ≥ 80 mg/kg Pb
-  Sample Result ≥ 5.2 mg/kg Cd
-  No Pb Analysis Performed
-  Additional (Step Out) Sampling Location
-  Proposed Pb Confirmation Sample

Notes: Results shown on this figure represent samples collected during characterization sampling conducted in May and June 2016. These results were originally reported in *Addendum No. 5, PCB Cleanup Plan, Former Compressor Building, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, California, Revision 2*, dated August 11, 2016.

COMPRESSOR BUILDING GROUND LEVEL

 NORTH
 CCSB

0 15 30
 Feet
 Scale: 1 inch = 30 feet
 Vertical Datum: Ventura Co. NAVD88
 Grid Interval = 3 meters

	Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California			
	Compressor Building Initial Cd and Pb Remediation and Sampling Plan			
Source	Revision	Date	Figure	
KDM Meridian Feb 2016	0	02/28/16	16	

5.2 Initial (1st Round) Cd and Pb Remediation and Sampling Results

5.2.1 Initial Cd and Pb Excavation and Sampling

The initial *Perimeter* soil samples were collected from areas surrounding the former building shown on Figure 16. Some of these areas were formerly paved with asphalt and others were bare soil. The perimeter grid locations were excavated during demolition approximately one-foot (0.3 m) below surrounding grade prior to confirmation sampling.

Post-demolition *Perimeter* sampling was conducted in six sampling events between October 26 and December 13, 2016. *Perimeter* samples were collected from 140 locations surrounding the former building (140 samples plus 15 duplicates). Nineteen initial *Perimeter* samples exceeded project action levels. These samples ranged from **82.6 mg/kg** to **910 mg/kg**.

Grid location MN25.5 was found to exceed project action levels for Cd during the 2016 characterization sampling and was therefore added to the *Perimeter* sampling during this event. Re-sampling of this location resulted in a concentration of **1.65 mg/kg** Cd; less than the project action level (sample *METL-MN25.5*; laboratory sample L875648-07). No further Cd sampling and analysis was performed during the project.

Figure 17 and Table 17 show the results of the initial *Perimeter* Pb soil samples.



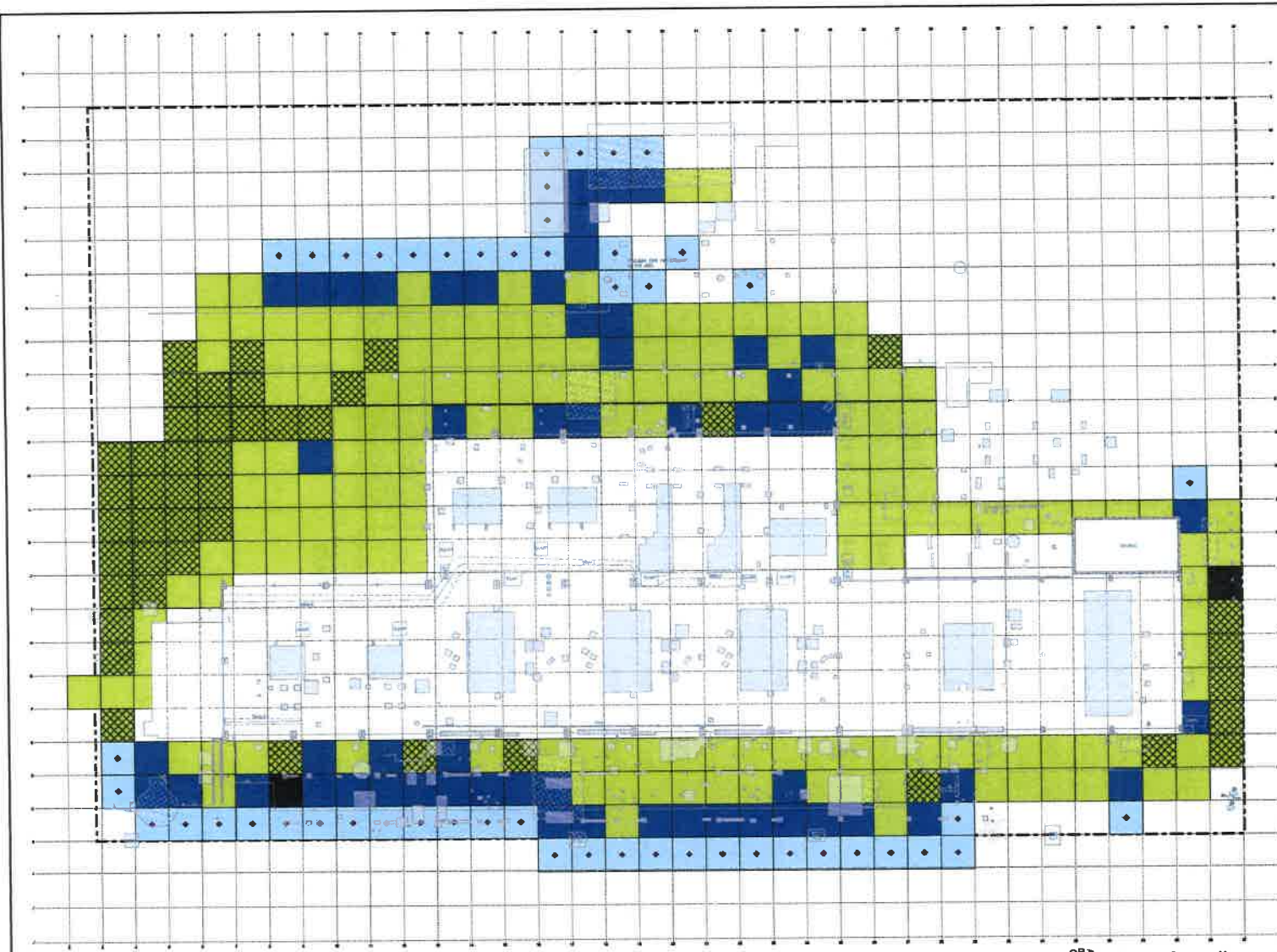
Step-Out Samples in Road
(Row AB)

5.2.2 Initial Pb Step Out Sample Results

Initial *Step-Out* sampling was performed concurrent with initial *Perimeter* sampling at 82 locations (82 samples plus 9 duplicates). Thirty-seven *Step-Out* sample locations exceeded project action levels. *Step-Out* samples that exceeded project action levels ranged from **84.4 mg/kg** to **6060 mg/kg**.

Figure 17 and Table 18 show the results of the initial *Perimeter* Pb soil samples.





LEGEND

- Concrete Foundation/Pedestal (Former)
- Concrete Pad (Former)
- Concrete Wall (Former)
- Original Limit of Work
- Original Characterization Sample Results Below Project Action Levels
- No Sample — Location Obstructed
- Sample Results Below Project Action Levels
- Sample Result ≥ 80 mg/kg Pb
- New Step-Out Sampling Location

Notes: Results shown on this figure include initial perimeter soil samples and 1st round step-out samples shown on Tables 17 and 18. Perimeter soil samples were collected as confirmation samples from shallow excavations (approx. 1' deep). Step-out samples are characterization samples collected from bare soil areas.

COMPRESSOR BUILDING GROUND LEVEL

0 15 30 Feet

 Scale: 1 inch = 30 feet

 Vertical Datum: Ventura Co. NAVD88

 Grid Interval = 3 meters

	Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California			
	Compressor Building Initial (1st Round) Pb Sampling Results			
	Source	Revision	Date	Figure
KDM Meridian Feb 2016	0	02/28/16	17	

Table 17: Initial Perimeter Soil Pb Confirmation Sample Results (mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID	Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L869209-01	METL-CD17.5	17.1		L878937-03	METL-DE29.5	9.92	
L869209-02	METL-CD18.5	10.9		L878937-04	METL-DE30.5	7.42	
L869209-03	METL-CD19.5	23.6		L878937-05	METL-DE31.5	10.2	
L869209-04	METL-CD20.5	16.3		L878937-06	METL-DE32.5	8.42	METL-XY48.5
L869209-05	METL-CD21.5	8.87		L878937-07	METL-XY48.5	8.34	METL-DE32.5
L869209-06	METL-CD22.5	20.1		L878937-08	METL-DE33.5	11.6	
L869209-07	METL-CD23.5	543		L878937-09	METL-DE35.5	10	
L869209-08	METL-CD24.5	7.8		L878937-10	METL-EF35.5	137	
L869209-09	METL-CD26.5	4.63		L872210-01	METL-FG3.5	8.36	
L878937-01	METL-DE5.5	18.7		L872210-02	METL-FG4.5	8.9	METL-XY49.5
L869209-10	METL-DE7.5	58.4		L872210-03	METL-XY49.5	10.5	METL-FG4.5
L869209-11	METL-DE9.5	138		L878937-11	METL-FG35.5	7.97	
L869209-12	METL-DE10.5	44.7		L872210-04	METL-GH4.5	9.94	
L869209-13	METL-DE11.5	82.6		L878937-12	METL-GH35.5	60.9	
L869209-14	METL-DE13.5	108	METL-XY46.5	L872210-05	METL-HI4.5	8.16	
L869209-27	METL-XY46.5	79.8	METL-DE13.5	L878937-13	METL-HI35.5	12.2	
L869209-15	METL-DE14.5	16		L872210-06	METL-IJ5.5	21.8	
L869209-16	METL-DE16.5	22		L872210-07	METL-IJ6.5	32.4	
L869209-17	METL-DE17.5	18.9		L878937-14	METL-IJ35.5	25.4	
L869209-18	METL-DE18.5	23.1		L872210-08	METL-JK6.5	31.5	
L869209-19	METL-DE19.5	11.8		L872210-09	METL-JK7.5	14.6	METL-XY50.5
L869209-20	METL-DE21.5	20.9		L872210-10	METL-XY50.5	23.4	METL-JK7.5
L869209-21	METL-DE22.5	10.4		L872210-21	METL-JK8.5	14.4	
L869209-22	METL-DE23.5	14.9	METL-XY47.5	L872210-22	METL-JK9.5	2.59	
L869209-28	METL-XY47.5	15.4	METL-DE23.5	L872210-23	METL-JK10.5	12.3	
L869209-23	METL-DE24.5	17.1		L872210-24	METL-JK11.5	10.3	
L869209-24	METL-DE25.5	21.4		L872210-25	METL-JK12.5	20.6	
L869209-25	METL-DE26.5	10.8		L875648-01	METL-JK25.5	7.42	
L869209-26	METL-DE27.5	20.5		L875648-02	METL-JK26.5	4.57	
L878937-02	METL-DE28.5	9.22		L878937-15	METL-JK35.5	12.3	

Color Code: ≥ 80 mg/kg Pb



Table 17: Initial Perimeter Soil Pb Confirmation Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID	Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L878937-16	METL-JK36.5	10.3		L870562-06	METL-XY51.5	17.3	METL-NO14.5
L872210-26	METL-KL7.5	10.7		L870562-07	METL-NO15.5	2.87	
L872210-27	METL-KL8.5	11		L870562-08	METL-NO16.5	121	
L872210-28	METL-KL9.5	16.1		L871382-01	METL-NO17.5	121	
L872210-29	METL-KL10.5	18.2		L871382-02	METL-NO18.5	10.2	
L872210-30	METL-KL11.5	7.03		L871382-03	METL-NO19.5	13.6	
L872210-41	METL-KL12.5	11.1		L871382-04	METL-NO20.5	159	
L875648-03	METL-KL25.5	7		L871382-05	METL-NO22.5	340	METL-XY52.5
L875648-04	METL-KL26.5	5.5		L871382-06	METL-XY52.5	664	METL-NO22.5
L872210-42	METL-LM7.5	29		L871382-07	METL-NO23.5	107	
L872210-43	METL-LM8.5	23.8		L871382-08	METL-NO24.5	910	METL-XY53.5
L872210-44	METL-LM9.5	25.3		L871382-09	METL-XY53.5	559	METL-NO24.5
L872210-45	METL-LM10.5	6.09		L875648-09	METL-NO25.5	10.5	
L872210-46	METL-LM11.5	8.43		L875648-10	METL-NO26.5	6.54	
L872210-47	METL-LM12.5	16.2		L870562-09	METL-OP8.5	24.1	
L875648-05	METL-LM25.5	16.7		L870562-10	METL-OP9.5	40.7	
L875648-06	METL-LM26.5	4.82		L870562-11	METL-OP11.5	3.61	
L872210-48	METL-MN7.5	23.1		L870562-12	METL-OP12.5	7.73	METL-XY54.5
L872210-49	METL-MN8.5	55.9		L870562-13	METL-XY54.5	7.62	METL-OP12.5
L872210-50	METL-MN9.5	103		L870562-14	METL-OP13.5	12.1	METL-XY55.5
L872210-51	METL-MN10.5	3.97		L870562-15	METL-XY55.5	17	METL-OP13.5
L872210-52	METL-MN11.5	6.75		L870562-16	METL-OP14.5	11.4	
L872210-53	METL-MN12.5	30.3		L870562-17	METL-OP15.5	9.81	
L875648-07	METL-MN25.5	8.38		L870562-18	METL-OP16.5	19.8	
L875648-08	METL-MN26.5	4.48		L871382-10	METL-OP18.5	27.8	
L870562-01	METL-NO10.5	26		L871382-21	METL-OP19.5	10.7	
L870562-02	METL-NO11.5	8.99		L871382-22	METL-OP20.5	40.7	
L870562-03	METL-NO12.5	20.5		L871382-23	METL-OP21.5	33.2	
L870562-04	METL-NO13.5	155		L871382-24	METL-OP22.5	27.7	
L870562-05	METL-NO14.5	18.2	METL-XY51.5	L871382-25	METL-OP23.5	132	

Color Code: ≥ 80 mg/kg Pb



Table 17: Initial Perimeter Soil Pb Confirmation Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID	Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L871382-26	METL-XY56.5	109		L871382-45	METL-PQ23.5	9.17	
L871382-27	METL-OP24.5	10.9	METL-XY57.5	L871382-46	METL-PQ24.5	89.1	
L871382-28	METL-XY57.5	13.6	METL-OP24.5	L875648-25	METL-PQ25.5	7.86	
L875648-21	METL-OP25.5	7.9	METL-XY58.5	L870562-24	METL-QR7.5	19.7	
L875648-22	METL-XY58.5	12.4	METL-OP25.5	L870562-25	METL-QR8.5	37.4	METL-XY60.5
L875648-23	METL-OP26.5	2.6	METL-XY59.5	L870562-26	METL-XY60.5	27.5	METL-QR8.5
L875648-24	METL-XY59.5	3.92	METL-OP26.5	L870562-27	METL-QR9.5	61.6	
L870562-19	METL-PQ6.5	19.9		L870562-28	METL-QR10.5	21.4	
L870562-20	METL-PQ8.5	27.8		L870562-29	METL-QR11.5	11.7	
L870562-21	METL-PQ9.5	38.7		L870562-30	METL-QR12.5	6.56	
L870562-22	METL-PQ10.5	34.7		L871382-47	METL-QR17.5	160	
L870562-23	METL-PQ12.5	16.5		L871382-48	METL-QR18.5	86.2	
L871382-29	METL-PQ17.5	8.16		L871382-49	METL-QR19.5	39.1	
L871382-30	METL-PQ18.5	157		L871382-50	METL-QR20.5	23.3	
L871382-41	METL-PQ19.5	57.4		L871382-61	METL-QR21.5	7.05	
L871382-42	METL-PQ20.5	11.9		L871382-62	METL-QR22.5	27.7	
L871382-43	METL-PQ21.5	39.4		L871382-63	METL-QR23.5	36.6	
L871382-44	METL-PQ22.5	180					

Color Code: ≥ 80 mg/kg Pb



Table 18: Initial Pb Step-Out Sample Results
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID	Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L869206-01	BC16.0	1630		L878932-07	CD32.5	6.46	
L869206-02	BC17.5	2350		L878932-08	CD33.5	74.8	XY62.5
L869206-03	BC18.5	32.1		L878932-09	XY62.5	114	CD33.5
L869206-04	BC19.5	362		L878932-10	CD34.5	9.59	
L869206-05	BC20.5	340		L878932-11	CD35.5	12.9	
L869206-06	BC21.5	622		L869206-25	DE4.5	208	
L869206-07	BC22.5	345		L878932-12	DE6.5	17	
L869206-08	BC23.5	864		L869206-26	DE20.5	49.1	
L869206-09	BC24.5	1300		L873387-10	FG2.5	18.6	
L869206-10	BC25.5	636		L875657-08	KL27.5	28.6	
L869206-11	BC26.5	58.6		L875988-06	KL28.5	66.1	
L869206-12	BC27.5	629		L875988-07	KL29.5	59.6	
L869206-13	CD4.0	159		L875988-08	KL30.5	53.3	
L869206-14	CD5.0	373		L875988-09	KL31.5	5.32	
L869206-15	CD6.0	15.8		L875988-10	KL32.5	5.17	
L869206-16	CD7.0	682		L875988-01	KL33.5	10.9	XY63.5
L869206-17	CD9.0	487		L875988-02	XY63.5	8.21	KL33.5
L869206-18	CD10.0	430		L875988-03	KL34.5	9.94	
L869206-19	CD11.0	288		L875988-04	KL35.5	107	
L869206-20	CD12.0	550		L875988-05	KL36.5	54.9	
L869206-21	CD13.0	671		L875657-07	LM27.5	4.72	
L869206-22	CD14.0	772		L875657-05	MN27.5	12.3	XY64.5
L869206-23	CD15.0	714		L875657-06	XY64.5	9.73	MN27.5
L869206-24	CD16.0	1660		L875657-04	NO27.5	4.34	
L878932-01	CD25.5	14.6		L870144-12	OP17.5	13	
L878932-02	CD28.5	972		L875657-03	OP27.5	19.4	
L878932-03	CD29.5	51.2	XY61.5	L870144-01	PQ13.5	5.89	XY65.5
L878932-04	XY61.5	41.9	CD29.5	L870144-02	XY65.5	5.59	PQ13.5
L878932-05	CD30.5	7.11		L870144-03	PQ14.5	5.65	
L878932-06	CD31.5	7.04		L870144-04	PQ15.5	6.79	

Color Code: ≥ 80 mg/kg Pb



Table 18: Initial Pb Step-Out Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID	Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L870144-05	PQ16.5	13.2		L870144-21	RS12.5	23	
L870144-06	QR6.5	6.82		L870144-22	RS13.5	97.1	
L870144-07	QR13.5	8.95		L870144-23	RS14.5	334	
L870144-08	QR14.5	8.85		L870144-24	RS15.5	47.7	
L870144-09	QR15.5	9.4		L870144-25	RS16.5	6060	
L870144-10	QR16.5	6.36		L870144-26	RS17.5	9.22	
L875657-01	QR24.5	10.1		L873387-01	ST17.5	224	XY68.5
L875657-02	QR25.5	26.2		L873387-02	XY68.5	127	ST17.5
L870144-13	RS6.5	31.8		L873387-03	TU17.5	157	
L870144-14	RS7.5	69.7	XY66.5	L873387-04	UV17.5	123	
L870144-15	XY66.5	69.9	RS7.5	L873387-05	UV18.5	435	
L870144-16	RS8.5	94.4		L873387-06	UV19.5	84.4	XY69.5
L870144-17	RS9.5	189		L873387-07	XY69.5	228	UV19.5
L870144-18	RS10.5	253		L873387-08	UV20.5	65.1	
L870144-19	RS11.5	552	XY67.5	L873387-09	UV21.5	50.4	
L870144-20	XY67.5	957	RS11.5				

Color Code: ≥ 80 mg/kg Pb



5.3 Second Round Pb Remediation and Sampling Results

Second round Pb sampling was performed in five events from December 13, 2016 to April 20, 2017. Sixty-one locations were re-excavated during this round corresponding to the 56 locations exceeding project action levels during the initial round (19 *Perimeter* and 37 *Step-Out* samples) plus 5 additional *Step-Out* samples (these *Step-Out* samples were inadvertently labeled as “ReEx1-” samples; see Table 19, below).

Twelve of these sample locations exceeded project action levels. Samples that exceeded action levels ranged in concentration from **90.7 mg/kg** to **1280 mg/kg**.

Figure 18 and Table 19 illustrate the Round Two Pb sampling results.



Typical Sampling Grid Layout

5.4 Third Round Pb Remediation and Sampling Results

Round Three sampling addressed re-excavation of the twelve locations exceeded project action levels during Round Two plus an additional 46 *Step-Out* locations. In total, 65 samples (58 samples plus 7 duplicates) were collected during Round Three over four separate sampling events performed between December 14, 2016 and March 16, 2017.

Thirty-eight sample locations exceeded project action levels (one location re-excavated from Round Two and 37 of the additional *Step-Out* locations). Pb concentrations in these samples were between **85.2 mg/kg** and **1970 mg/kg**.

Figure 19 and Table 20 show the Round Three Pb results.



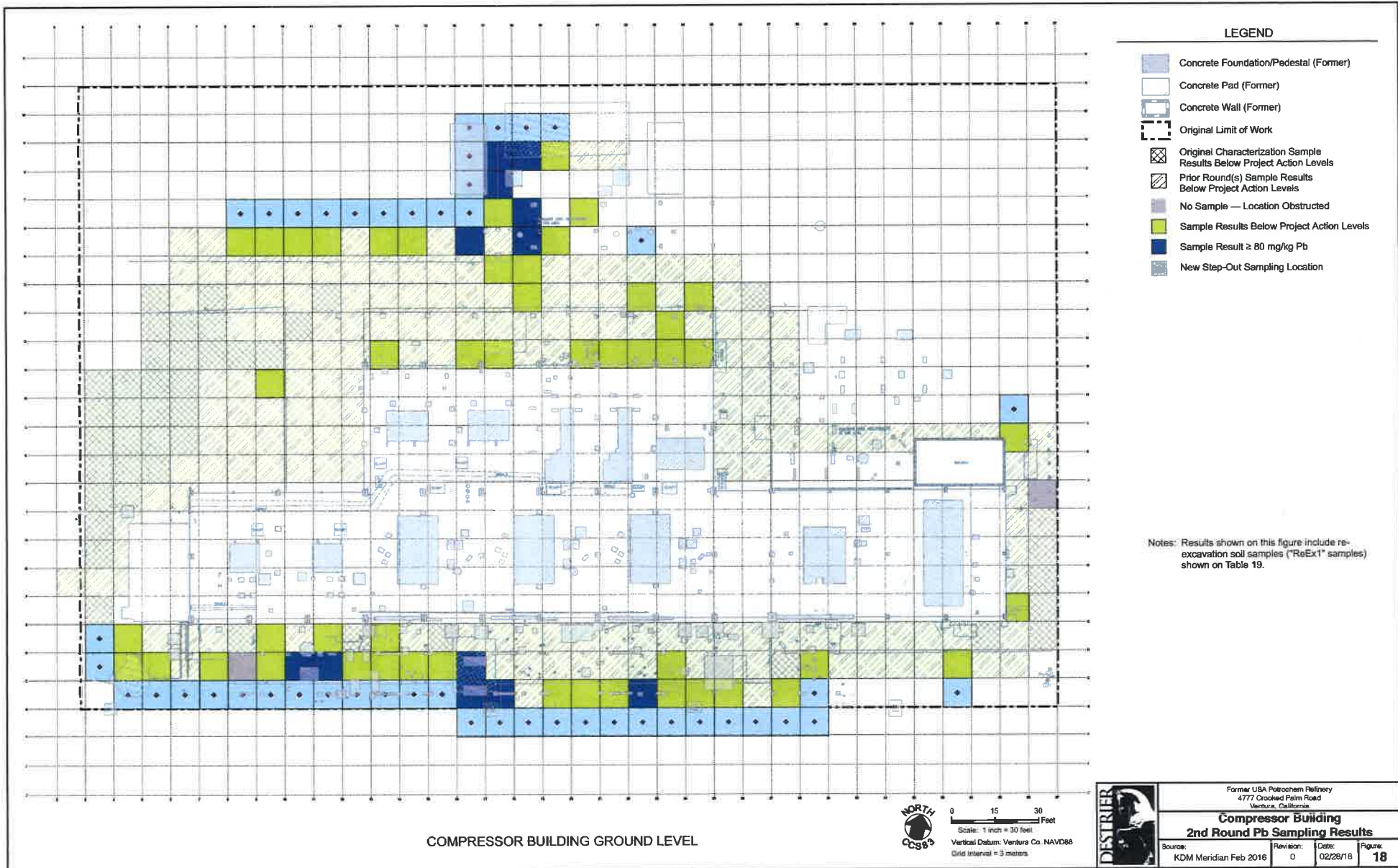


Table 19: Second Round Pb Sample Results
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID	Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L878962-01	REEX1-BC16.5	373		L896602-16	REEX1-MN9.5	6.57	
L878962-02	REEX1-BC17.5	175		L896602-19	REEX1-NO13.5	12.3	
L878962-03	REEX1-BC19.5	20.5		L896602-20	REEX1-NO16.5	8.36	
L878962-04	REEX1-BC20.5	17.4		L896602-21	REEX1-NO17.5	15.6	
L878962-05	REEX1-BC21.5	73.2		L904053-01	REEX1-NO20.5	7.81	
L878962-06	REEX1-BC22.5	99.6		L904053-02	REEX1-NO21.5	8.15	
L878962-07	REEX1-BC23.5	78		L904053-03	REEX1-NO22.5	8.41	
L878962-08	REEX1-BC24.5	46.4		L904053-04	REEX1-NO23.5	8.59	
L878962-09	REEX1-BC25.5	23.6		L904053-05	REEX1-NO24.5	8.73	
L878962-10	REEX1-BC27.5	49.9		L904053-06	REEX1-OP23.5	74.5	
L878962-11	REEX1-CD4.5	8.48		L896602-22	REEX1-PQ18.5	15.3	
L878962-12	REEX1-CD5.5	11.1		L896602-23	REEX1-PQ22.5	13.1	
L878962-13	REEX1-CD7.5	37.7		L896602-24	REEX1-PQ24.5	21.3	
L878962-14	REEX1-CD9.5	39		L896602-25	REEX1-QR17.5	9.18	
L878962-15	REEX1-CD10.5	129		L896602-26	REEX1-QR18.5	9.59	
L878962-16	REEX1-CD11.5	219	REEX1-YZ1.5	L879288-01	REEX1-RS8.5	13.2	
L878962-17	REEX1-YZ1.5	268	REEX1-CD11.5	L879288-02	REEX1-RS9.5	28.7	REEX1-YZ3.5
L878962-18	REEX1-CD12.5	32		L879288-03	REEX1-YZ3.5	14.3	REEX1-RS9.5
L878962-19	REEX1-CD13.5	20.5		L879288-04	REEX1-RS10.5	19.1	
L878962-20	REEX1-CD14.5	23.8		L879288-05	REEX1-RS11.5	20.4	
L878962-21	REEX1-CD15.5	70.8		L879288-06	REEX1-RS13.5	16.6	
L878962-22	REEX1-CD16.5	217		L879288-07	REEX1-RS14.5	9.43	
L878962-23	REEX1-CD23.5	52.8		L879288-08	REEX1-RS16.5	101	
L903834-03	REEX1-CD28.5	46.3	REEX1-YZ13.5	L879288-09	REEX1-RS18.5	246	
L903834-04	REEX1-YZ13.5	52.2	REEX1-CD28.5	L879288-10	REEX1-RS19.5	9.07	
L896602-40	REEX1-CD33.5	10.6		L879288-11	REEX1-ST17.5	11.7	
L878962-24	REEX1-DE4.5	8.08	REEX1-YZ2.5	L879288-12	REEX1-ST18.5	1280	
L878962-25	REEX1-YZ2.5	7.87	REEX1-DE4.5	L879288-13	REEX1-ST20.5	9.86	
L878962-26	REEX1-DE9.5	33.4		L879288-16	REEX1-TU17.5	1130	
L896602-15	REEX1-DE11.5	18		L879288-17	REEX1-UV17.5	260	
L878962-27	REEX1-DE13.5	64.6		L879288-18	REEX1-UV18.5	33.5	REEX1-YZ5.5
L896602-41	REEX1-EF35.5	11.2		L879288-19	REEX1-YZ5.5	90.7	REEX1-UV18.5
L896602-42	REEX1-KL35.5	9.69		L879288-20	REEX1-UV19.5	7.27	

Color Code: ≥ 80 mg/kg Pb



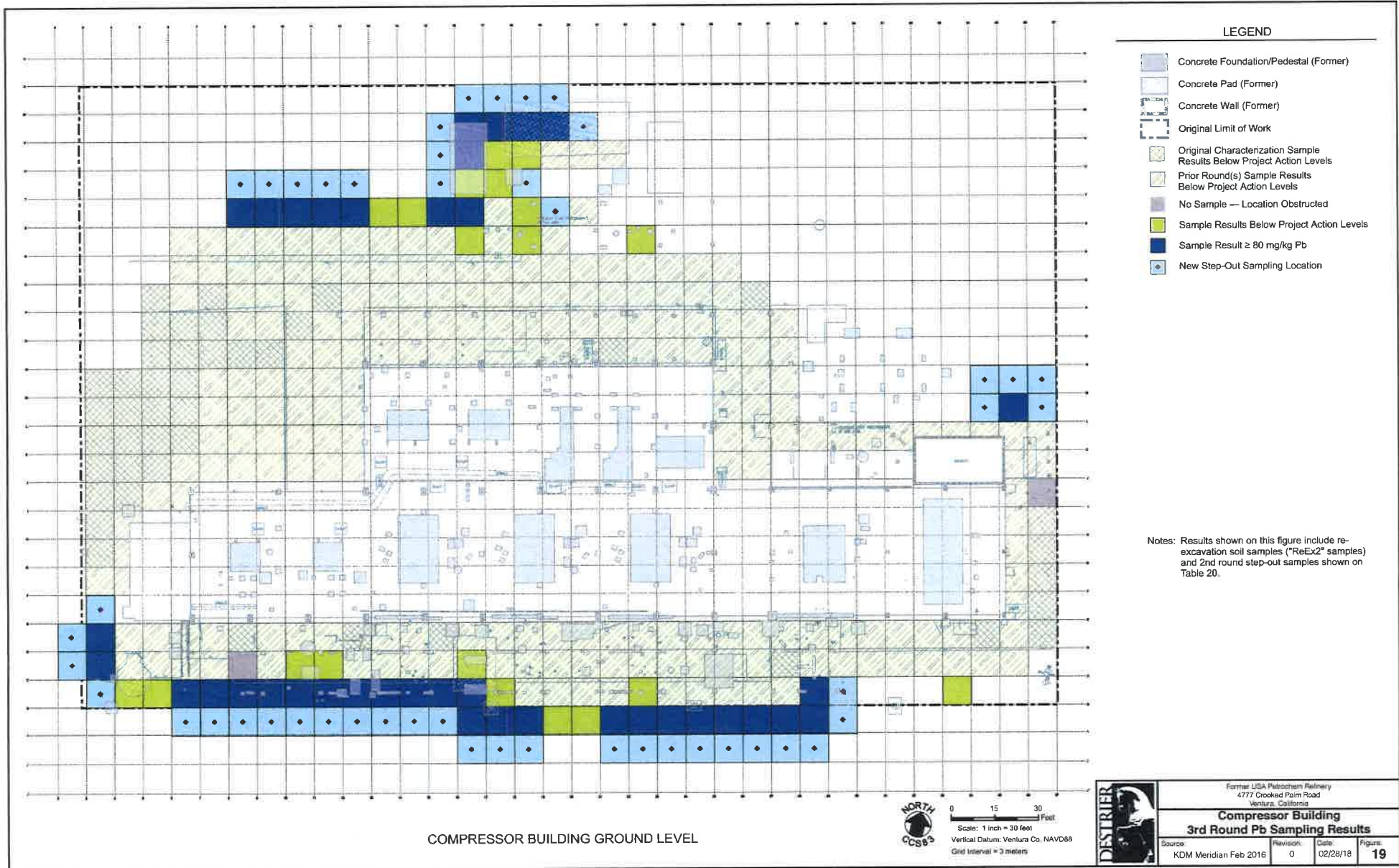


Table 20: Third Round Pb Sample Results
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID	Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L879276-01	AB16.5	190		L879276-31	BC28.5	507	
L879276-02	AB17.5	335		L896396-01	BC33.5	12.7	
L879276-03	AB18.5	131	YZ50.5	L879276-32	CD3.5	144	
L879276-04	YZ50.5	93.7	AB18.5	L896606-04	REEX2-CD10.5	23.5	
L879276-05	AB19.5	65.2	YZ51.5	L896606-05	REEX2-CD11.5	12.1	
L879276-06	YZ51.5	73.9	AB19.5	L896606-06	REEX2-CD16.5	17.2	REEX2-YZ15.5
L879276-07	AB20.5	72.1	YZ52.5	L896606-07	REEX2-YZ15.5	13.2	REEX2-CD16.5
L879276-08	YZ52.5	54.8	AB20.5	L879276-33	DE3.5	102	
L879276-09	AB21.5	187		L896396-05	LM35.5	426	
L879276-10	AB22.5	168		L896606-08	REEX2-RS16.5	8.59	
L879276-11	AB23.5	124		L896606-09	REEX2-RS18.5	13.1	
L879276-12	AB24.5	687		L879293-03	RS22.5	9.3	
L879276-13	AB25.5	119		L879293-04	ST8.5	101	
L879276-14	AB26.5	238		L879293-05	ST9.5	146	
L879276-15	AB27.5	1400		L879293-06	ST10.5	816	
L879276-16	AB28.5	1970		L879293-07	ST11.5	1330	
L879276-17	BC4.5	61.8		L879293-08	ST12.5	866	
L879276-18	BC5.5	30.8		L879293-09	ST13.5	40.5	
L879276-19	BC6.5	755		L879293-10	ST14.5	12.1	
L879276-20	BC7.5	273		L879293-11	ST15.5	176	
L879276-21	BC8.5	384		L879293-12	ST16.5	1090	
L879276-22	BC9.5	202		L896606-10	REEX2-ST18.5	11.2	
L879276-23	BC10.5	398		L879293-14	TU16.5	36.9	
L879276-24	BC11.5	426		L896606-11	REEX2-TU17.5	8.67	
L879276-25	BC12.5	396		L879293-15	UV16.5	797	
L879276-26	BC13.5	593		L896606-12	REEX2-UV17.5	9.46	
L879276-27	BC14.5	279	XY53.5	L896606-13	REEX2-UV18.5	8.66	REEX2-YZ16.5
L879276-28	XY53.5	517	BC14.5	L896606-14	REEX2-YZ16.5	9.02	REEX2-UV18.5
L879276-29	BC15.5	200	XY54.5	L879293-16	VW16.5	235	
L879276-30	XY54.5	227	BC15.5	L879293-17	VW17.5	191	
L896606-01	REEX2-BC16.5	404		L879293-18	VW18.5	308	
L896606-02	REEX2-BC17.5	12.2		L879293-19	VW19.5	85.2	
L896606-03	REEX2-BC22.5	7.77					

Color Code: ≥ 80 mg/kg Pb



5.5 Fourth Round Pb Remediation and Sampling Results

Ninety-five samples were collected during eight Round Four Pb sampling events conducted between March 14 and June 28, 2017. These 95 samples consisted of 85 locations (85 samples plus 10 duplicates) — 38 locations that exceeded project action levels during round three plus an additional 47 step-out locations.

Twenty sample locations exceeded project action levels (3 locations re-excavated from round three and 17 of the additional *Step-Out* locations). Pb concentrations among these samples ranged from **80.5 mg/kg** to **4260 mg/kg**.

Figure 20 and Table 21 address the fourth round Pb sampling results.

Two duplicate sample numbers, *YZ61.5* and *YZ62.5* (laboratory samples L919511-06 and L919511-17; duplicate of samples *AB10.5* and *ZA21.5*, respectively), were inadvertently used again for separate duplicate samples during Round Five (see Table 22). These duplicate sample numbers can be differentiated by their respective laboratory sample numbers.



Pb Re-Excavation In-Progress

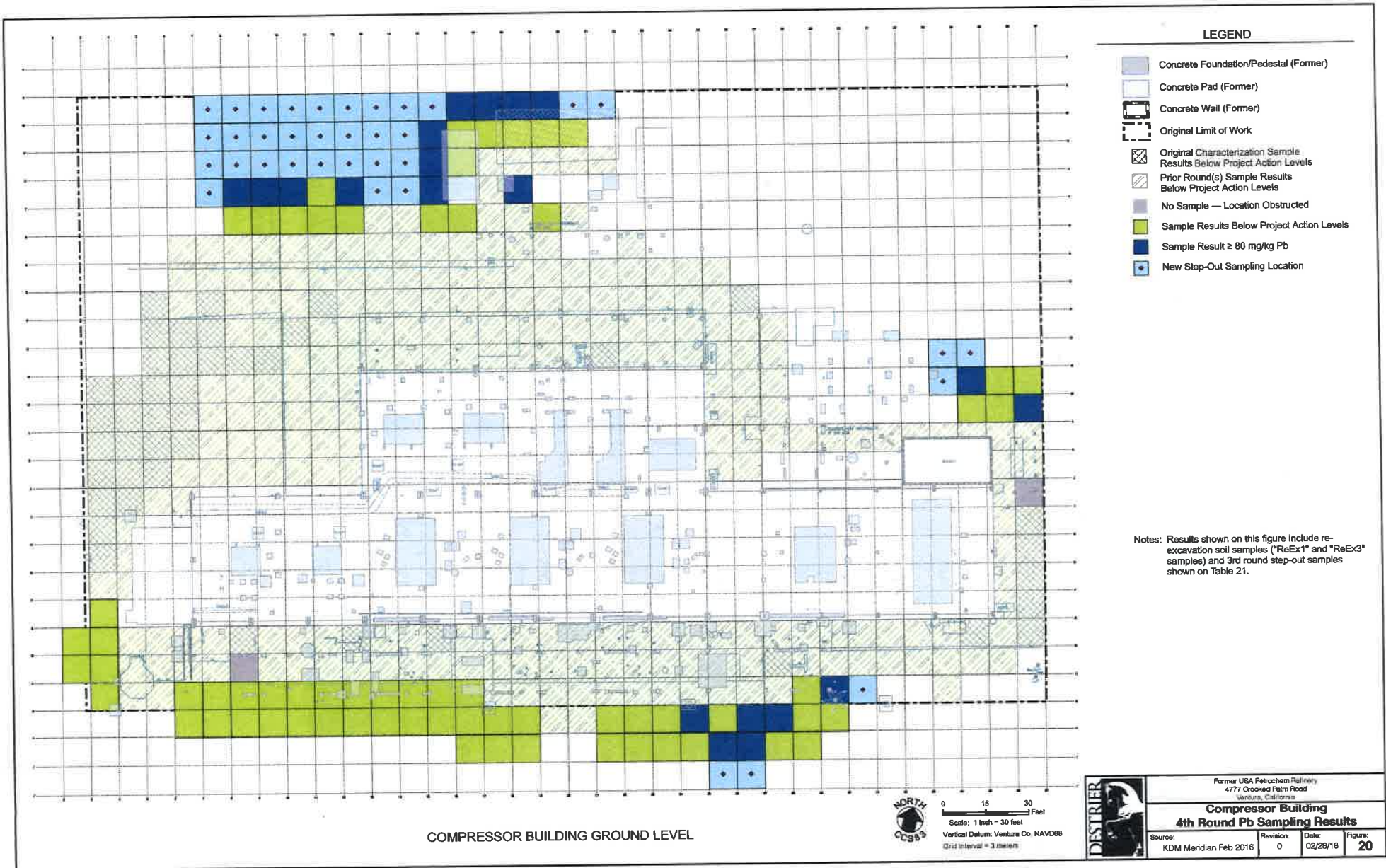
5.6 Fifth Round Pb Remediation and Sampling Results

Round Five consisted of the collection of Pb samples from 56 locations (20 locations exceeding project action levels during the fourth round and 36 additional *Step-Out* locations). A total of 61 samples were collected (56 samples and 5 duplicates). Round Five was conducted in eight separate sampling events between March 30 and July 18, 2017.

Three sample locations exceeded project action levels (all additional *Step-Out* locations). These three samples ranged in Pb concentration from **86.8 mg/kg** to **219 mg/kg**. Figure 21 and Table 22 present the Round Five Pb sampling results.

Two duplicate sample numbers, *YZ61.5* and *YZ62.5* (laboratory samples L899608-17 and L899608-19; duplicate of samples *VW11.5* and *VW12.5*, respectively), were inadvertently used twice for separate duplicate samples during Rounds Four and Five (see Tables 21 and 22). These duplicate sample numbers can be differentiated by their respective laboratory sample numbers.





LEGEND

- Concrete Foundation/Pedestal (Former)
- Concrete Pad (Former)
- Concrete Wall (Former)
- Original Limit of Work
- Original Characterization Sample Results Below Project Action Levels
- Prior Round(s) Sample Results Below Project Action Levels
- No Sample — Location Obstructed
- Sample Results Below Project Action Levels
- Sample Result ≥ 80 mg/kg Pb
- ★ New Step-Out Sampling Location

Notes: Results shown on this figure include re-excavation soil samples ("ReEx1" and "ReEx3" samples) and 3rd round step-out samples shown on Table 21.

COMPRESSOR BUILDING GROUND LEVEL

NORTH
CCS&S
0 15 30 Feet
Scale: 1 inch = 30 feet
Vertical Datum: Ventura Co. NAVD68
Grid Interval = 3 meters

	Former USA Petrochem Refinery 4777 Crooked Palm Road Ventura, California			
	Compressor Building 4th Round Pb Sampling Results			
	Source: KDM Meridian Feb 2016	Revision: 0	Date: 02/28/18	Figure: 20

Table 21: Fourth Round Pb Sample Results
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID	Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L919511-01	AB6.5	25.8		L896602-06	REEX1-BC9.5	11.3	
L919511-02	AB7.5	9.15		L896602-07	REEX1-BC10.5	62.1	
L919511-03	AB8.5	6.99		L896602-08	REEX1-BC11.5	17.6	
L919511-04	AB9.5	11.5		L896602-09	REEX1-BC12.5	8.04	
L919511-05	AB10.5	10.8	YZ61.5	L896602-10	REEX1-BC13.5	14.6	
L919511-06	YZ61.5	12.6	AB10.5	L896602-11	REEX1-BC14.5	9.06	
L919511-07	AB11.5	7.87		L896602-12	REEX1-BC15.5	11	
L919511-08	AB12.5	4.84		L903830-01	REEX3-BC16.5	17.5	REEX3-YZ21.5
L919511-09	AB13.5	7.45		L903830-02	REEX3-YZ21.5	17.6	REEX3-BC16.5
L919511-10	AB14.5	5.27		L903834-01	REEX1-BC28.5	17.6	
L919511-11	AB15.5	11.8		L896403-02	BC29.5	566	
L919506-01	REEX1-AB16.5	13.6		L896403-03	CD2.5	16.5	
L919506-02	REEX1-AB17.5	9.39		L896602-13	REEX1-CD3.5	8.43	
L919506-03	REEX1-AB18.5	7.98		L896403-04	DE2.5	53	
L919506-04	REEX1-AB21.5	6.97	REEX1-YZ24.5	L896602-14	REEX1-DE3.5	8.93	
L919506-05	REEX1-YZ24.5	7.19	REEX1-AB21.5	L896403-05	EF3.5	7.47	
L919506-06	REEX1-AB22.5	8.11		L899617-01	LM34.5	64.5	YZ58.5
L919506-07	REEX1-AB23.5	10.1		L899617-02	YZ58.5	48	LM34.5
L919506-08	REEX1-AB24.5	566		L899618-14	REEX1-LM35.5	9.35	
L919506-09	REEX1-AB25.5	10.2		L899617-03	LM36.5	586	
L919506-10	REEX1-AB26.5	104		L899617-04	MN34.5	81	
L919506-11	REEX1-AB27.5	106		L899617-05	MN35.5	55.5	
L919506-12	REEX1-AB28.5	10.3		L899617-06	MN36.5	9.33	
L919511-12	AB29.5	9.63		L896602-27	REEX1-ST8.5	16.2	
L896403-01	BC3.5	34.2		L896602-28	REEX1-ST9.5	30.1	
L896602-01	REEX1-BC6.5	14.3	REEX1-YZ11.5	L896602-29	REEX1-ST10.5	16.8	
L896602-02	REEX1-YZ11.5	41.3	REEX1-BC6.5	L896602-30	REEX1-ST11.5	9.79	
L896602-03	REEX1-BC7.5	23.5	REEX1-YZ12.5	L896602-31	REEX1-ST12.5	21.9	
L896602-04	REEX1-YZ12.5	15.4	REEX1-BC7.5	L896602-32	REEX1-ST15.5	9.58	
L896602-05	REEX1-BC8.5	10.3		L896602-33	REEX1-ST16.5	12	

Color Codes: ≥ 80 mg/kg Pb

Sample ID inadvertently used again in Round 5; refer to Laboratory ID.



Table 21: Fourth Round Pb Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID	Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L896403-06	ST19.5	12		L896403-18	VW20.5	45.1	
L896403-07	TU8.5	80.5		L896403-19	WX16.5	753	
L896403-08	TU9.5	644		L896403-20	WX17.5	1860	
L896403-09	TU10.5	560		L896403-21	WX18.5	614	
L896403-10	TU11.5	12.6		L896403-22	WX19.5	115	
L896403-11	TU12.5	160	YZ56.5	L919511-13	ZA16.5	16.7	
L896403-12	YZ56.5	1170	TU12.5	L919511-14	ZA17.5	48.8	
L896403-13	TU15.5	464		L919511-15	ZA18.5	16.8	
L896403-14	TU18.5	705		L919511-16	ZA21.5	46.1	YZ62.5
L896403-15	UV15.5	4260	YZ57.5	L919511-17	YZ62.5	30.2	ZA21.5
L896403-16	YZ57.5	220	UV15.5	L919511-18	ZA22.5	18.5	
L896602-34	REEX1-UV16.5	4.19		L919511-19	ZA23.5	37.3	
L896403-17	VW15.5	195		L919511-20	ZA24.5	25.1	
L896602-35	REEX1-VW16.5	3.45		L919511-21	ZA25.5	383	
L896602-36	REEX1-VW17.5	7.16	REEX1-YZ14.5	L919511-22	ZA26.5	293	
L896602-37	REEX1-YZ14.5	8.01	REEX1-VW17.5	L919511-23	ZA27.5	18.5	
L896602-38	REEX1-VW18.5	6.91		L919511-24	ZA28.5	27.1	
L896602-39	REEX1-VW19.5	12.9					

Color Codes: ≥ 80 mg/kg Pb

Sample ID inadvertently used again in Round 5; refer to Laboratory ID.



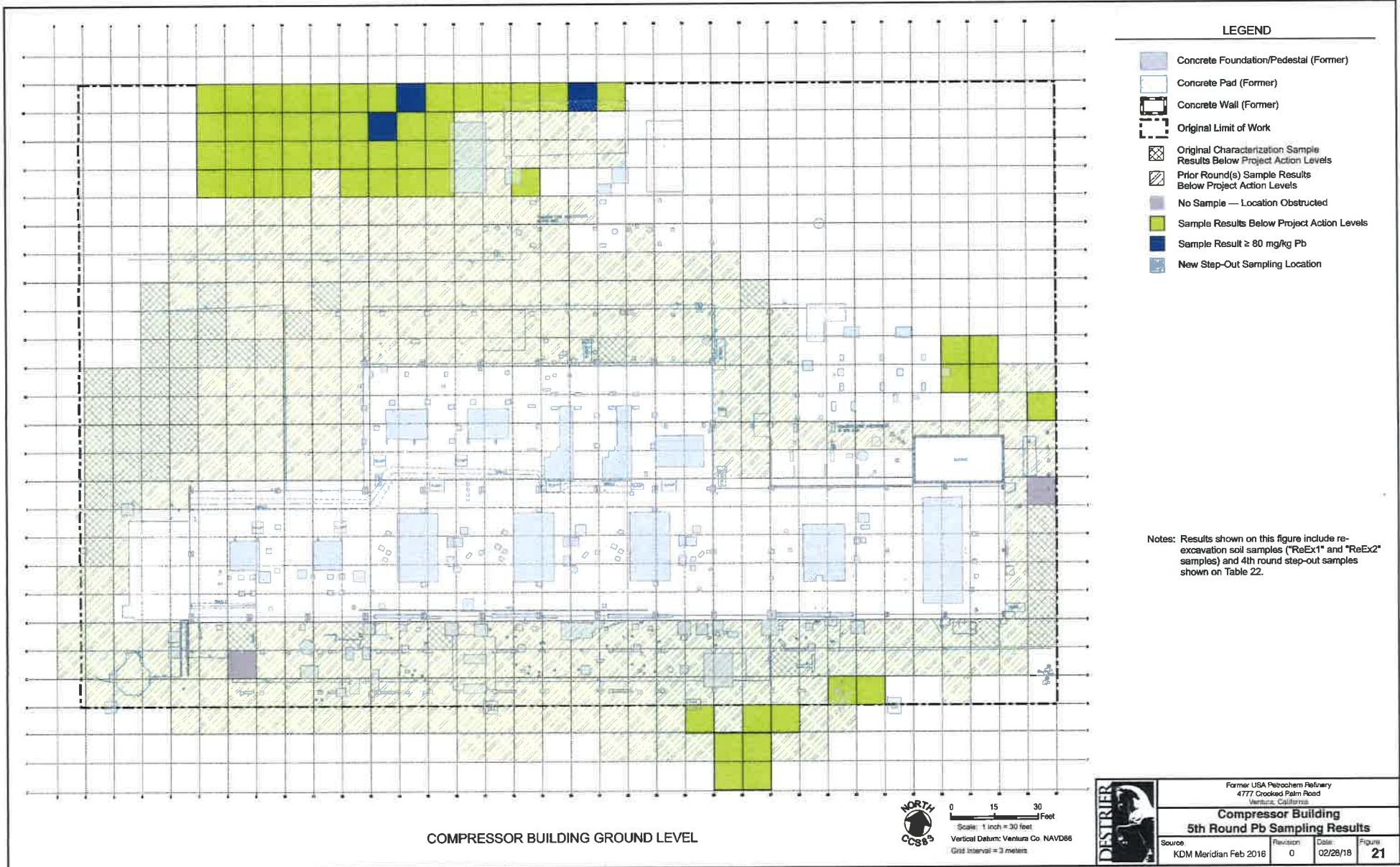


Table 22: Fifth Round Pb Sample Results
(mg/kg)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID	Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L923452-01	REEX2-AB24.5	19.8		L899608-13	VW8.5	57.5	
L923452-02	REEX2-AB26.5	7.61		L899608-14	VW9.5	19.5	
L923452-03	REEX2-AB27.5	9.28		L899608-15	VW10.5	6.9	
L903834-02	REEX1-BC29.5	30.6		L899608-16	VW11.5	6.64	YZ61.5
L903193-01	BC30.5	26.1	YZ60.5	L899608-17	YZ61.5	6.94	VW11.5
L903193-02	YZ60.5	9.83	BC30.5	L899608-18	VW12.5	10.9	YZ62.5
L903188-01	REEX1-LM36.5	9.43		L899608-19	YZ62.5	11.9	VW12.5
L903193-03	MN33.5	13.3		L899608-20	VW13.5	219	
L903188-02	REEX1-MN34.5	11		L899608-21	VW14.5	72.6	
L903193-06	NO33.5	25.3		L899618-09	REEX1-VW15.5	20.6	
L903193-04	NO34.5	13.9		L899608-22	WX7.5	62.4	
L899608-01	TU7.5	17.1		L899608-23	WX8.5	20	
L899618-01	REEX1-TU8.5	20.2		L899608-24	WX9.5	65.6	
L899618-02	REEX1-TU9.5	46.3	REEX1-YZ17.5	L899608-25	WX10.5	49	
L899618-03	REEX1-YZ17.5	28.9	REEX1-TU9.5	L899608-26	WX11.5	18.7	
L899618-04	REEX1-TU10.5	20.8		L899608-27	WX12.5	13.6	
L899618-05	REEX1-TU12.5	9.13		L899608-28	WX13.5	20	
L899608-02	TU13.5	24.9		L899608-29	WX14.5	114	
L899608-03	TU14.5	37.5		L899608-30	WX15.5	13.5	
L899618-06	REEX1-TU15.5	12.5		L899618-10	REEX1-WX16.5	68.2	
L899618-07	REEX1-TU18.5	12.6		L899618-11	REEX1-WX17.5	7.58	
L899608-04	UV7.5	38.5		L899618-12	REEX1-WX18.5	9.98	
L899608-05	UV8.5	28.8		L899618-13	REEX1-WX19.5	6.62	
L899608-06	UV9.5	52.7		L899608-31	WX20.5	90.8	YZ63.5
L899608-07	UV10.5	13.6		L899608-32	YZ63.5	86.8	WX20.5
L899608-08	UV11.5	12.3		L903193-05	WX21.5	47.5	
L899608-09	UV12.5	20.7		L923449-01	REEX1-ZA25.5	15.3	
L899608-10	UV13.5	15		L923449-02	REEX1-ZA26.5	10.8	
L899608-11	UV14.5	29		L923451-01	Z+25.5	36.9	
L899618-08	REEX1-UV15.5	13.1		L923451-02	Z+26.5	5.25	
L899608-12	VW7.5	16.7					

Color Codes: ≥ 80 mg/kg Pb

Sample ID also inadvertently used in Round 4; refer to Laboratory ID.



5.7 Sixth and Seventh Round Pb Remediation and Sampling Results

Round Six of the Pb remediation effort addressed the three locations found to exceed project action levels during the fifth round. Five samples were collected (3 samples plus 2 duplicates) April 17, 2017. One location, *WX14.5*, exceeded project action levels with a concentration of **185 mg/kg Pb** (higher duplicate result shown).

Figure 22 and Table 23 illustrate these results.



Finish Grade October 2017

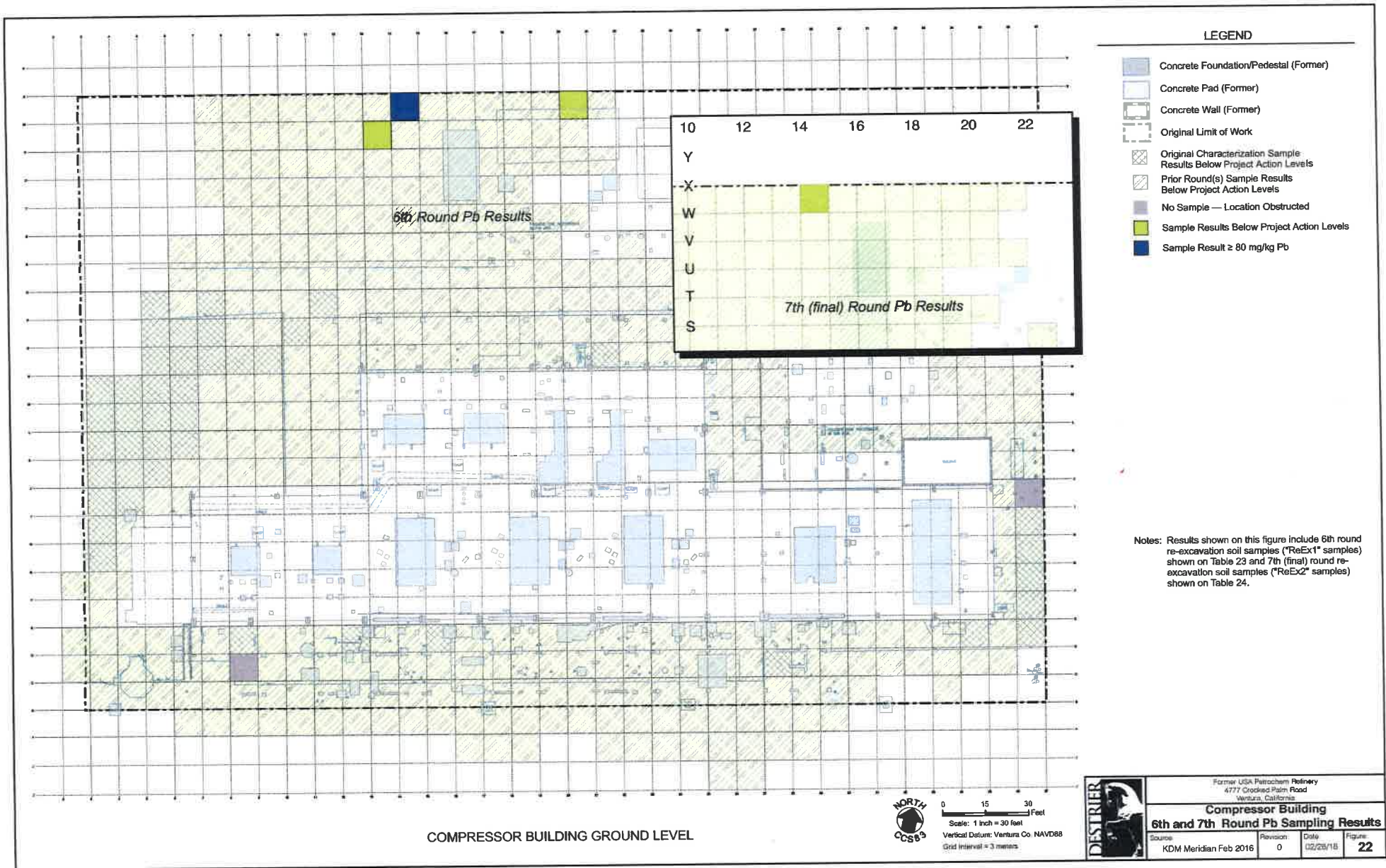
Round Seven addressed the re-excavation and sampling of location *WX14.5* on April 26, 2017. One sample was collected and was below project action levels.

Figure 22 and Table 24 show the Round Seven (Final) Pb results.

5.8 Cd and Pb Remediation Conclusions

Based on the results of the 39 independent sampling and re-excavation events described above, and the satisfactory resolution of each area found to exceed project action levels, ***no further action*** regarding Cd and Pb resulting from peeling and disturbed paint present in the Compressor Building structure is required.





Notes: Results shown on this figure include 6th round re-excavation soil samples ("ReEx1" samples) shown on Table 23 and 7th (final) round re-excavation soil samples ("ReEx2" samples) shown on Table 24.

*Table 23: Sixth Round Pb Sample Results
(mg/kg)*

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L903188-03	REEX1-VW13.5	15.3	
L903188-04	REEX1-WX14.5	128	REEX1-YZ19.5
L903188-05	REEX1-YZ19.5	185	REEX1-WX14.5
L903188-06	REEX1-WX20.5	6.91	REEX1-YZ20.5
L903188-07	REEX1-YZ20.5	7.18	REEX1-WX20.5

*Table 24: Seventh (Final) Round Pb Sample Results
(mg/kg)*

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Duplicate Sample ID
L905338-01	REEX2-WX14.5	14.8	



6.0 Waste Disposal Records

6.1 TSCA Waste (PCBs ≥ 50 ppm)

PCB concentrations of Bulk PCB Remediation Waste and gross residues removed during the interim cleanup operation were found to exceed 50 mg/kg PCBs in one limited area in the crawl space of the Compressor Building (see Section 2.4). This area was cleaned separately and the waste from this area was segregated and disposed as PCB waste (≥ 50 mg/kg). Additionally, the gross residues (oily residues) found in the Compressor Building underwent limited sampling during the Dudek characterization efforts. These samples were less than 50 mg/kg but based on the limited number of samples, these wastes were disposed as PCB waste (presumed ≥ 50 mg/kg).³⁷

Subsequent characterization sampling of the concrete equipment foundations, concrete crawlspace and perimeter slabs, and concrete floor deck resulted in four samples that exceeded 50 mg/kg PCBs (see Figure 7, above). Areas affected by PCBs ≥ 50 mg/kg were determined on the basis of the *area of inference* of the samples as described in Subpart O.³⁸ Furthermore, the crawlspace concrete slab area surrounding concrete equipment foundation "L" was expanded to include an additional buffer area north and east of sample location CS-J23 to ensure adequate removal of concrete exceeding 50 mg/kg PCBs.

During post-demolition soil sampling a number of samples collected from 3 meter grid-based sampling locations were also found to exceed 50 mg/kg PCBs. The *area of inference* of these samples was delimited as the 3 meter grid boundaries.

Wastes containing PCBs ≥ 50 mg/kg were disposed at the Waste Management Kettleman Hills Landfill using the pre-existing waste profile CA608683 (see Section 3.3, above).

A total of 818.67 tons of waste was disposed under this profile between November 2015 and July 2017. This amount constitutes the entire volume of wastes from the Petrochem facility disposed as TSCA-regulated waste. Table 25, below, provides a summary of each of these waste shipments.

6.2 Non-RCRA (California) Hazardous Waste

Elevated concentrations of cadmium (Cd) and lead (Pb) were found in samples collected by Destrier in 2016 to evaluate waste profile characteristics of the waste materials that would be generated and disposed offsite during demolition and remediation. These samples were analyzed for PCBs, Total Petroleum Hydrocarbons (TPH), Volatile Organic Compounds (VOCs), and CAM17 metals³⁹. Additional extraction and analysis of PCBs and certain metals constituents were also performed to determine if federal Toxicity Characteristic Leaching Procedure (TCLP) or California Soluble Threshold Limit Concentration (STLC) criteria may have been exceeded for these constituents.⁴⁰

³⁷ §761.61(a)(5)(i)(B)(2)(i)

³⁸ §761.283(d)

³⁹ California Assessment Method, a suite of 17 specific metals constituents matching California-based hazardous waste disposal criteria (TTLC and STLC), 22CCR §66261.24. CAM17 Metals includes Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Th, V, Z, and Hg.

⁴⁰ Total metals constituents with concentrations ten times (10X) greater than their corresponding STLC criteria are generally analyzed for extractable (soluble) metals using the California Waste Extraction Test (WET) and evaluated against their STLC criteria for waste characterization purposes.



Table 25: Profile CA608683 Disposal Records

Date	Manifest #	Net Tons	Subtotal Tons	Remarks
11/19/15	010927549JJK	5.77		
2/9/16	010927547JJK	2.37	8.14	Interim Cleanup Debris
10/26/16	016036452JJK	22.28		
10/26/16	016036453JJK	23.53		
10/26/16	016036454JJK	21.43		
10/26/16	016036455JJK	20.24		
10/26/16	016036461JJK	23.26		
10/27/16	016036456JJK	20.06		
10/27/16	016036457JJK	22.26		
10/27/16	016036458JJK	23.11		
10/27/16	016036459JJK	20.72		
10/27/16	016036460JJK	21.64		
11/1/16	016035505JJK	22.54		
11/1/16	016036482JJK	24.27		
11/1/16	016036483JJK	21.97		
11/1/16	016036484JJK	12.35		
11/2/16	016036485JJK	20.06		
11/3/16	016036496JJK	17.23		
11/3/16	016036497JJK	25.76		
11/7/16	016036500JJK	23.55		
11/10/16	016036494JJK	23.6		
11/10/16	016036495JJK	21.01		
11/10/16	016036499JJK	20.59		
5/3/17	016036492JJK	24.25		
5/3/17	016036493JJK	21.29		
5/4/17	016036489JJK	23.81		
5/4/17	016036490JJK	20.65		
5/5/17	016036491JJK	23.37		
5/18/17	016035588JJK	13.88		
5/18/17	016035589JJK	11.47		
6/21/17	016035585JJK	23.15		
6/21/17	016035587JJK	22.34		
6/21/17	016036487JJK	22.31		
6/21/17	016036488JJK	26.91		
6/22/17	016035581JJK	24.62		
6/22/17	016035582JJK	27.1		
6/22/17	016035583JJK	26.22		
6/22/17	016035584JJK	22.86		
7/18/17	016035580JJK	24.84	810.53	Demolition/Remediation

Total: 818.67



The results of these analyses demonstrated that *soil and asphalt* contained concentrations of Pb in excess of California hazardous waste criteria (TTLC and/or STLC). No other constituents were found to exceed California or federal hazardous waste criteria.

Sampling results obtained during the post-interim cleanup characterization effort (see Section 2.7) showed that the *concrete* passed California and federal hazardous waste classification criteria for all constituents including Pb.

Therefore, *soil and asphalt* scheduled for excavation and removal during the demolition and remediation efforts were classified as Non-RCRA (California) Hazardous Waste Solids (Pb) based on TTLC and STLC Pb results.

The pre-existing Waste Management Kettleman Hills Landfill waste profile CA608682 matched these criteria (see Section 2.5.3, above).

Approximately 1962.61 tons of contaminated soil and asphalt were removed and disposed offsite as Non-RCRA Hazardous Waste during the Compressor Building remediation.

Table 26, below, tabulates each of these waste shipments associated with the Compressor Building demolition and remediation.



Truck Loading Operations

6.3 Non-Hazardous Waste

6.3.1 PCB Cleanup Wastes

Cleanup wastes such as non-liquid cleaning materials and personal protective equipment were not sampled prior to disposal. Non-liquid cleaning materials and personal protective equipment waste at any concentration, including non-porous surfaces and other non-liquid materials such as rags and similar materials resulting from decontamination were disposed offsite as municipal solid waste.⁴¹

⁴¹ §761.79(g)(6) & §761.61(a)(5)(v)



Table 26: Profile CA608682 Disposal Records

Date	Manifest #	Net Tons	Subtotal Tons	Remarks
11/10/15	010927521JJK	24.11		
11/10/15	010927522JJK	26.19		
11/10/15	010927523JJK	25		
11/10/15	010927524JJK	26.56		
11/10/15	010927525JJK	20.68		
11/10/15	010927526JJK	27.16		
12/21/15	007437609JJK	22.78		
12/21/15	007437610JJK	28.09		
12/21/15	007437611JJK	28.22		
2/9/16	007437599JJK	7.91	236.7	Interim Cleanup Debris
11/7/16	016035567JJK	22.74		
11/7/16	016035568JJK	21.1		
11/7/16	016035569JJK	20.88		
11/7/16	016036469JJK	22.08		
11/8/16	016036470JJK	21.73		
11/8/16	016036471JJK	20.78		
11/8/16	016036472JJK	22.49		
11/8/16	016036473JJK	19.39		
11/8/16	016036474JJK	22.19		
11/9/16	016035561JJK	22.99		
11/9/16	016035562JJK	23.94		
11/9/16	016035563JJK	20.25		
11/9/16	016035564JJK	21.41		
11/9/16	016035565JJK	22.16		
11/10/16	016035560JJK	21.23		
11/10/16	016035566JJK	24.35		
11/10/16	016036475JJK	20.96		
11/10/16	016036476JJK	23.6		
11/14/16	016035550JJK	24.75		
11/14/16	016035551JJK	23.83		
11/14/16	016035552JJK	25.64		
11/14/16	016035553JJK	25.37		
11/14/16	016035554JJK	25.45		
11/14/16	016035555JJK	23.69		
11/14/16	016035556JJK	25.8		
11/14/16	016035557JJK	25.04		
11/14/16	016035558JJK	22.21		
11/14/16	016035559JJK	21.82		
11/15/16	016035540JJK	22.35		



Table 26: Profile CA608682 Disposal Records (Continued)

Date	Manifest #	Net Tons	Subtotal Tons	Remarks
11/15/16	016035541JJK	25.84		
11/15/16	016035542JJK	23.44		
11/15/16	016035547JJK	24.78		
11/15/16	016035548JJK	25.89		
11/15/16	016035549JJK	24.26		
11/16/16	016037721JJK	21.13		
11/16/16	016037722JJK	22.76		
11/16/16	016037723JJK	22.65		
11/16/16	016037726JJK	21.73		
12/1/16	007438603JJK	26.91		
12/1/16	007438604JJK	25.67		
12/1/16	007438605JJK	24.21		
12/5/16	016037720JJK	24.72		
12/5/16	016037727JJK	24.57		
12/5/16	016037728JJK	25.18		
12/8/16	016035539JJK	24.86		
12/8/16	016037729JJK	26.78		
3/14/17	016035520JJK	25.85		
3/14/17	016035521JJK	26.58		
3/14/17	016035522JJK	24.79		
3/14/17	016035523JJK	24.45		
3/14/17	016035524JJK	22.37		
3/14/17	016035525JJK	23.79		
3/14/17	016035526JJK	24.39		
3/14/17	016035527JJK	25.31		
3/14/17	016035528JJK	24.39		
3/14/17	016035529JJK	25.79		
3/14/17	016035530JJK	25.17		
3/14/17	016035531JJK	25.17		
3/14/17	016035532JJK	25.76		
3/14/17	016035533JJK	25.05		
3/14/17	016035534JJK	23.63		
3/14/17	016035535JJK	25.88		
3/14/17	016035536JJK	25.2		
3/14/17	016035537JJK	25.37		
3/14/17	016035538JJK	26.75		
3/14/17	016037730JJK	25.94		
3/15/17	016037731JJK	24.42		
3/15/17	016037732JJK	24.97		



Table 26: Profile CA608682 Disposal Records (Continued)

Date	Manifest #	Net Tons	Subtotal Tons	Remarks
3/30/17	007438546JJK	24.91		
3/30/17	007438547JJK	24.24		
6/26/17	007438548JJK	25.65		
6/26/17	016037733JJK	24.49	1725.91	Demoiltion/Remedlation

Total: 1962.61



6.3.2 Movable Equipment, Tools and Sampling Equipment (PCBs)

Movable equipment, tools and sampling equipment were decontaminated by swabbing with a solvent or cleaned using the “double wash/rinse” method defined in Subpart S.⁴² Confirmatory sampling or inspection is not specifically required, nor was it performed, following the implementation of these self-implementing decontamination procedures.⁴³

6.3.3 Construction and Demolition Debris

Construction and demolition debris not classified as TSCA (PCBs ≥ 50 ppm) or Non-RCRA (California) Hazardous Waste (Pb) was designated as non-hazardous waste (C&D). This waste stream included non-hazardous concrete waste generated during the demolition and remediation effort. All concrete was designated for off site disposal (vs. remaining on-site).

As noted above, pre-remediation characterization sampling conducted prior to the start of work demonstrated that *soil and asphalt* contained concentrations of Pb in excess of California hazardous waste criteria (TTLC and/or STLC). However, as these initial *Perimeter* and *Step-Out* locations were excavated and re-sampled, many grid locations exhibited total Pb concentrations below TTLC criteria. Based on these observations, Destrier and Waste Management proceeded to re-evaluate the data to determine if these areas continued to exceed California hazardous waste criteria.

In-situ sampling data from grid locations where total Pb concentrations were less than TTLC criteria were compiled and subjected to statistical analysis to determine if the upper confidence limits of the total Pb dataset were below TTLC thresholds (95% Chebyshev UCL). Furthermore, stockpiled soil from these re-excavations was composite sampled (ex-situ) and analyzed for STLC Pb. The result of these evaluations was accepted by Waste Management as evidence that remaining soil generated during Pb remediation was acceptable for disposal as non-hazardous C&D.

Non-hazardous C&D was transported and disposed offsite at the Waste Management Simi Valley Landfill under profile 624797CA. Approximately 6105.82 tons of waste C&D was removed and disposed offsite under this profile during demolition and remediation.

Table 27 summarizes the waste shipments under profile 624797CA associated with the Compressor Building demolition and remediation.

6.3.4 Non-Hazardous Soil

In addition to non-hazardous C&D, non-hazardous soil suitable for beneficial use as landfill daily cover was also generated during the Compressor Building demolition and remediation. The principal difference between this waste stream and the C&D waste stream described in Section 6.3.3 was the relative absence of debris such as concrete rubble present.

Non-hazardous soil was transported and disposed offsite at the Waste Management Simi Valley Landfill under profile 628305CA. Approximately 929.48 tons of waste C&D was removed and disposed offsite under this profile during the Compressor Building demolition and remediation project.

Table 28 summarizes the waste shipments under profile 628305CA associated with the Compressor Building demolition and remediation.

⁴² §761.79(c)(2)

⁴³ §761.79(f)(2)



Table 27: Profile 624797CA Disposal Records

Date	Manifest #	Weight Ticket #	Net Tons	Remarks
9/28/16	NO#	1621928	18.62	
9/28/16	NO #	1621948	21.18	
9/28/16	3	1622170	21.78	
9/28/16	4	1622171	21.01	
9/28/16	5	1622364	22.93	
9/28/16	6	1622382	22.96	
9/29/16	7	1622548	23.01	
9/29/16	8	1622591	22.71	
9/29/16	9	1622690	23.24	
9/29/16	10	1622775	23.7	
9/29/16	11	1622901	23.05	
9/29/16	12	1622970	23.11	
10/3/16	13	1624356	21.09	
10/3/16	14	1624399	23.23	
10/3/16	15	1624541	22.88	
10/3/16	16	1624596	22.84	
10/3/16	17	1624756	23.47	
10/3/16	18	1624808	22.24	
10/4/16	19	1625063	23.2	
10/4/16	20	1625073	21.2	
10/4/16	21	1625083	18.16	
10/6/16	22	1626767	15.87	
10/6/16	23	1626842	22.51	
10/6/16	24	1626858	23.21	
10/10/16	26	1628175	22.8	
10/10/16	27	1628189	23.66	
10/10/16	28	1628207	20.54	
10/10/16	29	1628212	20.97	
10/10/16	30	1628388	20.09	
10/10/16	31	1628412	20.76	
10/10/16	32	1628432	20.06	
10/10/16	33	1628490	20.89	
10/10/16	34	1628609	19.8	
10/10/16	35	1628635	22.7	
10/10/16	36	1628699	24.82	
10/11/16	37	1628895	19.39	
10/11/16	38	1628901	23.85	
10/11/16	39	1628908	23.32	
10/11/16	40	1628926	22.88	



Table 27: Profile 624797CA Disposal Records (Continued)

Date	Manifest #	Weight Ticket #	Net Tons	Remarks
10/11/16	41	1629090	22.01	
10/11/16	42	1629115	21.4	
10/11/16	43	1629154	21.84	
10/11/16	44	1629180	22.12	
10/11/16	45	1629319	20.44	
10/11/16	46	1629325	23.06	
10/11/16	47	1629376	23.67	
10/11/16	48	1629402	22.68	
10/12/16	49	1629666	21.4	
10/12/16	50	1629690	22.04	
10/12/16	51	1629701	23.55	
10/12/16	52	1629712	21.35	
10/12/16	53	1629878	20.24	
10/12/16	54	1629894	18.69	
10/12/16	55	1629902	19.92	
10/12/16	56	1629932	21.35	
10/12/16	57	1630064	20.85	
10/12/16	58	1630097	19.9	
10/12/16	59	1630113	21.65	
10/12/16	60	1630137	21.2	
10/13/16	61	1630356	21.06	
10/13/16	62	1630365	19.73	
10/13/16	63	1630382	20.76	
10/13/16	64	1630385	22.05	
10/13/16	65	1630534	21.81	
10/13/16	NO#	1630560	24.71	
10/13/16	67	1630596	23.24	
10/13/16	68	1630599	22.49	
10/13/16	68	1630706	20.8	
10/13/16	69	1630761	20.04	
10/13/16	70	1630785	24.31	
10/13/16	71	1630797	22.74	
10/17/16	72	1632307	24.44	
10/17/16	73	1632322	22.68	
10/17/16	74	1632336	22.75	
10/17/16	75	1632364	21.74	
10/17/16	76	1632515	22.05	
10/17/16	77	1632529	22.22	
10/17/16	78	1632547	23.17	



Table 27: Profile 624797CA Disposal Records (Continued)

Date	Manifest #	Weight Ticket #	Net Tons	Remarks
10/17/16	79	1632553	24.39	
10/17/16	80	1632691	21.95	
10/17/16	81	1632706	23.58	
10/17/16	82	1632714	22.84	
10/17/16	83	1632724	17.92	
10/18/16	84	1632979	21.68	
10/18/16	85	1632988	20.13	
10/18/16	88	1633016	21.66	
10/18/16	87	1633018	21.36	
10/18/16	86	1633036	22.28	
10/18/16	89	1633189	20.65	
10/18/16	90	1633209	19.91	
10/18/16	91	1633228	20.46	
10/18/16	92	1633248	20.23	
10/18/16	93	1633274	22.5	
10/18/16	94	1633397	20.16	
10/18/16	95	1633453	22.33	
10/18/16	96	1633454	22.24	
10/18/16	97	1633478	22.33	
10/19/16	098SP	1633755	9.75	Steel Diamond Plate
10/19/16	099SP	1633805	9.35	Steel Diamond Plate
10/19/16	102SP	1633846	5.91	Steel Diamond Plate
11/1/16	114	1640206	23.53	
11/1/16	113	1640218	19.44	
11/1/16	115	1640449	21.43	
11/1/16	116	1640466	22.06	
11/1/16	117	1640642	22.62	
11/1/16	118	1640661	20.61	
11/2/16	117	1640961	22.63	
11/2/16	118	1640984	21.79	
11/2/16	119	1641187	21.98	
11/2/16	122	1641212	19.76	
11/2/16	123	1641367	22.94	
11/2/16	124	1641380	20.67	
11/3/16	125	1641819	19.31	
11/3/16	126	1641630	20.19	
11/3/16	127	1641876	22.24	
11/3/16	128	1641878	20.36	
11/3/16	129	1642066	20.5	



Table 27: Profile 624797CA Disposal Records (Continued)

Date	Manifest #	Weight Ticket #	Net Tons	Remarks
11/3/16	130	1642071	20.42	
11/7/16	130	1643478	20.58	
11/7/16	131	1643484	18.76	
11/7/16	132	1643494	20.98	
11/7/16	133	1643507	22.98	
11/7/16	134	1643521	21.87	
11/7/16	135	1643535	19.41	
11/7/16	136	1643631	20.04	
11/7/16	137	1643651	20.07	
11/7/16	138	1643672	21.61	
11/7/16	139	1643677	24.35	
11/7/16	140	1643688	20.99	
11/7/16	141	1643722	22.34	
11/7/16	142	1643835	22.49	
11/7/16	143	1643856	19.22	
11/7/16	144	1643859	21.47	
11/7/16	145	1643873	22.45	
11/7/16	146	1643886	22.43	
11/7/16	145	1643906	20.46	
11/8/16	148	1644177	21.1	
11/8/16	149	1644184	23.94	
11/8/16	150	1644191	23.38	
11/8/16	151	1644196	22.54	
11/8/16	152	1644202	22.23	
11/8/16	153	1646133	19.34	
11/8/16	154	1644331	21.92	
11/8/16	155	1644346	20.24	
11/8/16	156	1644374	24.59	
11/8/16	157	1644400	21.97	
11/8/16	158	1644406	17.5	
11/8/16	154	1644536	22.76	
11/8/16	160	1644555	21.24	
11/8/16	161	1644584	21.27	
11/8/16	163	1644591	21.58	
11/8/16	162	1644597	22.81	
11/8/16	164	1644599	17.69	
11/8/16	165	1644702	21.82	
11/9/16	165	1644886	20.99	
11/9/16	166	1644894	18.6	



Table 27: Profile 624797CA Disposal Records (Continued)

Date	Manifest #	Weight Ticket #	Net Tons	Remarks
11/9/16	167	1644896	19.7	
11/9/16	168	1645030	21.94	
11/9/16	169	1645037	23.4	
11/9/16	170	1645054	21.84	
11/9/16	171	1645253	23.52	
11/9/16	172	1645261	21.4	
11/9/16	173	1645264	22.07	
11/10/16	174	1645530	22.43	
11/10/16	175	1645543	21.56	
11/10/16	176	1645549	22.35	
11/10/16	177	1645722	21.21	
11/10/16	178	1645738	24.16	
11/10/16	179	1645756	22.38	
11/10/16	180	1645957	21.23	
11/10/16	181	1645958	23.35	
11/10/16	182	1646013	24.11	
11/14/16	184	1647181	21.93	
11/14/16	183	1647180	20.69	
11/14/16	185	1647189	19.82	
11/14/16	186	1647360	23.97	
11/14/16	187	1647364	21.6	
11/14/16	188	1647385	22.87	
11/14/16	189	1647551	23.36	
11/14/16	191	1647585	24.13	
11/14/16	190	1647613	22.15	
11/15/16	192	1647832	20.8	
11/15/16	194	1647847	22.76	
11/15/16	193	1647855	24.57	
11/15/16	196	1647977	19.54	
11/15/16	198	1648009	22.76	
11/15/16	197	1648012	23.42	
11/15/16	199	1648178	20.52	
11/15/16	200	1648198	23.83	
11/15/16	201	1648219	23.53	
11/16/16	203	1648524	23.2	
11/16/16	202	1648536	22.48	
11/16/16	204	1648696	21.95	
11/16/16	205	1648712	23.25	
11/16/16	206	1648914	23.28	



Table 27: Profile 624797CA Disposal Records (Continued)

Date	Manifest #	Weight Ticket #	Net Tons	Remarks
11/16/16	207	1648918	21.7	
3/29/17	003M	1709917	18.28	
3/29/17	005M	1709942	21.38	
3/31/17	013M	1711135	18.14	
3/31/17	015M	1711267	18.74	
3/31/17	016M	1711327	22.08	
4/20/17	001A	1722705	23.79	
4/20/17	002A	1722908	21.36	
4/20/17	003A	1723073	22.83	
4/21/17	004A	1723406	24.75	
4/21/17	005A	1723601	24.96	
4/21/17	0006A	1723787	24.19	
4/24/17	007A	1724536	21.42	
4/24/17	008A	1724725	23.43	
4/24/17	009A	1724903	23.65	
4/25/17	010A	1725201	26.3	
4/25/17	011A	1725404	24	
4/25/17	012A	1725605	23.34	
4/26/17	013A	1725995	24.04	
4/26/17	014A	1726218	23.82	
4/26/17	015A	1726382	22.03	
4/27/17	016A	1726690	23.37	
4/27/17	017A	1726906	24.54	
4/27/17	018A	1727085	22.82	
5/1/17	019A	1728586	18.17	
5/1/17	020A	1728803	19.43	
5/1/17	021A	1728972	19.56	
5/2/17	022A	1729292	21.28	
5/2/17	023M	1729492	21	
5/2/17	024M	1729716	21.19	
5/3/17	025M	1730041	18.99	
5/3/17	026M	1730246	18.29	
5/3/17	027M	1730475	20.27	
5/4/17	028M	1730842	17.54	
5/4/17	029M	1731070	15.6	
5/16/17	016M	1738319	23.33	
5/16/17	017M	1738337	23.46	
5/16/17	018M	1738379	23.21	
5/17/17	019M	1738669	23.95	



Table 27: Profile 624797CA Disposal Records (Continued)

Date	Manifest #	Weight Ticket #	Net Tons	Remarks
5/17/17	020M	1738681	22.4	
5/17/17	021M	1738701	23.63	
5/17/17	022m	1738862	23.65	
5/17/17	023M	1738881	23.07	
5/17/17	024M	1738901	22.4	
5/17/17	025M	1739077	24.69	
5/17/17	026M	1739083	23.91	
5/17/17	027M	1739123	24.98	
5/18/17	028M	1739436	22.35	
5/18/17	029M	1739694	19.08	
5/18/17	030M	1739881	16.29	
6/2/17	001J	1748312	24.62	
6/2/17	002J	1748433	23.01	
6/2/17	003J	1748455	22.62	
6/2/17	005J	1748504	22.4	
6/2/17	45	1748506	20.7	
6/20/17	006J	1759530	23.55	
6/21/17	007J	1759848	22.15	
6/21/17	008J	1759871	24.91	
6/21/17	009J	1760062	21.34	
6/21/17	010J	1760088	19.26	
6/21/17	011J	1760288	22.53	
6/21/17	012J	1760291	20.6	
6/22/17	012J	1760576	21.3	
6/22/17	013J	1760614	23.69	
6/22/17	614J	1760767	21.83	
6/22/17	NO #	1760825	22.71	
6/22/17	016J	1761000	26.42	
6/22/17	017J	1761009	26.74	
6/26/17	018J	1762700	22.46	
6/26/17	019J	1762791	23.25	
6/26/17	020J	1762942	22.45	
6/26/17	021J	1763035	21.53	
6/26/17	.22J	1763205	22.33	
6/26/17	023J	1763241	23.79	
7/17/17	024J	1774417	21.89	
7/17/17	025J	1774606	23.03	
7/17/17	026J	1774797	22.18	
7/18/17	271	1775078	20.15	



Table 27: Profile 624797CA Disposal Records (Continued)

Date	Manifest #	Weight Ticket #	Net Tons	Remarks
7/18/17	028J	1775396	22.36	
7/18/17	029J	1775623	22.51	
7/19/17	030J	1775772	23.69	
7/19/17	031j	1775785	21.66	
7/19/17	032J	1775961	22.4	
7/19/17	033J	1775993	20.58	
7/19/17	034J	1776157	18.5	
7/19/17	035J	1776162	18.96	

Total: 6105.82



Table 28: Profile 628305CA Disposal Records

Date	Manifest #	Net Tons	Subtotal Tons	Remarks
11/17/16	208	1649245	22.35	
11/17/16	209	1649259	22.71	
11/17/16	210	1649260	21.46	
11/17/16	211	1649269	19.42	
11/17/16	212	1649447	22.55	
11/17/16	213	1649476	24.42	
11/29/16	214	1654053	21.87	
11/29/16	215	1654288	25.29	
11/29/16	216	1654483	23.03	
11/30/16	217	1654745	22.08	
11/30/16	218	1654967	21.24	
11/30/16	219	1655177	22.4	
12/1/16	220	1655405	24.45	
12/1/16	221	1655592	24.49	
12/1/16	222	1655788	22.12	
12/5/16	223	1656990	23.02	
12/5/16	224	1657163	23.33	
12/5/16	225	1657356	22.65	
12/8/16	226	1659068	21.51	
12/8/16	227	1659072	21.09	
12/8/16	228	1659229	21.74	
12/8/16	229	1659278	21.02	
12/8/16	230	1659406	18.93	
12/8/16	231	1659432	21.8	
3/15/17	NO #	1702050	19.37	
3/15/17	NO #	1702272	18.44	
3/29/17	001M	1709697	20.96	
3/29/17	002M	1709698	19.26	
3/29/17	004M	1710151	20.75	
3/29/17	006M	1710162	21.22	
3/30/17	007M	1710429	18.9	
3/30/17	008M	1710562	23.66	
3/30/17	004M	1710710	21.71	
3/30/17	010M	1710772	22.35	
3/30/17	011M	1710861	20.42	
3/30/17	012M	1710926	20.75	
3/31/17	012M	1711074	22.18	
3/31/17	013M	1711098	21.07	
3/31/17	017M	1711355	20.94	



Table 28: Profile 628305CA Disposal Records (Continued)

Date	Manifest #	Net Tons	Subtotal Tons	Remarks
8/18/17	001A	1792980	22.08	
8/18/17	002A	1792985	19.96	
8/18/17	003A	1793176	21.79	
8/18/17	004A	1793179	18.7	

Total: 929.48



7.0 Conclusions and Recommendations

7.1 PCB Cleanup

PCB contamination discovered at the former Compressor Building in October 2013 has undergone extensive investigation and remediation in accordance with an EPA-approved *PCB Cleanup Plan*.

The source of the PCB contamination at the former Compressor Building appears to be from the historical operations of the site by the Shell Chemical Company. This conclusion is based on the presence of PCBs in areas of the building that appear to only have been accessible during these historical operations. For example, PCBs were detected in the interiors of intact piping systems (see Section 3.4.3), in unreachable locations of the building's ceiling areas (see Section 3.4.4), and deep below underlying building foundations (see Section 4.7.1). The quantity of PCBs found in these unaccessible areas appears to obviate other sources such as vandalism, inadvertent surface releases, etc.

The results presented in this *Final Cleanup* Report demonstrate that the requirements of the *PCB Cleanup Plan* approved by EPA have been satisfied. Specifically, that no remaining 3 meter grid cells contained PCBs in soil in excess of the project action levels and that no residual PCB groundwater contamination is present.

Based on these results *no further action regarding PCBs appears to be required*.

7.2 Cd and Pb Cleanup

Elevated concentrations of cadmium (Cd) and lead (Pb) were found in soil and asphalt samples during PCB cleanup operations. These metals constituents were ascertained to be the result of peeling and disturbed paint present in the Compressor Building structure.

Based on the results of the sampling and remediation events described above, and the satisfactory resolution of each area found to exceed project action levels, *no further action* regarding Cd and Pb resulting from peeling and disturbed paint present in the Compressor Building structure appears to be required.

7.3 Residual NAPL

TPH concentrations in found in unfiltered groundwater samples ranged from **0.224 mg/l** to **3.71 mg/l** (C₁₂-C₂₂) and from **0.40 mg/l** to **7.64 mg/l** (C₂₂-C₄₀). These results are consistent with the presence of *residual NAPL* as noted in Section 4.8 and do not appear to exceed ESLs for groundwater.⁴⁴

⁴⁴ Tier 1 Environmental Screening Levels (ESLs) for Groundwater, San Francisco Bay Regional Water Quality Control Board, February 2016 (Rev. 3). Oil-range hydrocarbons are addressed in the ESLs as either hydrocarbon degradates or non-aqueous phase liquids (NAPL). If degradates are present, the ESLs stipulate that the diesel-range and oil-range values be added and compared to the diesel-range ESL (100 µg/l). Using this method, the additive diesel- and oil-range results would exceed the ESL criteria (0.1244 mg/l vs. 0.100 mg/l). However, since these samples were intended to directly evaluate the presence of LNAPL, the ESL criteria appear to be satisfied.



Historical groundwater monitoring data performed at the site demonstrated that TPH was not present.⁴⁵ Furthermore, extensive investigation of potential groundwater TPH contamination performed in 2014 with EPA found no evidence of TPH or free product in exploratory trenches.⁴⁶ Based on these results, ***no further action regarding Residual NAPL appears to be required.***

⁴⁵ *Preliminary Endangerment Assessment, Former USA Petroleum Facility, 4777 Crooked Palm Road, Ventura, California, Shaw Environmental, Inc., August 2005*

⁴⁶ *Trenching Report, Former USA Petrochem Refinery, 4777 Crooked Palm Road, Ventura, CA, Dudek, April 2014.*



Attachment A

Data Validation



Attachment A

Data Validation

1.0 Data Validation Summary

As part of the data validation process, it is the analytical laboratory's responsibility to establish and continually demonstrate the performance of its analytical processes and instrumentation. Analytical reports are reviewed and the resultant analytical results are validated against various performance criteria.

Analytical reports are reviewed along with batch controls to validate the usability of the sample results used to guide remedial decisions and remediation efficacy and completion. As the related report is developed, limitations associated with the analytical data are evaluated and discussed in context with corrective action(s).

Data validation is generally defined as the procedures used to determine whether analytical testing meets the performance criteria for the analytical method used. In the event there are impacts associated with the performance criteria, such impacts are qualified typically using appending qualifiers on the affected data points. Such qualifiers may indicate that the data may be considered estimated, not detected, or rejected.

Data usability is the process of evaluating the data validation results and determining the level of confidence in which the data can be used. Usability is determined by evaluating the data, and its qualifiers, with the analytical laboratory quality control results. If the laboratory quality control results fall within accepted performance criteria, the corresponding sample values are considered to have a high degree of confidence that the data are usable for the intended purpose. If the laboratory quality control results indicate otherwise, the data may be qualified or rejected, and not used in the remedial decision making process.

2.0 Analytical Methods¹

The analytical methods used for analyses applicable to this validation summary include:

- *Polychlorinated biphenyls (PCBs)*: EPA Method 8082, PCBs by Gas Chromatography.
- *Total Petroleum Hydrocarbons (TPH)*: EPA Method 8015B, Semi-volatile Organic Compounds by Gas Chromatography/Flame Ionization Detector (GC/FID).
- *Metals (CAM17)*: EPA Method 6010B, Inductively Coupled Plasma—Atomic Emission Spectrometry and/or EPA Method 6020, Inductively Coupled Plasma—Mass Spectrometry.
- *Mercury (Hg)*: EPA Method 7471A, Mercury in Solid or Semisolid Waste by Manual Cold-Vapor Technique.
- *Solubility Threshold Limit Concentration (STLC) Preparation*: California Waste Extraction Test (WET), Title 22 Appendix II.²
- *Toxicity Characteristic Leaching Procedure (TCLP) Preparation*: EPA Method 1311.

¹ Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA Publication SW-846, Final Update IV, 2008.

² California Code of Regulations, Title 22, Division 4.5, Chapter 11, Appendix II



- *Volatile Organic Compounds (VOC)*: EPA Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS).
- *Semi Volatile Organic Compounds (SVOC)*: EPA Method 8270C, Semi-volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS).
- *Total Solids*: EPA Method 2540, G-2011.

3.0 Analytical Batches

The analytical batches incorporated into this validation summary are summarized on Table A1 located at the end of this Attachment A.

4.0 Containers and Preservation

Soil samples were collected in 2 oz. wide mouth, glass jars sealed with PTFE-lined plastic caps. The laboratory provided pre-cleaned containers for soil samples. No preservatives were used for soil samples.

Groundwater samples for TPH, VOCs and SVOCs were collected in 40ml amber VOA vials sealed with PTFE-lined septum caps preserved with HCl. Groundwater samples for PCBs were collected in 100ml amber glass bottles sealed with PTFE-lined plastic caps. The laboratory provided pre-cleaned and preserved containers for groundwater samples.

All samples were cooled to 4°C using (wet) ice.

5.0 Sample Packaging and Shipment

Samples were shipped by common courier (FedEx) to ESC Lab Sciences in Mount Juliet, Tennessee. Samples were chilled to 4°C using wet ice and placed in reusable coolers. Samples and ice were enclosed in separate resealable plastic bags. Custody seals were not used.

6.0 Sample Documentation and Custody

Sample containers were recorded on chain-of-custody forms generated by Destrier. The custody record included the sample identification number, the date and time sampled, analyses requested, sample matrix, type of container, and preservatives used, if any. Additionally, the custody form recorded the identity of the sampling technician and documented by countersignature the continuous chain-of-custody of the samples.

7.0 Field Duplicate Samples

Field duplicate samples are split samples that are divided into to two containers for individual analysis. The samples are typically assigned unique identification numbers so that laboratory personnel cannot identify the samples as duplicates. Field duplicate samples are collected to assess sampling and analysis precision.

Duplicate samples were collected at a frequency of 10% for the primary samples collected except as noted. Duplicate samples are compared by evaluating their relative percent difference (RPD). Samples reported as "ND" are not evaluated for relative percent differences. RPD is calculated by the formula:

$$RPD = (|SAMPLE_A - SAMPLE_B|) / ((SAMPLE_A + SAMPLE_B) / 2)$$



As a general rule, RPD values are considered to be of concern if they are above 50%. Samples with reported analyte concentrations above the method detection limit (MDL) but below the reported detection limit (RDL) can produce greater variability, leading to greater RPDs. RPD values are considered non-representative when the following conditions exist:

- *Both the original and duplicate results are less than five times the reporting limit.*
- *One or both results are qualified as estimated or rejected or are suspected of blank contamination.*
- *One or both results are not detected at the reporting limit.*

The duplicate sample results and relative percent differences between the duplicate samples with detectable concentrations of target constituents is shown on Tables A2 (PCBs) and A3 (Pb), located at the end of this Attachment A. While some RPD values are above 50%, this is more likely to reflect the heterogeneity of contaminants in the field samples rather than anomalies regarding field sampling precision.

8.0 Chain of Custody, Preservation and Storage

Samples are subject to evaluation upon receipt at the laboratory for proper chain of custody documentation and preservation. Samples were received intact and undamaged by the laboratory and were accompanied by properly executed chain of custody forms. Custody seals were not used.

9.0 Holding Times

Samples collected during the investigation were extracted and analyzed by the laboratory within the appropriate holding times.

10.0 Detection Limits

ESC Lab Sciences reports both a Method Detection Limit (MDL) and a Reported Detection Limit (RDL) for its sample analyses. The MDL is based on the theoretical lowest concentration of an analyte that is statistically quantifiable using the specific analytical method. The RDL is established by the laboratory above the MDL based on empirically determined limits of quantification for each analyte. The RDL provides a safety factor for the quantification of analyte concentrations given that the laboratory may experience variability associated with analyzing samples from a wide variety of sources with different complicating factors such as matrix effects and dilution factors.

All samples in the referenced batches were reported with RDLs sufficiently below the project cleanup criteria and/or below the corresponding regulatory waste classification criteria to permit adequate evaluation of the data versus these criteria.

Analytes identified in a samples above the MDL but below the RDL are considered to be present (qualified) but are at too low of a concentration to be adequately quantified. These analytes are reported at their estimated concentration and flagged indicating that identification of the analyte is acceptable but the reported value is an estimate ("J" flag).

Estimated values identified in the data are noted on Table A4, located at the end of this Attachment A.



11.0 Method Blanks

A method blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in the sample processing. This blank is used to assess and document any contamination that may be introduced during the analytical process. Samples where an analyte is also detected in the method blank are flagged "B" if the target analyte concentration in the sample is less than ten times the concentration found in the blank.

Target analytes were found in method blank samples in two instances in the subject data set. In the first instance (batch L875988), the sample analyte concentrations for Pb were greater than ten times the estimated concentration found in the method blank sample. In the second instance (batch 903841), the estimated concentration of PCB 1260 found in the method blank sample was less than ten times the concentration(s) of the sample analyte concentrations found in the samples. However, the sample concentrations ranged from 0.0149 to 0.0530 mg/kg PCB 1260 which are well below the project action level.

In both of these cases, the method blank anomalies did not affect the use of the data for cleanup purposes and the data is considered valid and usable. Target analytes detected in method blank samples at or above the applicable method detection limits are documented on Table A4, located at the end of this Attachment A.

12.0 Matrix Spike/Matrix Spike Duplicates (MS/MSD)

MS/MSDs are two aliquots of a sample spiked with known concentrations of method-specific target analytes used to evaluate the method performance in the specific matrix of interest. The concentration recoveries and RPDs are evaluated to assess the accuracy and precision of the sample data.

Where MS/MSD spike values (recoveries) are above or below the established control limits, sample results are flagged using "J5" and "J6" data qualifiers, respectively. Where MS/MSD RPDs are outside of established control limits sample results are flagged using a "J3" data qualifier.

In some cases the analyte may fail the method required serial dilution test and/or subsequent post-spike criteria due to matrix interferences. In these cases the samples are flagged using an "O1" data qualifier.

A "V" flag is used if the sample concentration is too high to evaluate accurate spike recoveries.

A "P" flag is used where the RPD between the primary and confirmatory analysis exceeds 40%. In this event corrective action consists of confirming that RPDs are within established control limits.

Evaluation of flagged MS/MSD data is typically performed by checking LCS/LCSD recoveries and RPDs. If LCS/LCSD data is within control limits MS/MSD discrepancies can be attributed to matrix interferences and/or the heterogeneity of the sample matrix.

In those instances where MS/MSD recovery or RPD values were outside of established control limits in the subject data set, the corresponding LCS/LCSD values were acceptable. Therefore, the MS/MSD anomalies can be attributed to matrix effects. The MS/MSD discrepancies do not appear to adversely affect the usability or validity of the data for cleanup purposes.

MS/MSD recovery and RPD issues are noted below on Table A4, located at the end of this Attachment A.



13.0 Laboratory Control Samples/Duplicates (LCS/LCSD)

The LCS/LCSD is a spiked sample that is used to evaluate laboratory performance of the overall analytical approach in a matrix free of interferences (e.g., in reagent water, clean sand, or another suitable reference matrix). The LCS results are used in conjunction with MS/MSD results to separate issues of laboratory performance and "matrix effects". The LCS/LCSD is evaluated against laboratory-specific control limits and must be within acceptable ranges.

Samples that exhibit LCS/LCSD recoveries outside of established control limits are flagged using the data qualifier "J4". LCS/LCSD RPD discrepancies are flagged "J3".

In those cases where LCS/LCSD recoveries or RPDs were outside of established control limits, the corresponding MS/MSD data were acceptable. Therefore, the corresponding sample data are considered valid and usable for purposes of establishing cleanup efficacy.

LCS/LCSD recovery and RPD issues are noted below on Table A4, located at the end of this Attachment A.

14.0 Surrogate Recoveries

Surrogates are compounds not normally found in environmental samples that are added to all samples undergoing gas chromatography (GC) analyses. These compounds are chemically similar to the analytes of interest, and are used to monitor the method performance with respect to the sample matrix. The method performance is evaluated by comparing the actual resulting surrogate recoveries with the method specified acceptance limits.

Surrogate recoveries that fall outside of established control limits are flagged "J1" if above the limits or "J2" if below the limits. These discrepancies are typically due to matrix interferences and can be rectified using MS/MSD and LCS/LCSD evaluations as described above.

Occasionally, surrogate recoveries cannot be used for control limit evaluation due to sample dilution. In these cases, sample data is flagged "J7".

In rare cases (five samples total), surrogate recoveries were found to be higher or lower than established control limits. The target analyte concentrations in each of these samples were sufficiently higher than the project action levels and the surrogate concentration anomalies do not therefore adversely affect the validity or usability of the data for purposes of evaluating cleanup efficacy.

Samples that exhibited surrogate recovery issues are noted on Table A4, located at the end of this Attachment A.

15.0 Data Usability

The results of the data validation and verification indicate that the data presented herein are valid and usable for their intended purpose of determining cleanup efficacy.



Table A1: Summary and Cross Reference of Analytical Batches

Batch	Sampling Date	Analytical Methods			Data Included in Report Table #	Data Included on Report Figure #	Data included in PCB "Round(s)"	Data included in Pb "Round(s)"
		PCBs	Pb	Other				
L861638	9/22/16	✓			1	N/A	Section 3.4.2	N/A
L861647	9/22/16	✓			2	N/A	Section 3.4.3	N/A
L866134	10/13/16	✓			3	N/A	Section 3.4.4	N/A
L869206	10/26/16	✓	✓		6 & 18	9 & 17	Round 1	Round 1
L869209	10/26/16	✓	✓		4 & 17	9 & 17	Round 1	Round 1
L869213	10/27/16	✓			5	9	Round 1	N/A
L870144	11/2/16	✓	✓		6 & 18	9 & 17	Round 1	Round 1
L870562	11/3/16	✓	✓		4 & 17	9 & 17	Round 1	Round 1
L871380	11/8/16	✓			N/A	N/A	Section 4.2.5	N/A
L871382	11/8/16	✓	✓		4 & 17	9 & 17	Round 1	Round 1
L872210	11/10/16	✓	✓		4 & 17	9 & 17	Round 1	Round 1
L873380	11/16/16	✓			5	9	Round 1	N/A
L873387	11/16/16	✓	✓		6 & 18	9 & 17	Round 1	Round 1
L873391	11/16/16	✓			5	9	Round 1	N/A
L875232	11/29/16	✓			5	9	Round 1	N/A
L875648	11/30/16	✓	✓	Cd	4 & 17	9 & 17	Round 1	Round 1
L875657	11/30/16	✓	✓		6 & 18	9 & 17	Round 1	Round 1
L875661	11/30/16	✓			5	9	Round 1	N/A
L875988	12/1/16	✓	✓		6 & 18	9 & 17	Round 1	Round 1
L877594	12/7/16	✓			5	9	Round 1	N/A
L877604	12/7/16	✓			5	9	Round 1	N/A
L878932	12/13/16	✓	✓		6 & 18	9 & 17	Round 1	Round 1
L878937	12/13/16	✓	✓		4 & 17	9 & 17	Round 1	Round 1



Table A1: Summary and Cross Reference of Analytical Batches (Continued)

Batch	Sampling Date	Analytical Methods			Data Included in Report Table #	Data Included on Report Figure #	Data included in PCB "Round(s)"	Data included in Pb "Round(s)"
		PCBs	Pb	Other				
L878962	12/13/16	✓	✓		7 & 19	10 & 18	Round 2	Round 2
L879276	12/14/16	✓	✓		7 & 20	10 & 19	Round 2	Round 3
L879288	12/14/16	✓	✓		7 & 19	10 & 18	Round 2	Round 2
L879293	12/14/16	✓	✓		7 & 20	10 & 19	Round 2	Round 3
L896396	3/14/17	✓	✓		7 & 20	10 & 19	Round 2	Round 3
L896403	3/14/17		✓		21	20	N/A	Round 4
L896602	3/16/17	✓	✓		7, 19 & 21	10, 18 & 20	Round 2	Rounds 2 & 4
L896606	3/16/17		✓		20	19	N/A	Round 3
L899608	3/30/17		✓		22	21	N/A	Round 5
L899617	3/30/17	✓			8 & 21	11 & 20	Round 3	Round 4
L899618	3/30/17	✓	✓		7, 8, 21 & 22	10, 11, 20 & 21	Rounds 2 & 3	Rounds 4 & 5
L903188	4/17/17		✓		22 & 23	21 & 22	N/A	Rounds 5 & 6
L903193	4/17/17		✓		22	21	N/A	Round 5
L903830	4/19/17		✓		21	20	N/A	Round 4
L903834	4/19/17		✓		19, 21 & 22	18, 20 & 21	N/A	Rounds 2, 4 & 5
L903835	4/19/17	✓			7 & 8	10 & 11	Rounds 2 & 3	N/A
L903837	4/19/17	✓			7	10	Round 2	N/A
L903841	4/19/17	✓			8	11	Round 3	N/A
L904053	4/20/17	✓	✓		7 & 19	10 & 18	Round 2	Round 2
L905050	4/20/17	✓			7	10	Round 2	N/A
L905335	4/26/17	✓			11	13	Sumps Round 1	N/A
L905336	4/26/17	✓			7	10	Round 2	N/A
L905338	4/26/17		✓		24	22	N/A	Round 7



Table A1: Summary and Cross Reference of Analytical Batches (Continued)

Batch	Sampling Date	Analytical Methods			Data Included in Report Table #	Data Included on Report Figure #	Data included in PCB "Round(s)"	Data included in Pb "Round(s)"
		PCBs	Pb	Other				
L906260	5/1/17	✓			12	13	Sumps Round 2	N/A
L906263	5/1/17	✓			8	11	Round 3	N/A
L908243	5/9/17	✓			7	10	Round 2	N/A
L908281	5/9/17	✓			11	13	Sumps Round 1	N/A
L910301	5/17/17	✓			8	11	Round 3	N/A
L910305	5/17/17	✓			7	10	Round 2	N/A
L913342	6/1/17	✓			7	10	Round 2	N/A
L913346	6/1/17	✓			8	11	Round 3	N/A
L916120	6/14/17	✓			7 & 11	10 & 13	Round 2/Sumps 1	N/A
L916126	6/14/17	✓			12	13	Sumps 2	N/A
L919506	6/28/17				21	20	N/A	Round 4
L919511	6/28/17		✓		21	20	N/A	Round 4
L919844	6/29/17	✓			8, 11 & 12	11 & 13	Round 3/Sumps 2 & 3	N/A
L923449	7/18/17		✓		22	21	N/A	Round 5
L923451	7/18/17		✓		22	21	N/A	Round 5
L923452	7/18/17		✓		22	21	N/A	Round 5
L923454	7/18/17	✓			9 & 13	12 & 13	Round 4/Sumps 3	N/A
L923866	7/19/17	✓		TPH VOC SVOC	N/A	N/A	Section 4.8.1	N/A
L926766	8/2/17	✓			10	12	Round 5	N/A
L936488	9/11/17	✓		TPH	15 & 16	15	Section 4.8.2	N/A



**Table A2: PCB Duplicate Sample Results
(mg/kg)**

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Relative Percent Difference (RPD)
L869209-39	COMP-DE27.5	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	0.00696	80.31%
L869209-40	COMP-XY37.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	0.0163	
L870562-33	COMP-OP8.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	N/A
L870562-34	COMP-XY42.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	N/A
L871382-32	COMP-OP21.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.00678	35.14%
L871382-33	COMP-XY43.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.00967	
L871382-34	COMP-OP22.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	N/A
L871382-35	COMP-XY44.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	N/A
L871382-56	COMP-QR17.5	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	0.275	<0.0185	148.43%
L871382-57	COMP-XY45.5	<0.018	<0.018	<0.018	<0.018	<0.018	0.0407	<0.018	
L872210-19	COMP-JK12.5	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	N/A
L872210-20	COMP-XY38.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	N/A
L872210-32	COMP-KL9.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.0285	90.82%
L872210-33	COMP-XY39.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.0107	
L872210-36	COMP-LM7.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	N/A
L872210-37	COMP-XY40.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	N/A
L875648-19	COMP-NO25.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.0538	22.08%
L875648-26	COMP-XY41.5	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	0.0431	
L877594-03	EF20.5	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	N/A
L877594-04	XY70.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	
L873380-16	GH21.5	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	<0.0197	N/A
L873380-17	XY71.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.0184	
L873380-25	HI21.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	N/A
L873380-26	XY72.5	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	
L877594-30	HI26.5	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.225	16.70%
L877594-31	XY73.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	0.266	
L875232-06	IJ17.5	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	0.194	10.30%
L875232-07	XY74.5	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	0.175	
L877594-37	IJ26.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	1.14	111.48%
L877594-38	XY75.5	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	0.324	
L877594-40	IJ28.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	0.0608	71.87%
L877594-41	XY76.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.129	



Table A2: PCB Duplicate Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch— Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Relative Percent Difference (RPD)
L877594-44	IJ31.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	0.0326	82.86%
L877594-45	XY77.5	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	0.0135	
L877594-48	JK29.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.884	110.18%
L877594-49	XY78.5	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.256	
L877594-51	JK31.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.0893	30.15%
L877594-52	XY84.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	0.121	
L875232-19	KL13.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	0.0889	82.67%
L875232-20	XY79.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.0369	
L875232-22	KL15.5	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	N/A
L875232-23	XY80.5	<0.0237	<0.0237	<0.0237	<0.0237	<0.0237	<0.0237	0.00937	
L875232-35	LM19.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.0971	19.43%
L875232-36	XY81.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	0.116	
L875661-05	LM23.5	<1.79	<1.79	<1.79	<1.79	<1.79	<1.79	52.1	62.98%
L875661-06	XY82.5	<3.55	<3.55	<3.55	<3.55	<3.55	<3.55	100	
L875661-09	MN24.5	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	N/A
L875661-10	XY83.5	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	<0.0191	
L878932-08	CD33.5	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	0.0179	3.41%
L878932-09	XY82.5	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	<0.0177	0.0173	
L875988-01	KL33.5	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	N/A
L875988-02	XY83.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	
L875657-05	MN27.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	0.0206	N/A
L875657-06	XY84.5	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	<0.0178	
L873387-01	ST17.5	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	0.017	<0.0218	N/A
L873387-02	XY88.5	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	0.04	<0.0214	
L879276-05	AB19.5	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	0.0331	5.91%
L879276-06	YZ51.5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.0312	
L896396-06	NO3.5	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	<0.0175	0.0115	39.16%
L896396-07	YZ55.5	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	<0.0174	0.0171	
L903841-03	GH29.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.0149	32.11%
L903841-04	YZ59.5	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	0.0206	
L903835-01	REEX1-EF27.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	N/A
L903835-02	REEX1-YZ6.5	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	



Table A2: PCB Duplicate Sample Results (Continued)
(mg/kg)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260	Relative Percent Difference (RPD)
L903835-05	REEX1-HI26.5	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	N/A
L903835-06	REEX1-YZ7.5	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	
L916120-06	REEX1-JK22.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.00823	N/A
L916120-07	REEX1-YZ8.5	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	
L903837-06	REEX1-KL28.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	N/A
L903837-07	REEX1-YZ9.5	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	
L896602-17	REEX1-NO4.5	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	<0.0184	N/A
L896602-18	REEX1-YZ10.5	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	<0.0187	0.00612	
L899618-17	REEX1-OP4.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	N/A
L899618-18	REEX1-YZ16.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	
L879288-14	REEX1-ST21.5	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	0.00709	63.59%
L879288-15	REEX1-YZ4.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	0.0137	
L919844-09	REEX2-IJ20.5	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	3.47	11.91%
L919844-10	REEX2-YZ23.5	<0.0239	<0.0239	<0.0239	<0.0239	<0.0239	<0.0239	3.08	
L906263-01	REEX2-JK13.5	<0.0213	<0.0213	<0.0213	<0.0213	<0.0213	<0.0213	0.00703	N/A
L906263-02	REEX2-YZ22.5	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	
L923454-05	REEX3-IJ20.5	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	0.611	55.47%
L923454-06	REEX3-YZ25.5	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	1.08	
L926766-04	REEX4-IJ20.5	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	0.0312	37.71%
L926766-05	REEX4-YZ26.5	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.0457	
L905335-04	SUMP-04	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	0.107	6.96%
L905335-07	SUMP-10	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.0998	
L906260-01	REEX1-SUMP-09	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	N/A
L906260-02	REEX1-SUMP-11	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	<0.0206	

Average 51.32%



*Table A3: Pb Duplicate Sample Results
(mg/kg)*

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Total Pb	Relative Percent Difference (RPD)
L869209-14	METL-DE13.5	108	30.03%
L869209-27	METL-XY46.5	79.8	
L869209-22	METL-DE23.5	14.9	3.30%
L869209-28	METL-XY47.5	15.4	
L878937-06	METL-DE32.5	8.42	0.95%
L878937-07	METL-XY48.5	8.34	
L872210-02	METL-FG4.5	8.9	16.49%
L872210-03	METL-XY49.5	10.5	
L872210-09	METL-JK7.5	14.6	46.32%
L872210-10	METL-XY50.5	23.4	
L870562-05	METL-NO14.5	18.2	5.07%
L870562-06	METL-XY51.5	17.3	
L871382-05	METL-NO22.5	340	64.54%
L871382-06	METL-XY52.5	664	
L871382-08	METL-NO24.5	910	47.79%
L871382-09	METL-XY53.5	559	
L870562-12	METL-OP12.5	7.73	1.43%
L870562-13	METL-XY54.5	7.62	
L870562-14	METL-OP13.5	12.1	33.68%
L870562-15	METL-XY55.5	17	
L871382-25	METL-OP23.5	132	18.09%
L871382-26	METL-XY56.5	109	
L871382-27	METL-OP24.5	10.9	22.04%
L871382-28	METL-XY57.5	13.6	
L875648-21	METL-OP25.5	7.9	44.33%
L875648-22	METL-XY58.5	12.4	
L875648-23	METL-OP26.5	2.6	40.49%
L875648-24	METL-XY59.5	3.92	
L870562-25	METL-QR8.5	37.4	30.51%
L870562-26	METL-XY60.5	27.5	



**Table A3: Pb Duplicate Sample Results (Continued)
(mg/kg)**

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Total Pb	Relative Percent Difference (RPD)
L878932-03	CD29.5	51.2	19.98%
L878932-04	XY61.5	41.9	
L878932-06	CD33.5	74.8	41.53%
L878932-09	XY62.5	114	
L875988-01	KL33.5	10.9	28.15%
L875988-02	XY63.5	8.21	
L875657-05	MN27.5	12.3	23.33%
L875657-06	XY64.5	9.73	
L870144-01	PQ13.5	5.89	5.23%
L870144-02	XY65.5	5.59	
L870144-14	RS7.5	69.7	0.29%
L870144-15	XY66.5	69.9	
L870144-19	RS11.5	552	53.68%
L870144-20	XY67.5	957	
L873387-01	ST17.5	224	55.27%
L873387-02	XY68.5	127	
L873387-06	UV19.5	84.4	91.93%
L873387-07	XY69.5	228	
L879276-03	AB18.5	131	33.20%
L879276-04	YZ50.5	93.7	
L879276-05	AB19.5	65.2	12.51%
L879276-06	YZ51.5	73.9	
L879276-07	AB20.5	72.1	27.27%
L879276-08	YZ52.5	54.8	
L879276-27	BC14.5	279	59.80%
L879276-28	XY53.5	517	
L879276-29	BC15.5	200	12.65%
L879276-30	XY54.5	227	
L919511-05	AB10.5	10.8	15.38%
L919511-06	YZ61.5	12.6	



**Table A3: Pb Duplicate Sample Results (Continued)
(mg/kg)**

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Total Pb	Relative Percent Difference (RPD)
L899617-01	LM34.5	64.5	29.33%
L899617-02	YZ58.5	48	
L896403-11	TU12.5	160	151.88%
L896403-12	YZ56.5	1170	
L896403-15	UV15.5	4260	180.36%
L896403-16	YZ57.5	220	
L919511-16	ZA21.5	46.1	41.68%
L919511-17	YZ62.5	30.2	
L903193-01	BC30.5	26.1	90.56%
L903193-02	YZ60.5	9.83	
L899608-16	VW11.5	6.64	4.42%
L899608-17	YZ61.5	6.94	
L899608-18	VW12.5	10.9	8.77%
L899608-19	YZ62.5	11.9	
L899608-31	WX20.5	90.8	4.50%
L899608-32	YZ63.5	86.8	
L878962-16	REEX1-CD11.5	219	20.12%
L878962-17	REEX1-YZ1.5	268	
L903834-03	REEX1-CD28.5	46.3	11.98%
L903834-04	REEX1-YZ13.5	52.2	
L878962-24	REEX1-DE4.5	8.08	2.63%
L878962-25	REEX1-YZ2.5	7.87	
L879288-02	REEX1-RS9.5	28.7	66.98%
L879288-03	REEX1-YZ3.5	14.3	
L879288-18	REEX1-JV18.5	33.5	92.11%
L879288-19	REEX1-YZ5.5	90.7	
L919506-04	REEX1-AB21.5	6.97	3.11%
L919506-05	REEX1-YZ24.5	7.19	
L896602-01	REEX1-BC6.5	14.3	97.12%
L896602-02	REEX1-YZ11.5	41.3	



**Table A3: Pb Duplicate Sample Results (Continued)
(mg/kg)**

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Total Pb	Relative Percent Difference (RPD)
L896602-03	REEX1-BC7.5	23.5	41.65%
L896602-04	REEX1-YZ12.5	15.4	
L896602-36	REEX1-VW17.5	7.16	11.21%
L896602-37	REEX1-YZ14.5	8.01	
L899618-02	REEX1-TU9.5	46.3	48.26%
L899618-03	REEX1-YZ17.5	28.3	
L903188-04	REEX1-WX14.5	128	36.42%
L903188-05	REEX1-YZ19.5	185	
L903188-06	REEX1-WX20.5	6.91	3.83%
L903188-07	REEX1-YZ20.5	7.18	
L896606-06	REEX2-CD16.5	17.2	26.32%
L896606-07	REEX2-YZ15.5	13.2	
L896606-13	REEX2-UV18.5	8.66	4.07%
L896606-14	REEX2-YZ16.5	9.02	
L903830-01	REEX3-BC16.5	17.5	0.57%
L903830-02	REEX3-YZ21.5	17.6	

Average 35.17%



Table A4: Data Validation Summary

Key to Data Qualifiers (flags):

- B** The same analyte is found in the associated blank.
- J** The identification of the analyte is acceptable; the reported value is an estimate.
- J1** Surrogate recovery limits have been exceeded; values are outside upper control limits.
- J2** Surrogate recovery limits have been exceeded; values are outside lower control limits.
- J3** The associated batch QC was outside the established quality control range for precision.
- J4** The associated batch QC was outside the established quality control range for accuracy.
- J5** The sample matrix interfered with the ability to make any accurate determination; spike value is high.
- J6** The sample matrix interfered with the ability to make any accurate determination; spike value is low.
- J7** Surrogate recovery cannot be used for control limit evaluation due to dilution.
- O1** The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
- P** RPD between the primary and confirmatory analysis exceeded 40%.
- V** The sample concentration is too high to evaluate accurate spike recoveries.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L861638-01	COMPBEAR-01	✓							✓									
L861638-02	COMPBEAR-02	✓				✓		✓										
L861647-01	PIPESORB-01	✓							✓				✓					
L866134-01	CLMWIPE-01	✓																
L866134-02	CLMWIPE-02	✓																
L866134-03	CLMWIPE-03	✓																
L866134-04	CLMWIPE-04	✓																
L869206-01	BC16.0		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-02	BC17.5		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-03	BC18.5		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-04	BC19.5	✓	✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-05	BC20.5	✓	✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-06	BC21.5		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L869206-07	BC22.5		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-08	BC23.5	✓	✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-09	BC24.5		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-10	BC25.5		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-11	BC26.5		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-12	BC27.5		✓						✓								✓	MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-13	CD4.0	✓	✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-14	CD5.0	✓	✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-15	CD6.0	✓	✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-16	CD7.0		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-17	CD9.0		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-18	CD10.0		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-19	CD11.0	✓	✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L869206-20	CD12.0		✓															MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)												
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	QC Batch Discrepancies
L869206-21	CD13.0		✓														
L869206-22	CD14.0		✓														
L869206-23	CD15.0		✓														
L869206-24	CD16.0		✓														
L869206-25	DE4.5	✓	✓														
L869206-26	DE20.5	✓	✓														
L869209-01	METL-CD17.5		✓														
L869209-02	METL-CD18.5		✓														
L869209-03	METL-CD19.5		✓														
L869209-04	METL-CD20.5		✓														
L869209-05	METL-CD21.5		✓														
L869209-06	METL-CD22.5		✓														
L869209-07	METL-CD23.5		✓														
L869209-08	METL-CD24.5		✓														

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L869209-09	METL-CD26.5		✓														
L869209-10	METL-DE7.5		✓														
L869209-11	METL-DE9.5		✓														
L869209-12	METL-DE10.5		✓														
L869209-13	METL-DE11.5		✓														
L869209-14	METL-DE13.5		✓														
L869209-15	METL-DE14.5		✓														
L869209-16	METL-DE16.5		✓														
L869209-17	METL-DE17.5		✓														
L869209-18	METL-DE18.5		✓														
L869209-19	METL-DE19.5		✓														
L869209-20	METL-DE21.5		✓														
L869209-21	METL-DE22.5		✓														
L869209-22	METL-DE23.5		✓														

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L869209-23	METL-DE24.5		✓														
L869209-24	METL-DE25.5		✓														
L869209-25	METL-DE26.5		✓														
L869209-26	METL-DE27.5		✓														
L869209-27	METL-XY46.5		✓														
L869209-28	METL-XY47.5		✓														
L869209-29	COMP-CD19.5	✓				✓											
L869209-30	COMP-CD20.5	✓															
L869209-31	COMP-CD23.5	✓															
L869209-32	COMP-DE11.5	✓					✓										MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L869209-33	COMP-DE18.5	✓							✓								MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L869209-34	COMP-DE19.5	✓					✓										MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L869209-35	COMP-DE23.5	✓															MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L869209-36	COMP-DE24.5	✓															MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L869209-37	COMP-DE25.5	✓				✓											MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L869209-38	COMP-DE26.5	✓															MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L869209-39	COMP-DE27.5	✓				✓											MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L869209-40	COMP-XY37.5	✓				✓											MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L869213-01	IJ22.5	✓						✓								✓	MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L869213-02	IJ23.5	✓														✓	MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L869213-03	IJ24.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L869213-04	JK22.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L869213-05	JK23.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L869213-06	JK24.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L869213-07	KL22.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L869213-08	KL23.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L869213-09	KL24.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L869213-10	FNDL PIPE	✓														✓	MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L870144-01	PQ13.5		✓														
L870144-02	XY65.5		✓														
L870144-03	PQ14.5		✓														
L870144-04	PQ15.5		✓														
L870144-05	PQ16.5	✓	✓			✓											
L870144-06	QR6.5		✓														
L870144-07	QR13.5		✓														
L870144-08	QR14.5		✓														
L870144-09	QR15.5		✓														
L870144-10	QR16.5	✓	✓														
L870144-11	NO4.5	✓															
L870144-12	OP17.5	✓	✓														MS/MSD Rec. high (J5-Flags); MS/MSD RPD OK; LCS/ LCSD Rec. & RPD OK.
L870144-13	RS6.5		✓														
L870144-14	RS7.5		✓														

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L870144-15	XY66.5		✓														
L870144-16	RS8.5		✓														
L870144-17	RS9.5		✓														
L870144-18	RS10.5		✓														
L870144-19	RS11.5		✓														
L870144-20	XY67.5		✓														
L870144-21	RS12.5		✓														
L870144-22	RS13.5		✓														
L870144-23	RS14.5		✓														
L870144-24	RS15.5		✓														
L870144-25	RS16.5		✓														
L870144-26	RS17.5	✓	✓														
L870562-01	METL-NO10.5		✓														
L870562-02	METL-NO11.5		✓														

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L870562-03	METL-NO12.5		✓														
L870562-04	METL-NO13.5		✓														
L870562-05	METL-NO14.5		✓														
L870562-06	METL-XY51.5		✓														
L870562-07	METL-NO15.5		✓														
L870562-08	METL-NO16.5		✓														
L870562-09	METL-OP8.5		✓														
L870562-10	METL-OP9.5		✓														
L870562-11	METL-OP11.5		✓														
L870562-12	METL-OP12.5		✓														
L870562-13	METL-XY54.5		✓														
L870562-14	METL-OP13.5		✓														
L870562-15	METL-XY55.5		✓														
L870562-16	METL-OP14.5		✓														

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	D1	P		V
L870562-17	METL-OP15.5		✓														
L870562-18	METL-OP16.5		✓														
L870562-19	METL-PQ6.5		✓														
L870562-20	METL-PQ8.5		✓														
L870562-21	METL-PQ9.5		✓														
L870562-22	METL-PQ10.5		✓														
L870562-23	METL-PQ12.5		✓														
L870562-24	METL-QR7.5		✓														
L870562-25	METL-QR8.5		✓														
L870562-26	METL-XY60.5		✓														
L870562-27	METL-QR9.5		✓														
L870562-28	METL-QR10.5		✓														
L870562-29	METL-QR11.5		✓														
L870562-30	METL-QR12.5		✓														

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L870562-31	COMP-NO5.5	✓															
L870562-32	COMP-NO10.5	✓															
L870562-33	COMP-OP8.5	✓															
L870562-34	COMP-XY42.5	✓															
L870562-35	COMP-OP9.5	✓															
L870562-36	COMP-PQ9.5	✓															
L871380-01	TAR-01	✓		TPH	✓				✓			✓					
L871382-01	METL-NO17.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-02	METL-NO18.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-03	METL-NO19.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-04	METL-NO20.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-05	METL-NO22.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-06	METL-XY52.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-07	METL-NO23.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L871382-08	METL-NO24.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/ LCSD Rec. & RPD OK.
L871382-09	METL-XY53.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/ LCSD Rec. & RPD OK.
L871382-10	METL-OP18.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/ LCSD Rec. & RPD OK.
L871382-11	COMP-NO17.5	✓																
L871382-12	COMP-NO18.5	✓																
L871382-13	COMP-NO19.5	✓																
L871382-14	COMP-NO20.5	✓																
L871382-15	COMP-NO21.5	✓																
L871382-16	COMP-NO22.5	✓																
L871382-17	COMP-NO23.5	✓																
L871382-18	COMP-NO24.5	✓																
L871382-19	COMP-OP18.5	✓					✓											
L871382-20	COMP-OP19.5	✓																
L871382-21	METL-OP19.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/ LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)												
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	QC Batch Discrepancies
L871382-22	METL-OP20.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-23	METL-OP21.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-24	METL-OP22.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-25	METL-OP23.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-26	METL-XY56.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-27	METL-OP24.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-28	METL-XY57.5		✓						✓		✓						MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-29	METL-PQ17.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-30	METL-PQ18.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-31	COMP-OP20.5	✓				✓											
L871382-32	COMP-OP21.5	✓				✓											
L871382-33	COMP-XY43.5	✓				✓											
L871382-34	COMP-OP22.5	✓															
L871382-35	COMP-XY44.5	✓															

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L871382-36	COMP-OP23.5	✓				✓												
L871382-37	COMP-OP24.5	✓																
L871382-38	COMP-PQ17.5	✓																MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-39	COMP-PQ18.5	✓																MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-40	COMP-PQ19.5	✓																MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-41	METL-PQ19.5		✓								✓							MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L871382-42	METL-PQ20.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L871382-43	METL-PQ21.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L871382-44	METL-PQ22.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L871382-45	METL-PQ23.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L871382-46	METL-PQ24.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L871382-47	METL-QR17.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L871382-48	METL-QR18.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L871382-49	METL-QR19.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)												
Laboratory ID (Batch-Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	QC Batch Discrepancies
L871382-50	METL-QR20.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L871382-51	COMP-PQ20.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-52	COMP-PQ21.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-53	COMP-PQ22.5	✓				✓											MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-54	COMP-PQ23.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-55	COMP-PQ24.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-56	COMP-QR17.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-57	COMP-XY45.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-58	COMP-QR18.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-59	COMP-QR19.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-60	COMP-QR20.5	✓															MSD Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L871382-61	METL-QR21.5		✓														
L871382-62	METL-QR22.5		✓														
L871382-63	METL-QR23.5		✓														

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V		
L871382-64	COMP-QR21.5	✓							✓									LCS/LCSD RPD high (J3-Flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L871382-65	COMP-QR22.5	✓							✓									LCS/LCSD RPD high (J3-Flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L871382-66	COMP-QR23.5	✓							✓									LCS/LCSD RPD high (J3-Flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L872210-01	METL-FG3.5		✓															
L872210-02	METL-FG4.5		✓															
L872210-03	METL-XY9.5		✓															
L872210-04	METL-GH4.5		✓															
L872210-05	METL-HI4.5		✓															
L872210-06	METL-IJ5.5		✓															
L872210-07	METL-IJ6.5		✓															
L872210-08	METL-JK6.5		✓															
L872210-09	METL-JK7.5		✓															
L872210-10	METL-XY50.5		✓															
L872210-11	COMP-GH4.5	✓																

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L872210-12	COMP-IJ5.5	✓																
L872210-13	COMP-IJ8.5	✓																
L872210-14	COMP-JK7.5	✓					✓											
L872210-15	COMP-JK8.5	✓					✓											
L872210-16	COMP-JK9.5	✓																
L872210-17	COMP-JK10.5	✓																
L872210-18	COMP-JK11.5	✓																
L872210-19	COMP-JK12.5	✓																
L872210-20	COMP-XY38.5	✓																
L872210-21	METL-JK8.5		✓															
L872210-22	METL-JK9.5		✓															
L872210-23	METL-JK10.5		✓															
L872210-24	METL-JK11.5		✓															
L872210-25	METL-JK12.5		✓															

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L872210-26	METL-KL7.5		✓														
L872210-27	METL-KL8.5		✓														
L872210-28	METL-KL9.5		✓														
L872210-29	METL-KL10.5		✓														
L872210-30	METL-KL11.5		✓														
L872210-31	COMP-KL7.5	✓															
L872210-32	COMP-KL9.5	✓															
L872210-33	COMP-XY39.5	✓				✓											
L872210-34	COMP-KL10.5	✓															
L872210-35	COMP-KL12.5	✓															
L872210-36	COMP-LM7.5	✓															
L872210-37	COMP-XY40.5	✓															
L872210-38	COMP-LM8.5	✓															
L872210-39	COMP-LM9.5	✓															

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)												
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	QC Batch Discrepancies
L872210-40	COMP-LM12.5	✓															
L872210-41	METL-KL12.5		✓														
L872210-42	METL-LM7.5		✓														
L872210-43	METL-LM8.5		✓														
L872210-44	METL-LM9.5		✓														
L872210-45	METL-LM10.5		✓														
L872210-46	METL-LM11.5		✓														
L872210-47	METL-LM12.5		✓														
L872210-48	METL-MN7.5		✓														
L872210-49	METL-MN8.5		✓														
L872210-50	METL-MN9.5		✓														
L872210-51	METL-MN10.5		✓														
L872210-52	METL-MN11.5		✓														
L872210-53	METL-MN12.5		✓														

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L872210-54	COMP-MN7.5	✓																
L872210-55	COMP-MN8.5	✓																
L872210-56	COMP-MN9.5	✓																
L873380-01	GH6.5	✓																MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-02	GH7.5	✓																MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-03	HI6.5	✓						✓										MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-04	HI7.5	✓						✓										MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-05	FG18.5	✓																MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-06	FG19.5	✓																MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-07	FG20.5	✓																MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-08	FG21.5	✓																MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-09	GH12.5	✓																MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-10	GH13.5	✓								✓		✓						MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-11	GH15.5	✓																MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)												
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	QC Batch Discrepancies
L873380-12	GH16.5	✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-13	GH17.5	✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-14	GH19.5	✓				✓											MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-15	GH20.5	✓				✓											MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-16	GH21.5	✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-17	XY71.5	✓				✓											MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-18	HI12.5	✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-19	HI13.5	✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-20	HI15.5	✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L873380-21	HI16.5	✓				✓											
L873380-22	HI17.5	✓															
L873380-23	HI19.5	✓															
L873380-24	HI20.5	✓				✓											
L873380-25	HI21.5	✓															

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L873380-26	XY72.5	✓															
L873380-27	RS18.5	✓															
L873380-28	RS19.5	✓															
L873380-29	ST18.5	✓															
L873380-30	ST19.5	✓															
L873380-31	ST20.5	✓															
L873380-32	ST21.5	✓															
L873380-33	TU18.5	✓															
L873380-34	TU19.5	✓															
L873380-35	TU20.5	✓															
L873380-36	TU21.5	✓															
L873387-01	ST17.5	✓	✓			✓											MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L873387-02	XY68.5	✓	✓														MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L873387-03	TU17.5	✓	✓														MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)												
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	QC Batch Discrepancies
L873387-04	UV17.5	✓	✓						✓								MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/LCSD RPD OK.
L873387-05	UV18.5	✓	✓														MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/LCSD RPD OK.
L873387-06	UV19.5	✓	✓			✓											MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/LCSD RPD OK.
L873387-07	XY69.5		✓														
L873387-08	UV20.5	✓	✓			✓											MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/LCSD RPD OK.
L873387-09	UV21.5	✓	✓														MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/LCSD RPD OK.
L873387-10	FG2.5		✓														
L873391-01	IJ18.5	✓															
L873391-02	IJ19.5	✓															
L873391-03	JK18.5	✓															
L873391-04	MN20.5	✓															
L873391-05	MN21.5	✓				✓											
L875232-01	IJ12.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-02	IJ13.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L875232-03	IJ14.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-04	IJ15.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-05	IJ16.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-06	IJ17.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-07	XY74.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-08	IJ20.5	✓													✓		MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-09	IJ21.5	✓							✓							✓	MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-10	KL21.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-11	JK13.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-12	JK14.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-13	JK15.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-14	JK16.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-15	JK17.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-16	JK20.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)												
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	QC Batch Discrepancies
L875232-17	JK21.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-18	JK19.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-19	KL13.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-20	XY79.5	✓															MS/MSD RPD high (J3-flag; QC sample V-Flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L875232-21	KL14.5	✓															LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-22	KL15.5	✓								✓							LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-23	XY80.5	✓					✓			✓							LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-24	KL16.5	✓					✓			✓							LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-25	KL17.5	✓								✓							LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-26	KL18.5	✓								✓							LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-27	KL19.5	✓								✓							LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-28	KL20.5	✓								✓							LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-29	LM13.5	✓					✓			✓							LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-30	LM14.5	✓								✓							LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L875232-31	LM15.5	✓				✓			✓								LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-32	LM16.5	✓							✓								LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-33	LM17.5	✓							✓								LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-34	LM18.5	✓							✓								LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-35	LM19.5	✓							✓								LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-36	XY81.5	✓							✓								LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-37	LM22.5	✓							✓								LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-38	LM20.5	✓							✓								LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-39	MN14.5	✓							✓								LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-40	MN15.5	✓							✓								LCS/LCSD RPD high (J3-flag); LCS/LCSD Rec. OK; MS/MSD Rec. & RPD OK.
L875232-41	MN18.5	✓															
L875232-42	MN19.5	✓															
L875232-43	MN22.5	✓															
L875232-44	LM21.5	✓															

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L875232-45	MN13.5	✓				✓												
L875232-46	MN16.5	✓																
L875232-47	MN17.5	✓																
L875648-01	METL-JK25.5		✓															
L875648-02	METL-JK26.5		✓															
L875648-03	METL-KL25.5		✓															
L875648-04	METL-KL26.5		✓															
L875648-05	METL-LM25.5		✓															
L875648-06	METL-LM26.5		✓															
L875648-07	METL-MN25.5		✓	Cd														
L875648-08	METL-MN26.5		✓															
L875648-09	METL-NO25.5		✓															
L875648-10	METL-NO26.5		✓															
L875648-11	COMP-JK25.5	✓																

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L875648-12	COMP-JK26.5	✓																
L875648-13	COMP-KL25.5	✓				✓												
L875648-14	COMP-KL26.5	✓																
L875648-15	COMP-LM25.5	✓																
L875648-16	COMP-LM26.5	✓																
L875648-17	COMP-MN25.5	✓																
L875648-18	COMP-MN26.5	✓																
L875648-19	COMP-NO25.5	✓																
L875648-20	COMP-NO26.5	✓																
L875648-21	METL-OP25.5		✓															
L875648-22	METL-XY58.5		✓															
L875648-23	METL-OP26.5		✓															
L875648-24	METL-XY59.5		✓															
L875648-25	METL-PQ25.5		✓															

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)												
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	QC Batch Discrepancies
L875648-26	COMP-XY41.5	✓															
L875657-01	QR24.5	✓	✓														
L875657-02	QR25.5		✓														
L875657-03	OP27.5		✓														
L875657-04	NO27.5	✓	✓														
L875657-05	MN27.5	✓	✓														
L875657-06	XY64.5	✓	✓														
L875657-07	LM27.5	✓	✓														
L875657-08	KL27.5	✓	✓														
L875661-01	GH14.5	✓															
L875661-02	GH18.5	✓				✓											
L875661-03	HI14.5	✓															
L875661-04	HI18.5	✓				✓											
L875661-05	LM23.5	✓											✓				

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L875661-06	XY82.5	✓											✓				
L875661-07	LM24.5	✓															
L875661-08	MN23.5	✓															
L875661-09	MN24.5	✓															
L875661-10	XY83.5	✓															
L875988-01	KL33.5	✓	✓														Pb Method Blank Est. Concentration (J-Flag); Analyte concentration > 10X est. blank concentration.
L875988-02	XY63.5	✓	✓														Pb Method Blank Est. Concentration (J-Flag); Analyte concentration > 10X est. blank concentration.
L875988-03	KL34.5	✓	✓														Pb Method Blank Est. Concentration (J-Flag); Analyte concentration > 10X est. blank concentration.
L875988-04	KL35.5	✓	✓														Pb Method Blank Est. Concentration (J-Flag); Analyte concentration > 10X est. blank concentration.
L875988-05	KL36.5	✓	✓														Pb Method Blank Est. Concentration (J-Flag); Analyte concentration > 10X est. blank concentration.
L875988-06	KL28.5	✓	✓														Pb Method Blank Est. Concentration (J-Flag); Analyte concentration > 10X est. blank concentration.
L875988-07	KL29.5	✓	✓														Pb Method Blank Est. Concentration (J-Flag); Analyte concentration > 10X est. blank concentration.
L875988-08	KL30.5	✓	✓														Pb Method Blank Est. Concentration (J-Flag); Analyte concentration > 10X est. blank concentration.
L875988-09	KL31.5	✓	✓														Pb Method Blank Est. Concentration (J-Flag); Analyte concentration > 10X est. blank concentration.

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	
L875088-10	KL32.5	✓	✓														Pb Method Blank Est. Concentration (J-Flag); Analyte concentration > 10X est. blank concentration.
L877594-01	EF18.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-02	EF19.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-03	EF20.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-04	XY70.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-05	EF21.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-06	EF24.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-07	EF25.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-08	EF26.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-09	EF27.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-10	EF22.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-11	FG24.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-12	FG25.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-13	FG26.5	✓															MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L877594-14	FG27.5	✓																MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-15	EF23.5	✓																MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-16	FG22.5	✓																MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-17	FG23.5	✓																MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-18	GH22.5	✓				✓												MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-19	GH23.5	✓																MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-20	GH24.5	✓									✓							MS/MSD Rec. & RPD low due to matrix interference (J6-flag); LCS/LCSD Rec. & RPD OK.
L877594-21	GH25.5	✓																MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-22	GH26.5	✓				✓												MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-23	GH27.5	✓																MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-24	GH30.5	✓																MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-25	GH31.5	✓																MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-26	HI22.5	✓																MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-27	HI23.5	✓																MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L877594-28	HI24.5	✓									✓						MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-29	HI25.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-30	HI26.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-31	XY73.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-32	HI27.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-33	HI28.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-34	HI29.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-35	HI30.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-36	IJ25.5	✓											✓				MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-37	IJ26.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-38	XY75.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-39	IJ27.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-40	IJ28.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L877594-41	XY76.5	✓															MS/MSD Rec. high due to matrix interference (J5-flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L877594-42	IJ29.5	✓															
L877594-43	IJ30.5	✓															
L877594-44	IJ31.5	✓															
L877594-45	XY77.5	✓					✓										
L877594-46	JK27.5	✓															
L877594-47	JK28.5	✓															
L877594-48	JK29.5	✓															
L877594-49	XY78.5	✓															
L877594-50	JK30.5	✓					✓										
L877594-51	JK31.5	✓															
L877594-52	XY84.5	✓															
L877594-53	HI31.5	✓															
L877604-01	STAIN-JK19.5	✓															
L877604-02	STAIN-JK20.5	✓															

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
Laboratory ID (Batch--Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L877604-03	STAIN-JK21.5	✓											✓				
L877604-04	STAIN-JK22.5	✓															
L877604-05	STAIN-JK23.5	✓											✓				
L877604-06	STAIN-L20	✓				✓											
L878932-01	CD25.5	✓	✓			✓											MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878932-02	CD28.5		✓														
L878932-03	CD29.5		✓														
L878932-04	XY61.5		✓														
L878932-05	CD30.5		✓														
L878932-06	CD31.5		✓														
L878932-07	CD32.5		✓														
L878932-08	CD33.5	✓	✓														MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878932-09	XY62.5	✓	✓			✓											MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878932-10	CD34.5	✓	✓			✓											MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L878932-11	CD35.5	✓	✓														MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878932-12	DE6.5	✓	✓														MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878937-01	METL-DE5.5		✓														
L878937-02	METL-DE28.5		✓														
L878937-03	METL-DE29.5		✓														
L878937-04	METL-DE30.5		✓														
L878937-05	METL-DE31.5		✓														
L878937-06	METL-DE32.5		✓														
L878937-07	METL-XY48.5		✓														
L878937-08	METL-DE33.5		✓														
L878937-09	METL-DE35.5		✓														
L878937-10	METL-EF35.5		✓														
L878937-11	METL-FG35.5		✓														
L878937-12	METL-GH35.5		✓														

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch – Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L878937-13	METL-HI35.5		✓															
L878937-14	METL-IJ35.5		✓															
L878937-15	METL-JK35.5		✓															
L878937-16	METL-JK36.5		✓															
L878937-17	COMP-DE5.5	✓				✓												MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878937-18	COMP-DE33.5	✓																MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878937-19	COMP-DE35.5	✓																MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878937-20	COMP-EF35.5	✓																MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878937-21	COMP-FG35.5	✓					✓											MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878937-22	COMP-GH35.5	✓																MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878937-23	COMP-HI35.5	✓																MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/ LCSD RPD OK.
L878962-01	REEX1-BC16.5		✓															MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-02	REEX1-BC17.5		✓															MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-03	REEX1-BC19.5	✓	✓															MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L878962-04	REEX1-BC20.5	✓	✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-05	REEX1-BC21.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-06	REEX1-BC22.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-07	REEX1-BC23.5	✓	✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-08	REEX1-BC24.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-09	REEX1-BC25.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-10	REEX1-BC27.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-11	REEX1-CD4.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-12	REEX1-CD5.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-13	REEX1-CD7.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-14	REEX1-CD9.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-15	REEX1-CD10.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-16	REEX1-CD11.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-17	REEX1-YZ1.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)												
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	QC Batch Discrepancies
L878962-18	REEX1-CD12.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-19	REEX1-CD13.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-20	REEX1-CD14.5		✓														MSD Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L878962-21	REEX1-CD15.5		✓														
L878962-22	REEX1-CD16.5		✓														
L878962-23	REEX1-CD23.5		✓														
L878962-24	REEX1-DE4.5		✓														
L878962-25	REEX1-YZ2.5		✓														
L878962-26	REEX1-DE9.5		✓														
L878962-27	REEX1-DE13.5		✓														
L879276-01	AB16.5		✓						✓		✓	✓			✓		MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-02	AB17.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-03	AB18.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-04	YZ50.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L879276-05	AB19.5	✓	✓														Pb MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); PCB MS/MSD RPD high (J3-Flag); LCS/LCSD Rec. & RPD OK.
L879276-06	YZ51.5	✓	✓														Pb MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); PCB MS/MSD RPD high (J3-Flag); LCS/LCSD Rec. & RPD OK.
L879276-07	AB20.5	✓	✓														Pb MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); PCB MS/MSD RPD high (J3-Flag); LCS/LCSD Rec. & RPD OK.
L879276-08	YZ52.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-09	AB21.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-10	AB22.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-11	AB23.5	✓	✓														Pb MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); PCB MS/MSD RPD high (J3-Flag); LCS/LCSD Rec. & RPD OK.
L879276-12	AB24.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-13	AB25.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-14	AB26.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-15	AB27.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-16	AB28.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-17	BC4.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	
L879276-18	BC5.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-19	BC6.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-20	BC7.5		✓														MS Rec. low (J6-Flag); MSD Rec. high (J5-flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879276-21	BC8.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879276-22	BC9.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879276-23	BC10.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879276-24	BC11.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879276-25	BC12.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879276-26	BC13.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879276-27	BC14.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879276-28	XY53.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879276-29	BC15.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879276-30	XY54.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879276-31	BC28.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L879276-32	CD3.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879276-33	DE3.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879288-01	REEX1-RS8.5		✓						✓		✓						MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-02	REEX1-RS9.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-03	REEX1-YZ3.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-04	REEX1-RS10.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-05	REEX1-RS11.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-06	REEX1-RS13.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-07	REEX1-RS14.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-08	REEX1-RS16.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-09	REEX1-RS18.5	✓	✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-10	REEX1-RS19.5	✓	✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-11	REEX1-ST17.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-12	REEX1-ST18.5	✓	✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	
L879288-13	REEX1-ST20.5	✓	✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-14	REEX1-ST21.5	✓				✓											
L879288-15	REEX1-YZ4.5	✓				✓											
L879288-16	REEX1-TU17.5	✓	✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-17	REEX1-UV17.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-18	REEX1-UV18.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-19	REEX1-YZ5.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879288-20	REEX1-UV19.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD high (J3-flag); LCS/LCSD Rec. & RPD OK.
L879293-01	RS20.5	✓															MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L879293-02	RS21.5	✓															MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L879293-03	RS22.5	✓	✓														Pb MS/MSD Rec. & RPD high (J3-flag; J5-Flag); PCB MS/MSD RPD high (J3-flag); PCB MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L879293-04	ST8.5		✓						✓		✓						MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879293-05	ST9.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L879293-06	ST10.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879293-07	ST11.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879293-08	ST12.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879293-09	ST13.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879293-10	ST14.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879293-11	ST15.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879293-12	ST16.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879293-13	ST22.5	✓															MS/MSD RPD high (J3-flag); MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L879293-14	TU16.5	✓	✓														Pb MS/MSD Rec. & RPD high (J3-flag; J5-Flag); PCB MS/MSD RPD high (J3-flag); PCB MS/MSD Rec. OK; LCS/LCSD Rec. & RPD OK.
L879293-15	UV16.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879293-16	VW16.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879293-17	VW17.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L879293-18	VW18.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L879293-19	VW19.5		✓														MS/MSD Rec. & RPD high (J3-flag; J5-Flag); LCS/LCSD Rec. & RPD OK.
L896396-01	BC33.5		✓														MS/MSD Rec. high (QC sample V-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L896396-02	EF28.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L896396-03	FG28.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L896396-04	LM28.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L896396-05	LM35.5		✓														MS/MSD Rec. high (QC sample V-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L896396-06	NO3.5	✓					✓										MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L896396-07	YZ55.5	✓					✓										MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L896396-08	OP3.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L896396-09	OP4.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L896396-10	IJ7.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L896396-11	IJ8.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L896396-12	IJ9.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L896396-13	IJ10.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L896396-14	IJ11.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L896403-01	BC3.5		✓														
L896403-02	BC29.5		✓														
L896403-03	CD2.5		✓														
L896403-04	DE2.5		✓														
L896403-05	EF3.5		✓														
L896403-06	ST19.5		✓														
L896403-07	TU8.5		✓														
L896403-08	TU9.5		✓														
L896403-09	TU10.5		✓														

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L896403-10	TU11.5		✓														
L896403-11	TU12.5		✓														
L896403-12	YZ56.5		✓														
L896403-13	TU15.5		✓														
L896403-14	TU18.5		✓														
L896403-15	UV15.5		✓														
L896403-16	YZ57.5		✓														
L896403-17	VW15.5		✓														
L896403-18	VW20.5		✓														
L896403-19	WX16.5		✓														
L896403-20	WX17.5		✓														
L896403-21	WX18.5		✓														
L896403-22	WX19.5		✓														
L896802-01	REEX1-BC6.5		✓														

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L896602-02	REEX1-YZ11.5		✓														
L896602-03	REEX1-BC7.5		✓														
L896602-04	REEX1-YZ12.5		✓														
L896602-05	REEX1-BC8.5		✓														
L896602-06	REEX1-BC9.5		✓														
L896602-07	REEX1-BC10.5		✓														
L896602-08	REEX1-BC11.5		✓														
L896602-09	REEX1-BC12.5		✓														
L896602-10	REEX1-BC13.5		✓														
L896602-11	REEX1-BC14.5		✓														
L896602-12	REEX1-BC15.5		✓														
L896602-13	REEX1-CD3.5		✓														
L896602-14	REEX1-DE3.5		✓														
L896602-15	REEX1-DE11.5		✓														

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L896602-16	REEX1-MN9.5		✓														
L896602-17	REEX1-NO4.5	✓															
L896602-18	REEX1-YZ10.5	✓				✓											
L896602-19	REEX1-NO13.5		✓														
L896602-20	REEX1-NO16.5		✓														
L896602-21	REEX1-NO17.5		✓														
L896602-22	REEX1-PQ18.5		✓														
L896602-23	REEX1-PQ22.5		✓														
L896602-24	REEX1-PQ24.5		✓														
L896602-25	REEX1-QR17.5	✓	✓														
L896602-26	REEX1-QR18.5		✓														
L896602-27	REEX1-ST8.5		✓														
L896602-28	REEX1-ST9.5		✓														
L896602-29	REEX1-ST10.5		✓														

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L896602-30	REEX1-ST11.5		✓														
L896602-31	REEX1-ST12.5		✓														
L896602-32	REEX1-ST15.5		✓														
L896602-33	REEX1-ST16.5		✓														
L896602-34	REEX1-JV16.5		✓														
L896602-35	REEX1-VW16.5		✓														
L896602-36	REEX1-VW17.5		✓														
L896602-37	REEX1-YZ14.5		✓														
L896602-38	REEX1-VW18.5		✓														
L896602-39	REEX1-VW19.5		✓														
L896602-40	REEX1-CD33.5		✓														
L896602-41	REEX1-EF35.5		✓														
L896602-42	REEX1-KL35.5		✓														
L896606-01	REEX2-BC16.5		✓														

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)												
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	QC Batch Discrepancies
L896606-02	REEX2-BC17.5		✓														
L896606-03	REEX2-BC22.5		✓														
L896606-04	REEX2-CD10.5		✓														
L896606-05	REEX2-CD11.5		✓														
L896606-06	REEX2-CD16.5		✓														
L896606-07	REEX2-YZ15.5		✓														
L896606-08	REEX2-RS16.5		✓														
L896606-09	REEX2-RS18.5		✓														
L896606-10	REEX2-ST18.5		✓														
L896606-11	REEX2-TU17.5		✓														
L896606-12	REEX2-UV17.5		✓														
L896606-13	REEX2-UV18.5		✓														
L896606-14	REEX2-YZ16.5		✓														
L896608-01	TU7.5		✓														

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L899608-02	TU13.5		✓														
L899608-03	TU14.5		✓														
L899608-04	UV7.5		✓														
L899608-05	UV8.5		✓														
L899608-06	UV9.5		✓														
L899608-07	UV10.5		✓														
L899608-08	UV11.5		✓														
L899608-09	UV12.5		✓														
L899608-10	UV13.5		✓														
L899608-11	UV14.5		✓														
L899608-12	VW7.5		✓														
L899608-13	VW8.5		✓														
L899608-14	VW9.5		✓														
L899608-15	VW10.5		✓														

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)												
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V	QC Batch Discrepancies
L899608-16	VW11.5		✓														
L899608-17	YZ61.5		✓														
L899608-18	VW12.5		✓														
L899608-19	YZ62.5		✓														
L899608-20	VW13.5		✓														
L899608-21	VW14.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899608-22	WX7.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899608-23	WX8.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899608-24	WX9.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899608-25	WX10.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899608-26	WX11.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899608-27	WX12.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899608-28	WX13.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899608-29	WX14.5		✓														MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L899608-30	WX15.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899608-31	WX20.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899608-32	YZ63.5		✓															MS Rec. high (J5-Flag); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899617-01	LM34.5		✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899617-02	YZ58.5		✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899617-03	LM36.5		✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899617-04	MN34.5		✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899617-05	MN35.5		✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899617-06	MN36.5		✓															MS/MSD Rec. high (J5-Flags); MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.
L899617-07	OP5.5	✓																
L899617-08	PQ3.5	✓																
L899617-09	PQ4.5	✓																
L899617-10	PQ5.5	✓																
L899618-01	REEX1-TU8.5		✓															

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L899618-02	REEX1-TU9.5		✓														
L899618-03	REEX1-YZ17.5		✓														
L899618-04	REEX1-TU10.5		✓														
L899618-05	REEX1-TU12.5		✓														
L899618-06	REEX1-TU15.5		✓														
L899618-07	REEX1-TU18.5		✓														
L899618-08	REEX1-UV15.5		✓														
L899618-09	REEX1-VW15.5		✓														
L899618-10	REEX1-WX16.5		✓														
L899618-11	REEX1-WX17.5		✓														
L899618-12	REEX1-WX18.5		✓														
L899618-13	REEX1-WX19.5		✓														
L899618-14	REEX1-LM35.5		✓														
L899618-15	REEX1-LJ7.5	✓															

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L899618-16	REEX1-IJ8.5	✓															
L899618-17	REEX1-OP4.5	✓															
L899618-18	REEX1-YZ18.5	✓															
L903188-01	REEX1-LM36.5		✓														
L903188-02	REEX1-MN34.5		✓														
L903188-03	REEX1-VW13.5		✓														
L903188-04	REEX1-WX14.5		✓														
L903188-05	REEX1-YZ19.5		✓														
L903188-06	REEX1-WX20.5		✓														
L903188-07	REEX1-YZ20.5		✓														
L903193-01	BC30.5		✓														
L903193-02	YZ60.5		✓														
L903193-03	MN33.5		✓														
L903193-04	NO34.5		✓														

Table A4: Data Validation Summary (Continued)

		Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L903193-05	WX21.5		✓														
L903193-06	NO33.5		✓														
L903830-01	REEX3-BC16.5		✓														MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L903830-02	REEX3-YZ21.5		✓														MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L903834-01	REEX1-BC28.5		✓														MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L903834-02	REEX1-BC29.5		✓														MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L903834-03	REEX1-CD28.5		✓														MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L903834-04	REEX1-YZ13.5		✓														MS/MSD Rec. & RPD high (J3-flag; QC sample V-Flag); LCS/LCSD Rec. & RPD OK.
L903835-01	REEX1-EF27.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L903835-02	REEX1-YZ6.5	✓															MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L903835-03	REEX1-FG27.5	✓													✓		MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L903835-04	REEX1-FG28.5	✓				✓											MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies		
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V	
L903835-05	REEX1-HI26.5	✓																MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L903835-06	REEX1-YZ7.5	✓																MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L903835-07	REEX1-HI27.5	✓																MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L903835-08	REEX1-HI29.5	✓																MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L903835-09	REEX1-IJ26.5	✓																MS/MSD RPD between the primary and confirmatory analysis exceeded 40% (P-flag). MS/MSD & LCS/LCSD Rec. & RPD OK.
L903837-01	REEX1-IJ27.5	✓					✓											
L903837-02	REEX1-IJ29.5	✓																
L903837-03	REEX1-JK28.5	✓																
L903837-04	REEX1-JK29.5	✓					✓											
L903837-05	REEX1-KL27.5	✓																
L903837-06	REEX1-KL28.5	✓																
L903837-07	REEX1-YZ9.5	✓																

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)													QC Batch Discrepancies
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P	V		
L903841-01	EF29.5	✓			✓												Method Blank Est. Concentration 0.00967 mg/kg PCB 1260 (J-Flag); Analyte concentration < 10X est. blank concentration (B-Flag).	
L903841-02	FG29.5	✓			✓												Method Blank Est. Concentration 0.00967 mg/kg PCB 1260 (J-Flag); Analyte concentration < 10X est. blank concentration (B-Flag).	
L903841-03	GH29.5	✓			✓	✓											Method Blank Est. Concentration 0.00967 mg/kg PCB 1260 (J-Flag); Analyte concentration < 10X est. blank concentration (B-Flag).	
L903841-04	YZ59.5	✓			✓												Method Blank Est. Concentration 0.00967 mg/kg PCB 1260 (J-Flag); Analyte concentration < 10X est. blank concentration (B-Flag).	
L904053-01	REEX1-NO20.5	✓	✓														PCB MS/MSD Rec. & RPD high (J3-flag; J5-Flag; P-flag); PCB LCS/LCSD (P-flag); LCS/LCSD Rec. & RPD OK.	
L904053-02	REEX1-NO21.5		✓															
L904053-03	REEX1-NO22.5	✓	✓														PCB MS/MSD Rec. & RPD high (J3-flag; J5-Flag; P-flag); PCB LCS/LCSD (P-flag); LCS/LCSD Rec. & RPD OK.	
L904053-04	REEX1-NO23.5	✓	✓			✓											PCB MS/MSD Rec. & RPD high (J3-flag; J5-Flag; P-flag); PCB LCS/LCSD (P-flag); LCS/LCSD Rec. & RPD OK.	
L904053-05	REEX1-NO24.5	✓	✓														PCB MS/MSD Rec. & RPD high (J3-flag; J5-Flag; P-flag); PCB LCS/LCSD (P-flag); LCS/LCSD Rec. & RPD OK.	
L904053-06	REEX1-OP23.5		✓															
L905050-01	REEX1-NO21.5	✓																
L905335-01	SUMP-01	✓													✓			
L905335-02	SUMP-02	✓				✓									✓			

Table A4: Data Validation Summary (Continued)

Laboratory ID (Batch—Sample)	Sample ID (Grid Location)	Analytical Method(s)			Laboratory Data Qualifiers (Flags)											QC Batch Discrepancies	
		PCBs	Pb	Other	B	J	J1	J2	J3	J4	J5	J6	J7	O1	P		V
L905335-03	SUMP-03	✓													✓		
L905335-04	SUMP-04	✓															
L905335-05	SUMP-08	✓															
L905335-06	SUMP-09	✓													✓		
L905335-07	SUMP-10	✓															
L905336-01	REEX1-KL12.5	✓															
L905336-02	REEX1-JK13.5	✓													✓		
L905336-03	REEX1-MN14.5	✓															
L905338-01	REEX2-WX14.5	✓															
L906260-01	REEX1-SUMP-09	✓															
L906260-02	REEX1-SUMP-11	✓															
L906263-01	REEX2-JK13.5	✓					✓										
L906263-02	REEX2-YZ22.5	✓															
L908243-01	REEX1-EF22.5	✓															

MS/MSD Rec. high (J5-flag & P-flag; QC sample V-Flag);
MS/MSD RPD OK; LCS/LCSD Rec. & RPD OK.



UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

May 10, 2019

Mr. John Moller
Managing Member
Petrochem Development I, LLC
6591 Collins Drive, E-11
Moorpark, CA 93021

Re: Completion of PCB Remediation Activities at the former Petrochem Refinery located at 4777 Crooked Palm Road, Ventura, CA 93021 – CAD074144171

Dear Mr. Moller:

Thank you for submitting the Final Cleanup Report- Former Compressor Building, dated July, 12, 2018 and the Self-Implementing PCB Cleanup Report- Former Transformer Pads, dated December 14, 2018, both prepared by Destrier, Inc. for Petrochem I LLC (Petrochem). EPA has reviewed the above-referenced reports on the investigation and remediation of PCBs from the former Petrochem Refinery located at 4777 Crooked Palm Road, Ventura, CA 93021 and determined that Petrochem has completed the cleanup of PCBs consistent with EPA approvals.

USEPA issued the following approvals:

- (1) Self-implementing PCB Cleanup Plan Former Tank F Area dated February 2, 2016
- (2) Self-implementing PCB Cleanup Plan Former Tank 14 Area dated February 2, 2016
- (3) Self-implementing PCB Cleanup Plan, Former Compressor Building Addendum No. 1, Paint Characterization Report Revision 2 and Addendum No. 5 PCB Cleanup Plan Former Compressor building dated August 25, 2016

PCBs were identified at the site during the decommissioning of the Compressor Building as part of the closure process occurring at this site. A detailed investigation was then initiated incorporating a phased approach to determine the source, concentration and extent of PCB contamination at and near the former Compressor Building, Ammonia Plant, and associated transformer pads. The EPA Regional Screening Level (RSL) cleanup goal of 0.24 ppm for residential cleanup of PCBs was used at this site. The results of all verification sampling indicated that this cleanup level has been achieved.

At this time, Petrochem has complied with the requirements of the three USEPA approvals and no further assessment or remedial activities associated with PCBs is required. However,

County of Ventura
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USEPA reserves the right to require additional characterization and/or cleanup of PCBs at the site if new information shows that PCBs remain at the site above the approved PCB cleanup level. In addition, USEPA may require cleanup in areas immediately adjacent to the site if those areas are found to be impacted by PCBs from the site.

If you have any questions, please call Mitch Kaplan at 415-972-3359.

Sincerely,



Jeff Scott, Director
Land, Chemicals and Redevelopment Division

Recording requested by:
Hamner, Jewell & Associates
Government Real Estate Services
3639 Harbor Boulevard, Suite 210
Ventura, CA 93001

98-210152	Rec Fee	.00
Recorded	A.R.	.00
Official Records		
County of		
Ventura		
Richard D. Dean		
Recorder		
8:02am 1-Dec-98	VENT CT	24

When recorded, mail to:
City of San Buenaventura
501 Poli Street
P.O. Box 99
Ventura, CA 93002-0099

No Fee per Government Code 6103

APN 063-120-015
APN 063-120-020
APN 063-050-145
APN 063-050-320

RECIPROCAL EASEMENT AGREEMENT

WITNESSETH

THIS AGREEMENT, made and entered into 6th day of October 19 98 by and between the CITY OF SAN BUENAVENTURA, California, hereinafter referred to as the "CITY" and USA Petroleum Corporation hereinafter referred to as "OWNER."

RECITALS

A. CITY is the owner of the parcel of land described in Exhibit "A" attached hereto and by this reference incorporated herein (hereinafter referred to as Parcel "A"). The CITY purchased Parcel "A" for interim trail use pursuant to the National Trails System Act, 16 USC § 1247(d).

B. OWNER is the owner of the parcel of land described in Exhibit "B" attached hereto and by this reference incorporated herein (hereafter referred to as Parcel "B"), OWNER is also the owner of a parcel of land that adjoins Parcel "A" ("Adjoining Parcel", which is described in Exhibit "C" attached hereto and by this reference incorporated herein.)

C. Parcel "A" passes through, and/or is adjacent to, OWNER's Adjoining Parcel, and OWNER's use of the Adjoining Parcel requires repeated crossings over Parcel "A".

D. In order to avoid potential conflicts between OWNER's use of the Adjoining Parcel and CITY's use of Parcel "A" as a recreational trail, OWNER proposes to grant an easement to CITY over Parcel "B" to enable CITY to use

Parcel "B" as a recreational trail, and CITY proposes to grant owner an easement over Parcel "A" to enable OWNER to gain access to various parts of OWNER's Adjoining Parcel.

E. Owner is the owner of all of the real property described and shown in Exhibit "D" and collectively referred to as Property "D." Owner is in the process of developing Property "D" and is planning to subdivide said property. Parcel "A" dissects Property "D", and Parcel "B" and Adjoining Parcel make up part of Property "D."

F. In developing Property "D", owner will designate a parcel (hereinafter Parcel "E") subject to City to City approval, that meets the interim trail use requirements pursuant to the National Trails System Act 16 USC § 1247 (d). The parties' plan for a fee parcel exchange between Parcel A and Parcel "E."

G. In developing Property "D", owner will designate a parcel (hereinafter Parcel "F") subject to City approval, that may be used for the site of a permanent recreation trail. The parties' plan to exchange easements over Parcel "E" and Parcel "F."

H. OWNER and City agree that when subdivision of the property described, and shown, in Exhibit "D" is approved by the County of Ventura, a fee parcel exchange for Parcels "A" and "E" will take place with the recordation of the Final Map, provided that:

1. Final Map indicates OWNER has granted CITY Parcel "E".
2. OWNER has agreed and guaranteed through securities acceptable to the CITY, the construction of permanent trail improvements over Parcel "F" without limitation or compensation from the City. OWNER shall grant CITY an exclusive surface easement over Parcel "F" for the maintenance of the permanent trail.
3. OWNER agrees to and is responsible for the remediation at OWNER's cost, of any and all hazardous and/or contaminated material within Parcel "A", as required by law.
4. Improvements to Parcel "E" and its adjacent uses within the subdivision shall allow for the potential return of the property for rail use pursuant to the National Trail System Act.

NOW, THEREFORE, in consideration of the mutual covenants and agreements of the parties hereto, CITY and OWNER covenant and agree as follows:

1. CITY hereby grants to OWNER a non-exclusive easement (the "Service Easement") over Parcel "A" for the uses and purposes, and subject to the terms and conditions, set forth below.

- (a) Parcel "A" shall be used solely for the purpose of permitting access to and egress from the Adjoining Parcel by OWNER and OWNER's officers, employees, agents, lessees', customers, concessionaires, invitees, licensees, and permittees.
- (b) OWNER shall be responsible for maintenance and security of Parcel "A" during the time that OWNER has title to the Service Easement.
- (c) OWNER shall not store or use, or allow the storage or use of, any hazardous or contaminated materials on Parcel "A".
- (d) Except as provided in this Agreement, OWNER shall not place or construct, or allow placement or construction of, any permanent structures within the boundaries of Parcel "A". OWNER shall be permitted to construct, at its own risk and expense, subsurface utility installation beneath Parcel "A". If such construction takes place, OWNER shall provide the CITY within thirty (30) days of installation, plans indicating the installed location of the installation. These plans shall show finished elevations and location from permanent survey monuments.
- (e) The Service Easement shall be subject to termination, and shall automatically terminate, on the 180th day after CITY requests in writing that OWNER vacate Parcel "A". Within 180 days after CITY gives OWNER such notice to vacate Parcel "A", as provided in this subparagraph, OWNER shall execute and deliver to CITY a quitclaim deed releasing and quitclaiming to CITY the Service Easement and all of OWNER's rights, title and interest in and to Parcel "A". The quitclaim deed that is provided for in this subparagraph is intended to serve as evidence of termination of the Service Agreement. However, failure by OWNER to execute or deliver said quitclaim deed to CITY shall not prevent, avoid, delay or otherwise affect the automatic termination of the Service Easement, as provided in this subparagraph. OWNER shall return Parcel "A" to the condition that existed at the time CITY granted the Service Easement to OWNER.
- (f) OWNER shall indemnify, defend and hold CITY, its officers and employees, harmless from and against any claims, damages, costs including reasonable attorney fees, judgments, and liability resulting from the use of Parcel "A" by OWNER, its officers, employees, agents, lessees', customers, concessionaires, invitees, licensees, and permittees.

- (g) OWNER may place a gate across the north and south ends of Parcel "A"; however, CITY shall be provided access through any such gates at all times.
- (h) OWNER shall be responsible for the remediation, at the OWNER's cost, of any and all hazardous and/or contaminated material within Parcel "A", as required by law.
- (i) OWNER shall allow for the maintenance of existing utilities located within Parcel "A". OWNER shall protect in place, or pay for replacement if damaged, existing utilities within Parcel "A"

2. OWNER hereby grants to CITY an exclusive easement (the "Recreational Easement") over Parcel "B" for the uses and purposes, and subject to the terms and conditions, set forth below:

- (a) Parcel "B" shall be used solely for the purpose of constructing, operating and maintaining a pedestrian, bicycle, and/or equestrian trail for use by members of the public.
- (b) OWNER shall retain the responsibility for the existence of any hazardous and/or contaminated materials within Parcel "B" that were in place at the time the Recreational Easement was granted to CITY.
- (c) Such improvements as CITY makes to Parcel "B" relating to the CITY's use of Parcel "B" shall be made at no expense to OWNER. In the event hazardous and/or contaminated materials are encountered on Parcel "B", CITY will remove, remediate and/or dispose of those materials at OWNER's cost and expense up to \$10,000. If the cost of removal, remediation and/or disposal exceeds \$10,000, the CITY may undertake the removal, remediation and/or disposal of the materials in excess of \$10,000 at its own expense and responsibility. In the event the CITY does not elect to undertake such action, the Recreational Easement shall terminate on the CITY giving 30 days written notice to the OWNER.

If CITY terminates its easement pursuant to this subparagraph, City shall execute and deliver to OWNER a Quitclaim Deed releasing and quitclaiming to OWNER the Recreational Easement and all of the CITY's right, title and interest in and to Parcel "B". The Quitclaim Deed provided for in this subparagraph is intended to serve as evidence of termination of the Recreational Easement. However, failure

by CITY to execute and deliver said Quitclaim Deed to OWNER shall not prevent, avoid, delay or otherwise affect the termination of the Recreational Easement, as provided in this subparagraph. Upon vacation of Parcel "B" as provided in this subparagraph, the CITY shall, if desired by OWNER, return Parcel "B" to the condition that existed before CITY acquired the Recreational Easement.

Notwithstanding any other provision, if CITY vacates Parcel "B", CITY may request in writing that OWNER vacate Parcel "A" and return possession to CITY within thirty (30) days after CITY has returned Parcel "B" to OWNER. Within said thirty (30) day period, OWNER shall execute and deliver to CITY a quitclaim deed releasing and quitclaiming to CITY the Service Easement and all of OWNER's rights, title and interest in and to Parcel "A". The quitclaim deed that is provided for in this subparagraph is intended to serve as evidence of termination of the Service Agreement. However, failure by OWNER to execute or deliver said quitclaim deed to CITY shall not prevent, avoid, delay or otherwise affect the automatic termination of the Service Easement, as provided in this subparagraph. OWNER shall return Parcel "A" to the condition that existed at the time CITY granted the Service Easement to OWNER.

Upon request by CITY that OWNER vacate Parcel "A", as provide in paragraph 1(e) of this Agreement, OWNER may request that CITY vacate Parcel "B". If OWNER makes such request, CITY shall execute and deliver to OWNER a quitclaim deed releasing and quitclaiming Parcel "B" to OWNER within 30 days after OWNER has executed and delivered to CITY the quitclaim deed provided for in paragraph 1(e) of this Agreement. Upon vacation of Parcel "B" as provided in this subparagraph, the CITY shall, if desired by OWNER, return Parcel "B" to the condition that existed before CITY acquired the Recreational Easement.

- (e) The CITY shall indemnify, defend and hold OWNER, its officers and employees, harmless from and against any claims, damages, costs including reasonable attorney fees, judgments, and liability resulting from the use of Parcel "B" by the CITY or its officers, employees, agents, lessees, invitees, licensees, or permittees. Notwithstanding the foregoing, OWNER shall retain the responsibility for the existence and for the remediation, if required under State or Federal laws or regulations, of any hazardous and/or contaminated materials within Parcel "B" that were in place at the time the Recreational Easement was granted to CITY.

3. At the time of final map recordation for the subdivision of Property "D", the City and Owner shall exchange fee parcels of Parcel "A" and Parcel "E" by quit claim deeds provided that the following conditions are satisfied prior thereto.

- (a) In subdividing Property "D", Owner has designated a parcel (hereinafter Parcel "E") subject to City approval, that meets the interim trail use requirements pursuant to the National Trails System Act, 16 USC § 1247(d) or subsequently renumbered statute.
- (b) Owner will ensure that Improvements to Parcel "E" and its adjacent uses within the subdivision shall allow for the potential return of Parcel "E" for rail use.
- (c) The Final Maps evidences that Owner has granted City Parcel "E".
- (d) In subdividing Property "D", Owner has designated a parcel (hereinafter Parcel "F") subject to City approval, that will be used for the site of a permanent recreation trail.
- (e) By a separate agreement Owner has agreed and guaranteed through securities acceptable to the City, the construction of a permanent recreational trail over Parcel "F" without compensation from the City. The construction of the permanent trail shall be part of the Final Map.
- (f) Owner agrees to and assumes responsibility for the remediation at Owner's sole cost and expense of any and all hazardous and/or contaminated material within Parcel "A". Furthermore, Owner agrees at its sole cost and expense to remediate any and all hazardous and/or contaminated material within Parcel "F" and Parcel "E".

4. Provided that all of the conditions in Paragraph 3, (a) through (f) are satisfied, upon completion of construction of the permanent recreation trail on Parcel "F", Owner through a separate agreement shall grant City an exclusive surface easement over Parcel "F" for the purpose of operating and maintaining a pedestrian, bicycle, and/or equestrian trail for use by members of the public. Such easement shall be subject to the same type of conditions on the easement to Parcel "B" evidenced in Paragraphs 2 (b) and 2(e) of the Agreement. Furthermore, upon the granting of said easement City shall vacate Parcel "B" and shall execute and deliver to Owner a quitclaim deed releasing and quitclaiming Parcel "B" to Owner.

5. Provided that all of the conditions of Paragraph 3 (a) through (f) are satisfied, upon completion of construction of the permanent recreation trail on Parcel "F", and simultaneous with the granting of the easement in Paragraph 4,

City through a separate agreement shall grant Owner an exclusive easement over Parcel "E" subject to the same type of conditions on the easement to Parcel "A" as evidenced in Paragraph 1 (a), 1 (b), 1 (c), 1(d), 1(f), 1 (i), and 1 (j). Such easement shall only be subject to termination if the City needs to restore the railroad corridor pursuant to the National Trails System Act upon 180 days notice to the Owner. In the event that City exercises termination of the easement over Parcel "E", Owner may terminate the City's easement in Parcel "F" upon 180 days notice.

6. City shall allow for the maintenance of existing utilities located within Parcel "B" or Parcel "F", provided that the Owner shall be liable to City for the cost of any damage to the trail because of the maintenance work performed by maintenance of the utility.

7. The OWNER warrants there are no oral or written surface leases on all or any portion of Parcels "B, D and F" exceeding a period of one month, or if there are such leases, OWNER agrees to hold the CITY harmless and reimburse CITY for any and all of the expenses occasioned by reason of any lease of said property held by tenant of OWNER for a period exceeding one month.

8. CITY warrants there are no oral or written surface leases on all or any portion of Parcel "A" exceeding a period of one month, or if there are such leases, CITY agrees to hold the OWNER harmless and reimburse OWNER for any and all of the expenses occasioned by reason of any lease of said property held by tenant of CITY for a period of one month.

9. Notices. All notices given or required to be given pursuant to this Agreement shall be in writing and may be given by personal delivery or by mail. Notice sent by mail shall be addressed as follows:

TO CITY: CITY OF SAN BUENVENTURA
ATTENTION: CITY ENGINEER
P. O. Box 99
Ventura, CA 93002-0099

TO OWNER: USA PETROLEUM CORPORATION
ATTENTION: BILL STEWARD
30101 Agoura Court, Suite 200
Agoura, CA 91301-4311

10. Governing Law. The terms of this Agreement shall be interpreted according to the laws of the State of California. Should litigation occur, venue should be in Ventura County.

11. Successors and Assigns. The covenants and agreements herein contained shall bind, and the rights hereunder shall inure to, the respective successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the Parties hereto have caused this contract to be executed the day and year first above written.

CITY OF SAN BUENAVENTURA

By: Donna Lander
City Manager

ATTEST:

[Signature]
City Clerk

USA PETROLEUM CORPORATION

By: [Signature]
Chm of Board
Title

APPROVED AS TO FORM:

[Signature]
Assistant City Attorney

By: _____

Title

EXHIBITS:

- "A" - LEGAL DESCRIPTION OF CITY'S PROPERTY (Parcel "A"). City's RoW, former Railway.
- "B" - LEGAL DESCRIPTION OF USA PROPERTY BEING ACCEPTED AS EASEMENT (Parcel "B") Temporary Trail Alignment.
- "C" - LEGAL DESCRIPTION OF OWNER'S PARCEL ADJACENT TO RAILWAY (Parcel "C")
- "D" - OWNER'S FUTURE IMPROVEMENT PROJECT.
- "E" - OWNER'S RIGHT-OF-WAY MEETING RAILWAY REPLACEMENT CRITERIA.
- "F" - OWNER'S RIGHT-OF-WAY FOR PERMANENT TRAIL. (Parcel "F")

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of CALIFORNIA

County of VENTURA

On NOVEMBER 17, 1998 before me, LAUREL SPAWN
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared DONNA LANDEROS
Name(s) of Signer(s)

personally known to me – OR – proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

Laurel Spawn
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: EASEMENT

Document Date: Oct 6th 1998 Number of Pages: 8

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: DONNA LANDEROS

- Individual
- Corporate Officer
Title(s): _____
- Partner — Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

CITY MANAGER

Signer Is Representing:

CITY OF SAN BUENAVENTURA

Signer's Name: _____

- Individual
- Corporate Officer
Title(s): _____
- Partner — Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer Is Representing:

EXHIBIT A

USA Prop. Agreement

City Railroad R/W to Owner

Page 1 of 1

PARCEL 42 of DOCUMENT No. 95-131253 (V49/3 No. 6)

THAT CERTAIN STRIP OF LAND, 40-FEET WIDE, AS DESCRIBED IN THAT CERTAIN INDENTURE TO THE VENTURA AND OJAI RAILROAD COMPANY, RECORDED APRIL 8, 1899, IN BOOK 57, PAGE 498 OF DEEDS, IN THE OFFICE OF THE RECORDER OF VENTURA COUNTY, STATE OF CALIFORNIA.

EXCEPT THAT PORTION LYING SOUTHWESTERLY OF A LINE PARALLEL WITH AND DISTANT 19 FEET NORTHEASTERLY OF THE FOLLOWING DESCRIBED 3RD COURSE:

BEGINNING AT THE INTERSECTION OF THE CENTERLINE OF SAID VENTURA AND OJAI VALLEY RAILROAD, 40 FEET WIDE, PER SAID INDENTURE WITH THAT CERTAIN COURSE IN THE LAND DESCRIBED IN PARCEL 5 OF DOCUMENT No. 83-0017136 OF OFFICIAL RECORDS, RECORDS OF SAID COUNTY, AS HAVING A BEARING AND DISTANCE OF "NORTH 57° 30' EAST 138.60 FEET"; THENCE,

1ST SOUTH 58°23'53" WEST 10.67 FEET TO A CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 131.23 FEET THROUGH WHICH A RADIAL BEARING OF NORTH 56°58'41" EAST PASSES; THENCE,

2ND NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 1°56'13" AN ARC LENGTH OF 4.44 FEET; THENCE,

3RD NORTH 34°57'32" WEST 72.12 FEET.

PARCEL 43 (V49/3 No. 7) of DOCUMENT No: 95-131253 (V49/3 No. 7)

THAT CERTAIN STRIP OF LAND, 40-FEET WIDE, AS DESCRIBED IN THAT CERTAIN INDENTURE TO THE VENTURA AND OJAI RAILROAD COMPANY, RECORDED APRIL 13, 1899, IN BOOK 57, PAGE 552 OF DEEDS, IN THE OFFICE OF THE RECORDER OF VENTURA COUNTY, STATE OF CALIFORNIA.

PARCEL 44 of DOCUMENT No. 95-131253 (V49/3 No. 8)

THAT CERTAIN STRIP OF LAND, 40-FEET WIDE, AS DESCRIBED IN THAT CERTAIN INDENTURE TO THE VENTURA AND OJAI RAILROAD COMPANY, RECORDED APRIL 8, 1899, IN BOOK 57, PAGE 449 OF DEEDS, IN THE OFFICE OF THE RECORDER OF VENTURA COUNTY, STATE OF CALIFORNIA.

PARCEL 45 of DOCUMENT No. 95-131253 (V49/3 No. 9)

THAT CERTAIN STRIP OF LAND, 40-FEET WIDE, AS DESCRIBED IN THAT CERTAIN INDENTURE TO THE VENTURA AND OJAI RAILROAD COMPANY, RECORDED APRIL 8, 1899, IN BOOK 57, PAGE 476 OF DEEDS, IN THE OFFICE OF THE RECORDER OF VENTURA COUNTY, STATE OF CALIFORNIA.

PARCEL 46 of DOCUMENT No. 95-131253 (V49/3 No. 10)

THAT CERTAIN STRIP OF LAND, 40-FEET WIDE, AS DESCRIBED IN THAT CERTAIN INDENTURE TO THE VENTURA AND OJAI RAILROAD COMPANY, RECORDED APRIL 13, 1899, IN BOOK 57, PAGE 548 OF DEEDS, IN THE OFFICE OF THE RECORDER OF VENTURA COUNTY, STATE OF CALIFORNIA.

EXCEPT THAT PORTION LYING NORTHWESTERLY OF A LINE CONCENTRIC WITH AND DISTANT 19 FEET SOUTHEASTERLY OF THE FOLLOWING DESCRIBED CURVED LINE:

AT A POINT IN THE WESTERLY SIDELINE OF SAID INDENTURE DISTANT 44.13 FEET SOUTHERLY FROM ITS NORTHERLY TERMINUS THROUGH WHICH A CURVE CONCAVE NORTHWESTERLY HAVING A RADIUS OF 98.42 FEET AND WHICH A RADIAL LINE OF SOUTH 59°13'26" EAST PASSES THROUGH.

Prepared by:
W.H.Holdings, Inc.


William L. Meagher PLS



EXHIBIT B

USA Prop. Agreement

Trail Parcel

Page 1 of 2

PARCEL P

AN EASEMENT 30 FEET WIDE LYING 11 FEET WESTERLY AND 19 FEET EASTERLY OF THE FOLLOWING DESCRIBED CENTERLINE WITHIN PARCELS 2, 3, 4 AND 5 OF DOCUMENT NO. 83-0017136 OF OFFICIAL RECORDS, RECORDS OF VENTURA COUNTY, STATE OF CALIFORNIA:

BEGINNING AT THE INTERSECTION OF THE CENTERLINE OF THE *VENTURA AND OJAI VALLEY RAILROAD*, 40 FEET WIDE, PER DOCUMENT RECORDED IN BOOK 57, PAGE 498 OF DEEDS, RECORDS OF VENTURA COUNTY, WITH THAT CERTAIN COURSE IN THE LAND DESCRIBED IN SAID PARCEL 5 AS HAVING A BEARING AND DISTANCE OF "NORTH 57° 30' EAST 138.60 FEET"; THENCE,

1ST SOUTH 58°23'53" WEST 10.67 FEET ALONG SAID COURSE TO A CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 131.23 FEET THROUGH WHICH A RADIAL BEARING OF SOUTH 56°58'41" WEST PASSES; THENCE

2ND NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 1°56'13" AN ARC LENGTH OF 4.44 FEET; THENCE

3RD NORTH 34°57'32" WEST 72.12 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 82.02 FEET; THENCE

4TH NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 53°02'37" AN ARC LENGTH OF 75.93 FEET; THENCE

6TH NORTH 88°00'09" WEST 62.39 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 393.70 FEET; THENCE

7TH NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 8°36'51" AN ARC LENGTH OF 59.19 FEET; THENCE

8TH NORTH 79°23'18" WEST 82.06 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHEASTERLY HAVING A RADIUS OF 164.04 FEET; THENCE

9TH NORTHWESTERLY AND NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 66°37'46" AN ARC LENGTH OF 190.76 FEET ; THENCE

10TH NORTH 12°45'32" WEST 79.61 FEET TO THE BEGINNING OF A CURVE CONCAVE EASTERLY HAVING A RADIUS OF 1246.72 FEET; THENCE

11TH NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 34°04'46" AN ARC LENGTH OF 741.55 FEET TO A REVERSE CURVE HAVING A RADIUS OF 656.17 FEET; THENCE

12TH NORTHERLY ALONG SAID REVERSE CURVE THROUGH A CENTRAL ANGLE OF 11°05'02" AN ARC LENGTH OF 126.94 FEET; THENCE

13TH NORTH 10°14'12" WEST 83.97 FEET TO THE BEGINNING OF A CURVE CONCAVE WESTERLY HAVING A RADIUS OF 98.43 FEET; THENCE

14TH NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 23°03'50" AN ARC LENGTH OF 39.62 FEET; THENCE

15TH NORTH 12°49'38" WEST 54.81 FEET TO THE BEGINNING OF A CURVE CONCAVE EASTERLY HAVING A RADIUS OF 393.70 FEET; THENCE

16TH NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 12°15'09" AN ARC LENGTH OF 84.19 FEET; THENCE

EXHIBIT B

USA Prop. Agreement

Trail Parcel

Page 2 of 2

17TH NORTH 0°34'29" WEST 445.38 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTH-EASTERLY HAVING A RADIUS OF 98.42 FEET; THENCE

18TH NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 58°49'12" AN ARC LENGTH OF 101.04 FEET TO A REVERSE CURVE HAVING A RADIUS OF 98.42 FEET; THENCE

19TH NORTHERLY ALONG SAID REVERSE CURVE THROUGH A CENTRAL ANGLE OF 27°28'09" AN ARC LENGTH OF 47.19' TO A POINT IN THE WESTERLY SIDELINE OF SAID RAILROAD PER DOCUMENT RECORDED IN BOOK 57, PAGE 496 OF DEEDS, RECORDS OF VENTURA COUNTY, DISTANT 44.13 FEET FROM ITS NORTHERLY TERMINUS.

THE SIDELINES OF SAID 30-FOOT WIDE EASEMENT SHALL BE LENGTHENED OR SHORTENED AS TO TERMINATE IN THE WESTERLY SIDELINE OF SAID RAILROAD.

Prepared by:
W.H.Holdings, Inc.

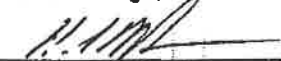

William L. Meagher PLS



EXHIBIT C

USA Petrochem Agreement

Owners Property Description

Page 1 of 6

PARCEL P-1 (PARCEL 1 of DOCUMENT No. 83-0017136)

PART OF SUBDIVISIONS 14, 15 AND 16 OF TRACT "B" OF THE RANCHO CANADA LARGA, AS PER MAP RECORDED IN BOOK 1, PAGE 202 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTERLINE OF THAT CERTAIN COUNTY ROAD, 60 FEET WIDE, LEGALLY KNOWN AS AND CALLED "VENTURA AVENUE"; AT THE CORNER COMMON TO SUBDIVISIONS 9, 10, 16 AND 17, AS DELINEATED UPON THE ABOVE DESCRIBED MAP; THENCE FROM SAID POINT OF BEGINNING,

1ST SOUTH 75° 10' WEST 860.43 FEET ALONG THE LINE BETWEEN SAID SUBDIVISION 16 AND 17, AT 30 FEET A 1-INCH IRON PIPE SET IN THE WESTERLY LINE OF SAID VENTURA AVENUE, AT 840.33 FEET A 1-INCH IRON PIPE SET IN THE EASTERLY LINE OF THE SOUTHERN PACIFIC RAILROAD COMPANY'S RIGHT-OF-WAY, 40 FEET WIDE, AT 860.43 FEET A POINT IN THE CENTERLINE OF SAID SOUTHERN PACIFIC COMPANY'S RIGHT-OF-WAY; THENCE ALONG THE CENTERLINE OF SAID RIGHT-OF-WAY BY THE FOLLOWING TEN COURSES AND DISTANCES,

2ND NORTH 9° 03' WEST 176.06 FEET TO A POINT; THENCE,

3RD NORTH 8° 50' WEST 100.00 FEET TO A POINT; THENCE,

4TH NORTH 8° 45' WEST 100.00 FEET TO A POINT; THENCE,

5TH NORTH 8° 35' WEST 100.00 FEET TO A POINT; THENCE,

6TH NORTH 8° 27' WEST 100.00 FEET TO A POINT; THENCE,

7TH NORTH 8° 09' WEST 100.00 FEET TO A POINT; THENCE,

8TH NORTH 8° 04' WEST 100.00 FEET TO A POINT; THENCE,

9TH NORTH 7° 50' WEST 100.00 FEET TO A POINT; THENCE,

10TH NORTH 7° 43' WEST 100.00 FEET TO A POINT; THENCE,

11TH NORTH 7° 35' WEST 100 FEET TO A POINT IN THAT CERTAIN LINE AS ESTABLISHED BY THAT CERTAIN AGREEMENT BETWEEN JOHN GERMANN, ET UX., AND LENA F. SANDOZ, DATED NOVEMBER 19, 1924, RECORDED IN BOOK 54, PAGE 226, OFFICIAL RECORDS; THENCE ALONG SAID LINE,

12TH NORTH 75° 10' EAST 364.42 FEET, PARALLEL TO AND AT ALL POINT DISTANT NORTHWESTERLY 10.14 FEET FROM THE LINE BETWEEN SUBDIVISIONS 14 AND 15, AS DELINEATED UPON THE ABOVE DESCRIBED MAP, TO A 1-INCH IRON PIPE; THENCE,

13TH SOUTH 14° 50' EAST 631.90 FEET TO A 1-INCH IRON PIPE; THENCE,

14TH NORTH 75° 10' EAST 374.67 FEET TO A POINT IN THE CENTERLINE OF SAID VENTURA AVENUE, FROM WHICH THE CORNER COMMON TO SAID SUBDIVISIONS 15 AND 16, BEARS NORTH 14° 50' WEST 91.15 FEET DISTANT; THENCE,

15TH SOUTH 14° 50' EAST 439.45 FEET ALONG THE CENTERLINE OF SAID VENTURA AVENUE, TO THE POINT OF BEGINNING.

EXCEPT THAT PORTION OF SAID LAND INCLUDED WITHIN SAID SOUTHERN PACIFIC COMPANY'S RIGHT OF WAY, 40 FEET WIDE.

ALSO EXCEPT THAT PORTION OF SAID LAND LYING EASTERLY OF THE WESTERLY LINE OF THE LAND DESCRIBED AS PARCEL 7B, IN THE FINAL ORDER OF CONDEMNATION RECORDED FEBRUARY 19, 1969, IN BOOK 3446, PAGE 150, OFFICIAL RECORDS.

EXHIBIT C

USA Petrochem Agreement

Owners Property Description

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ALSO EXCEPT AN UNDIVIDED ONE-HALF INTEREST IN AND TO ALL OIL, GAS OR OTHER HYDROCARBON SUBSTANCES WHICH MAY UNDERLIE SAID LAND, BUT SPECIFICALLY WITHOUT THE RIGHT OF ACCESS THERETO FROM THE SURFACE OF SAID LAND, AS RESERVED IN DEED RECORDED DECEMBER 10, 1962, IN BOOK 2241, PAGE 546, OFFICIAL RECORDS.

ALSO EXCEPT THE INTEREST OF SHELL OIL COMPANY, A DELAWARE CORPORATION, AS SET OUT IN THE DEED TO CALIFORNIA OIL PURIFICATION COMPANY, A CALIFORNIA CORPORATION, RECORDED JULY 3, 1973 AS DOCUMENT NO. 47297, OFFICIAL RECORDS, WHICH RECITES IN PART AS FOLLOWS:

"EXCEPTING AND RESERVING, HOWEVER, UNTO GRANTOR HEREIN, ALL OF GRANTOR'S RIGHT, TITLE AND INTEREST IN AND TO ALL OIL, OTHER HYDROCARBONS, GAS AND ASSOCIATED SUBSTANCES, OTHER MINERALS AND MINERAL RIGHTS OF WHATEVER KIND OR NATURE IN, UNDER, RECOVERABLE FROM OR WHICH MAY BE PRODUCED FROM ANY OR ALL OF THE ABOVE DESCRIBED LAND, WITHOUT ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, BUT WITH THE PERPETUAL RIGHT TO EXPLORE FOR, MINE, DEVELOP AND REMOVE SAME BY MEANS OF WELLS OR MINING EQUIPMENT HAVING SURFACE LOCATIONS OUTSIDE OF THE EXTERIOR BOUNDARIES OF SAID LAND AND ENTERING SAID LAND BELOW A DEPTH OF 500 FEET FROM THE PRESENT NATURAL SURFACE THEREOF, TOGETHER WITH FULL RIGHTS TO DRILL INTO, THROUGH, PRODUCE FROM, OPERATE WITHIN AND/OR OTHERWISE USE THE SUBSURFACE OF SAID LAND BELOW SUCH 500 FOOT DEPTH OF, INCLUDING (WITHOUT LIMITATION) THE RIGHT TO WHIPSTOCK OR DIRECTIONALLY DRILL INTO OR THROUGH SAID SUBSURFACE. PROVIDED, HOWEVER, NOTHING HEREIN SHALL PRECLUDE THE GRANTEE, ITS SUCCESSORS AND/OR ASSIGNS FROM DRILLING WELLS FOR THE PURPOSE OF INJECTING DISPOSAL OF WASTE, SUBSTANCES BENEATH THE SURFACE OF SAID LAND AS LONG AS SAID RIGHT DOES NOT IMPAIR THE OIL, HYDROCARBON, GAS, MINERAL AND MINERAL RIGHTS RESERVED HEREIN."

PARCEL P-2 (PARCEL 2 of DOCUMENT No. 83-0017136)

A PART OF TRACT "B" OF THE RANCHO CANADA LARGA, AS SHOWN UPON THAT CERTAIN MAP RECORDED IN BOOK 1, PAGE 202 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN LINE NO. 5 OF THE FINAL SURVEY OF SAID RANCHO CANADA LARGA, AT THE CORNER COMMON TO LOTS 16 AND 17 OF SAID TRACT "B", AS SHOWN UPON THE ABOVE DESCRIBED MAP; THENCE FROM SAID POINT OF BEGINNING,

1ST NORTH 5° 45' WEST 1067.88 FEET ALONG SAID LINE NO. 5 TO A POINT; THENCE,

2ND NORTH 75° 10' EAST TO A POINT IN THE WESTERLY LINE OF A STRIP OR PARCEL OF LAND 40 FEET WIDE, LYING EQUALLY ON EACH SIDE OF THE CENTERLINE OF THE TRACK OF THE VENTURA AND OJAI VALLEY RAILROAD, AS NOW CONSTRUCTED AND MAINTAINED; THENCE ALONG SAID WESTERLY LINE OF SAID STRIP OF LAND, 40 FEET WIDE,

3RD SOUTHERLY TO A POINT IN THE BOUNDARY LINE BETWEEN SAID LOTS 16 AND 17 OF SAID TRACT "B"; THENCE ALONG SAID BOUNDARY LINE,

4TH SOUTH 75° 10' WEST TO THE POINT OF BEGINNING.

EXCEPT ALL THE OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND, PROVIDED, HOWEVER, THAT THERE SHALL BE NO RIGHT TO DRILL UPON SAID LAND NOR USE THE SURFACE THEREOF IN ANY MATTER WHATSOEVER IN CONNECTION WITH THE FOREGOING, AS RESERVED IN DEED RECORDED OCTOBER 13, 1955, IN BOOK 1343, PAGE 516, OFFICIAL RECORDS.

ALSO EXCEPT THE INTEREST OF SHELL OIL COMPANY, A DELAWARE CORPORATION, AS SET OUT IN THE DEED TO CALIFORNIA OIL PURIFICATION COMPANY, A CALIFORNIA CORPORATION, RECORDED JULY 3, 1973 AS DOCUMENT NO. 47297, OFFICIAL RECORDS, WHICH RECITES IN PART AS FOLLOWS:

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"EXCEPTING AND RESERVING, HOWEVER, UNTO GRANTOR HEREIN, ALL OF GRANTOR'S RIGHT, TITLE AND INTEREST IN AND TO ALL OIL, OTHER HYDROCARBONS, GAS AND ASSOCIATED SUBSTANCES, OTHER MINERALS AND MINERAL RIGHTS OF WHATEVER KIND OR NATURE IN, UNDER, RECOVERABLE FROM OR WHICH MAY BE PRODUCED FROM ANY OR ALL OF THE ABOVE DESCRIBED LAND, WITHOUT ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, BUT WITH THE PERPETUAL RIGHT TO EXPLORE FOR, MINE, DEVELOP AND REMOVE SAME BY MEANS OF WELLS OR MINING EQUIPMENT HAVING SURFACE LOCATIONS OUTSIDE OF THE EXTERIOR BOUNDARIES OF SAID LAND AND ENTERING SAID LAND BELOW A DEPTH OF 500 FEET FROM THE PRESENT NATURAL SURFACE THEREOF, TOGETHER WITH FULL RIGHTS TO DRILL INTO, THROUGH, PRODUCE FROM, OPERATE WITHIN AND/OR OTHERWISE USE THE SUBSURFACE OF SAID LAND BELOW SUCH 500 FOOT DEPTH OF, INCLUDING (WITHOUT LIMITATION) THE RIGHT TO WHIPSTOCK OR DIRECTIONALLY DRILL INTO OR THROUGH SAID SUBSURFACE. PROVIDED, HOWEVER, NOTHING HEREIN SHALL PRECLUDE THE GRANTEE, ITS SUCCESSORS AND/OR ASSIGNS FROM DRILLING WELLS FOR THE PURPOSE OF INJECTING DISPOSAL OF WASTE, SUBSTANCES BENEATH THE SURFACE OF SAID LAND AS LONG AS SAID RIGHT DOES NOT IMPAIR THE OIL, HYDROCARBON, GAS, MINERAL AND MINERAL RIGHTS RESERVED HEREIN."

PARCEL P-3 (PARCEL 3 of DOCUMENT No. 83-0017136)

PART OF SUBDIVISION 17 OF TRACT "B" OF THE RANCHO CANADA LARGA, AS PER MAP RECORDED IN BOOK 1, PAGE 202 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT A ROCK 12" X 10" X 10" IN DIMENSIONS, SET IN THE CENTERLINE OF THE PUBLIC ROAD FROM THE CITY OF SAN BUENAVENTURA TO RANCHO OJAI, DISTANT SOUTH 14248 50' EAST 3.53 CHAINS FROM A STONE SET AT THE CORNER COMMON TO SUBDIVISIONS 9, 10, 16 AND 17 OF SAID TRACT "B", SAID POINT OF BEGINNING BEING THE SOUTHEAST CORNER OF THAT CERTAIN PARCEL OF LAND, AS CONVEYED BY GEORGE W. BOWEN, ET UX., TO CHARLES F. ROGERS, BY DEED DATED JANUARY 8, 1903, AND RECORDED JANUARY 20, 1903, IN BOOK 92, PAGE 48 OF DEEDS; THENCE FROM SAID POINT OF BEGINNING,

1ST SOUTH 14° 50' EAST 232.98 FEET ALONG THE CENTERLINE OF SAID PUBLIC ROAD TO A ROCK 14" X 10" X 8" IN DIMENSIONS; THENCE,

2ND SOUTH 75° 10' WEST 1440.12 FEET, AT 30 FEET A POST IN THE WEST LINE OF SAID PUBLIC ROAD, AT 1440.12 FEET A POINT IN LINE NO. 5 OF THE FINAL SURVEY OF SAID RANCHO CANADA LARGA; THENCE ALONG SAME,

3RD NORTH 14° 45' WEST 232.98 FEET TO THE SOUTHWEST CORNER OF THE SAID LANDS SO CONVEYED TO ROGERS, AT A POINT DISTANT SOUTH 14° 45' EAST 83.82 FEET FROM CORNER NO. 5 OF THE FINAL SURVEY OF SAID RANCHO CANADA LARGA; THENCE,

4TH NORTH 75° 10' EAST 1440.12 FEET TO THE POINT OF BEGINNING.

EXCEPT A STRIP OR PARCEL OF LAND, 40 FEET WIDE, LYING EQUALLY ON EACH SIDE OF THE CENTERLINE OF THE TRACT OF THE VENTURA AND OJAI VALLEY RAILROAD, AS CONSTRUCTED AND MAINTAINED OVER AND ACROSS SAID PROPERTY.

ALSO EXCEPT THAT PORTION OF SAID LAND LYING EASTERLY OF THE WESTERLY LINE OF THE LAND DESCRIBED AS PARCEL 7B IN THE FINAL ORDER OF CONDEMNATION RECORDED FEBRUARY 19, 1969, IN BOOK 3446, PAGE 150, OFFICIAL RECORDS.

ALSO EXCEPT AN UNDIVIDED ONE-HALF INTEREST IN AND TO ALL OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND, SUBJECT TO THE PROVISIONS CONTAINED IN DEED RECORDED DECEMBER 31, 1951, IN BOOK 1041, PAGE 16, OFFICIAL RECORDS, MORE PARTICULARLY SET FORTH THEREIN.

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ALSO EXCEPT THE INTEREST OF SHELL OIL COMPANY, A DELAWARE CORPORATION, AS SET OUT IN THE DEED TO CALIFORNIA OIL PURIFICATION COMPANY, A CALIFORNIA CORPORATION, RECORDED JULY 3, 1973 AS DOCUMENT NO. 47297, OFFICIAL RECORDS, WHICH RECITES IN PART AS FOLLOWS:

"EXCEPTING AND RESERVING, HOWEVER, UNTO GRANTOR HEREIN, ALL OF GRANTOR'S RIGHT, TITLE AND INTEREST IN AND TO ALL OIL, OTHER HYDROCARBONS, GAS AND ASSOCIATED SUBSTANCES, OTHER MINERALS AND MINERAL RIGHTS OF WHATEVER KIND OR NATURE IN, UNDER, RECOVERABLE FROM OR WHICH MAY BE PRODUCED FROM ANY OR ALL OF THE ABOVE DESCRIBED LAND, WITHOUT ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, BUT WITH THE PERPETUAL RIGHT TO EXPLORE FOR, MINE, DEVELOP AND REMOVE SAME BY MEANS OF WELLS OR MINING EQUIPMENT HAVING SURFACE LOCATIONS OUTSIDE OF THE EXTERIOR BOUNDARIES OF SAID LAND AND ENTERING SAID LAND BELOW A DEPTH OF 500 FEET FROM THE PRESENT NATURAL SURFACE THEREOF, TOGETHER WITH FULL RIGHTS TO DRILL INTO, THROUGH, PRODUCE FROM, OPERATE WITHIN AND/OR OTHERWISE USE THE SUBSURFACE OF SAID LAND BELOW SUCH 500 FOOT DEPTH OF, INCLUDING (WITHOUT LIMITATION) THE RIGHT TO WHIPSTOCK OR DIRECTIONALLY DRILL INTO OR THROUGH SAID SUBSURFACE. - PROVIDED, HOWEVER, NOTHING HEREIN SHALL PRECLUDE THE GRANTEE, ITS SUCCESSORS AND/OR ASSIGNS FROM DRILLING WELLS FOR THE PURPOSE OF INJECTING DISPOSAL OF WASTE, SUBSTANCES BENEATH THE SURFACE OF SAID LAND AS LONG AS SAID RIGHT DOES NOT IMPAIR THE OIL, HYDROCARBON, GAS, MINERAL AND MINERAL RIGHTS RESERVED HEREIN."

PARCEL P-4 (PARCEL 4 of DOCUMENT No. 83-0017136)

PART OF SUBDIVISION 17 OF TRACT "B" OF THE RANCHO CANADA LARGA, AS PER MAP RECORDED IN BOOK 1, PAGE 202 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT A STONE SET IN THE CENTERLINE OF THE COUNTY ROAD LEADING FROM THE CITY OF SAN BUENAVENTURA TO RANCHO OJAI AT THE CORNER COMMON TO SUBDIVISIONS 9, 10, 16 AND 17 OF SAID TRACT "B"; THENCE FROM SAID POINT OF BEGINNING WHICH IS THE NORTHEAST CORNER OF SUBDIVISION 17, ALONG THE CENTERLINE OF SAID COUNTY ROAD,

1ST SOUTH 14° 50' EAST 232.98 FEET TO A STONE 12" X 10" X 10" SET AT THE NORTHEAST CORNER OF THE LAND CONVEYED TO GEO. W. BOWEN, ET UX., TO EMMA H. HOTCHKISS, BY DEED RECORDED IN BOOK 41, PAGE 492 OF DEEDS; THENCE,

2ND SOUTH 75° 10' WEST 1440.12 FEET ALONG THE NORTHERLY LINE OF LAND OF SAID EMMA H. HOTCHKISS TO STATION IN LINE NO. 5 OF THE FINAL SURVEY OF SAID RANCHO CANADA LARGA; THENCE,

3RD NORTH 14° 45' WEST 83.82 FEET TO CORNER NO. 5 OF THE FINAL SURVEY OF SAID RANCHO CANADA LARGA; THENCE,

4TH NORTH 5° 45' WEST WITH LINE NO. 4 OF THE FINAL SURVEY 151.14 FEET TO THE SOUTHWEST CORNER OF SUBDIVISION 16 OF SAID TRACT "B" OF SAID RANCHO; THENCE,

5TH NORTH 75° 10' EAST 1414.38 FEET ALONG LINE BETWEEN SUBDIVISIONS 16 AND 17 TO THE POINT OF BEGINNING.

EXCEPT A STRIP OF LAND, 40 FEET WIDE CONVEYED TO VENTURA AND OJAI VALLEY RAILROAD COMPANY, BY DEED DATED JANUARY 9, 1899, AND RECORDED APRIL 8, 1899, IN BOOK 57, PAGE 449 OF DEEDS.

ALSO EXCEPT THAT PORTION OF SAID LAND LYING EASTERLY OF THE WESTERLY LINE OF THE LAND DESCRIBED AS PARCEL 7B IN THE FINAL ORDER OF CONDEMNATION RECORDED FEBRUARY 19, 1969, IN BOOK 3446, PAGE 150, OFFICIAL RECORDS.

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ALSO EXCEPT AN UNDIVIDED ONE-HALF INTEREST IN AND TO ALL OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND, SUBJECT TO THE PROVISIONS CONTAINED IN DEED RECORDED DECEMBER 31, 1951, IN BOOK 1041, PAGE 16, OFFICIAL RECORDS, MORE PARTICULARLY SET FORTH THEREIN.

ALSO EXCEPT THE INTEREST OF SHELL OIL COMPANY, A DELAWARE CORPORATION, AS SET OUT IN THE DEED TO CALIFORNIA OIL PURIFICATION COMPANY, A CALIFORNIA CORPORATION, RECORDED JULY 3, 1973 AS DOCUMENT- NO. 47297, OFFICIAL RECORDS, WHICH RECITES IN PART AS FOLLOWS:

"EXCEPTING AND RESERVING, HOWEVER, UNTO GRANTOR HEREIN, ALL OF GRANTOR'S RIGHT, TITLE AND INTEREST IN AND TO ALL OIL, OTHER HYDROCARBONS, GAS AND ASSOCIATED SUBSTANCES, OTHER MINERALS AND MINERAL RIGHTS OF WHATEVER KIND OR NATURE IN, UNDER, RECOVERABLE FROM OR WHICH MAY BE PRODUCED FROM ANY OR ALL OF THE ABOVE DESCRIBED LAND, WITHOUT ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, BUT WITH THE PERPETUAL RIGHT TO EXPLORE FOR, MINE, DEVELOP AND REMOVE SAME BY MEANS OF WELLS OR MINING EQUIPMENT HAVING SURFACE LOCATIONS OUTSIDE OF THE EXTERIOR BOUNDARIES OF SAID LAND AND ENTERING SAID LAND BELOW A DEPTH OF 500 FEET FROM THE PRESENT NATURAL SURFACE THEREOF, TOGETHER WITH FULL RIGHTS TO DRILL INTO, THROUGH, PRODUCE FROM, OPERATE WITHIN AND/OR OTHERWISE USE THE SUBSURFACE OF SAID LAND BELOW SUCH 500 FOOT DEPTH OF, INCLUDING (WITHOUT LIMITATION) THE RIGHT TO WHIPSTOCK OR DIRECTIONALLY DRILL INTO OR THROUGH SAID SUBSURFACE. PROVIDED, HOWEVER, NOTHING HEREIN SHALL PRECLUDE THE GRANTEE, ITS SUCCESSORS AND/OR ASSIGNS FROM DRILLING WELLS FOR THE PURPOSE OF INJECTING DISPOSAL WASTE, SUBSTANCES BENEATH THE SURFACE OF SAID LAND AS LONG AS SAID RIGHT DOES NOT IMPAIR THE OIL, HYDROCARBON, GAS, MINERAL AND MINERAL RIGHTS RESERVED HEREIN."

PARCEL P-5 (PARCEL 5 of DOCUMENT No. 83-0017136)

PART OF SUBDIVISION 17 OF TRACT "B" OF THE RANCHO CANADA LARGA, AS PER MAP RECORDED IN BOOK 1, PAGE 202 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTERLINE OF NORDHOFF ROAD, AT THE NORTHEAST CORNER OF SAID SUBDIVISION 17; THENCE ALONG SAID CENTERLINE SOUTH 14° 50' EAST 465.96 FEET TO THE TRUE POINT OF BEGINNING, SAID POINT BEING AT THE SOUTHEAST CORNER OF THE LAND DESCRIBED IN THE DEED TO GEORGE W. BROWN, ET AL., RECORDED JANUARY 26, 1891, IN BOOK 32, PAGE 516 OF DEEDS; THENCE

1ST SOUTH 75° 10' WEST 1440.12 FEET ALONG THE SOUTH LINE OF LAND DESCRIBED IN DEED RECORDED IN BOOK 32, PAGE 516 OF DEEDS, TO THE SOUTHWEST CORNER THEREOF; THENCE,

2ND SOUTH 14°45' EAST 391.38 FEET TO A ROCK MOUNT; THENCE,

3RD EAST 487.08 FEET TO A ROCK MOUND IN THE MOUNT OF THE BARRANCA SAN JOSE; AND THENCE WITH MEANDERS OF AND UP THE CENTERLINE OF SAID BARRANCA BY THE FOLLOWING SEVENTEEN COURSES,

4TH NORTH 57° 30' EAST 138.60 FEET; THENCE,

5TH NORTH 38° 30' EAST 27.72 FEET; THENCE,

6TH SOUTH 87°00' EAST 47.52 FEET; THENCE,

7TH NORTH 59° 15' EAST 65.34 FEET; THENCE,

8TH NORTH 85° 30' EAST 46.86 FEET; THENCE,

9TH NORTH 57° 00' EAST 115.50 FEET; THENCE,

10TH NORTH 41° 45' EAST 32.34 FEET; THENCE,

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- 11TH NORTH 6° 45' EAST 25.08 FEET; THENCE,
 12TH NORTH 46° 00' EAST 58.74 FEET; THENCE,
 13TH NORTH 69° 00' EAST 22.44 FEET; THENCE,
 14TH NORTH 42°30' EAST 107.58 FEET; THENCE,
 15TH NORTH 52° 30' EAST 48.18 FEET; THENCE,
 16TH NORTH 32° 45' EAST 33.66 FEET; THENCE,
 17TH NORTH 61° 00' EAST 39.60 FEET; THENCE,
 18TH SOUTH 86° 30' EAST 77.88 FEET; THENCE,
 19TH NORTH 7° 00' EAST 80.52 FEET; THENCE,
 20TH NORTH 30° 45' EAST 126.72 FEET TO A POINT IN SAID CENTERLINE OF NORDHOFF ROAD; THENCE ALONG SAME,
 21ST NORTH 14°15' WEST 178.86 FEET TO THE POINT OF BEGINNING.

EXCEPT THAT PORTION THEREOF CONVEYED TO THE VENTURA AND OJAI VALLEY RAILROAD COMPANY, A CORPORATION, BY DEED RECORDED APRIL 8, 1899, ID BOOK 57, PAGE 498 OF DEEDS.

ALSO EXCEPT THAT PORTION OF SAID LAND LYING EASTERLY OF THE WESTERLY LINE OF THE LAND DESCRIBED AS PARCEL 7B IN THE FINAL ORDER OF CONDEMNATION RECORDED FEBRUARY 19, 1969, IN BOOK 3446, PAGE 150, OFFICIAL RECORDS.

ALSO EXCEPT AN UNDIVIDED 3/8TH INTEREST IN AND TO ALL OIL, GAS AND OTHER HYDROCARBON SUBSTANCES IN AND UNDER SAID LAND, SUBJECT TO THE PROVISIONS CONTAINED IN DEED RECORDED DECEMBER 31, 1951, IN BOOK 1041, PAGE 8, OFFICIAL RECORDS.

ALSO EXCEPT THE INTEREST OF SHELL OIL COMPANY, A DELAWARE CORPORATION, AS SET OUT IN THE DEED TO CALIFORNIA OIL PURIFICATION COMPANY, A CALIFORNIA CORPORATION, RECORDED JULY 3, 1973 AS DOCUMENT NO. 47297, OFFICIAL RECORDS, WHICH RECITES IN PART AS FOLLOWS:

"EXCEPTING AND RESERVING, HOWEVER, UNTO GRANTOR HEREIN, ALL OF GRANTOR'S RIGHT, TITLE AND INTEREST IN AND TO ALL OIL, OTHER HYDROCARBONS, GAS AND ASSOCIATED SUBSTANCES, OTHER MINERALS AND MINERAL RIGHTS OF WHATEVER KIND OR NATURE IN, UNDER, RECOVERABLE FROM OR WHICH MAY BE PRODUCED FROM ANY OR ALL OF THE ABOVE DESCRIBED LAND, WITHOUT ANY RIGHT TO ENTER UPON THE SURFACE OF SAID LAND, BUT WITH THE PERPETUAL RIGHT TO EXPLORE FOR, MINE, DEVELOP AND REMOVE SAME BY MEANS OF WELLS OR MINING EQUIPMENT HAVING SURFACE LOCATIONS OUTSIDE OF THE EXTERIOR BOUNDARIES OF SAID LAND AND ENTERING SAID LAND BELOW A DEPTH OF 500 FEET FROM THE PRESENT NATURAL SURFACE THEREOF, TOGETHER WITH FULL RIGHTS TO DRILL INTO, THROUGH, PRODUCE FROM, OPERATE WITHIN AND/OR OTHERWISE USE THE SUBSURFACE OF SAID LAND BELOW SUCH 500 FOOT DEPTH OF, INCLUDING (WITHOUT LIMITATION) THE RIGHT TO WHIPSTOCK OR DIRECTIONALLY DRILL INTO OR THROUGH SAID SUBSURFACE. PROVIDED, HOWEVER, NOTHING HEREIN SHALL PRECLUDE THE GRANTEE, ITS SUCCESSORS AND/OR ASSIGNS FROM DRILLING WELLS FOR THE PURPOSE OF INJECTING DISPOSAL OF WASTE, SUBSTANCES BENEATH THE SURFACE OF SAID LAND AS LONG AS SAID RIGHT DOES NOT IMPAIR THE OIL, HYDROCARBON, GAS, MINERAL AND MINERAL RIGHTS RESERVED HEREIN."

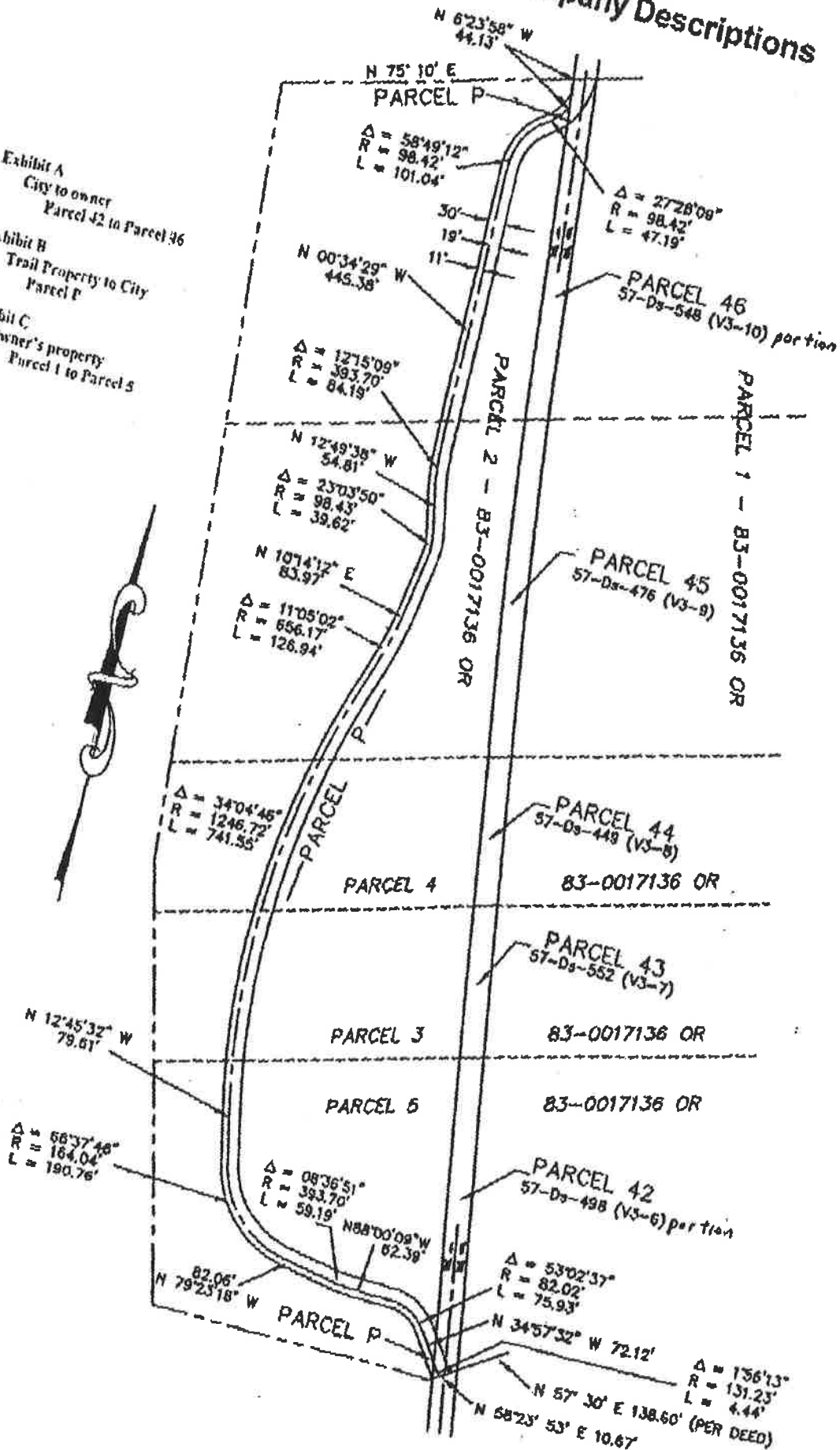
Transcribed by:
W.H.Holdings, Inc.

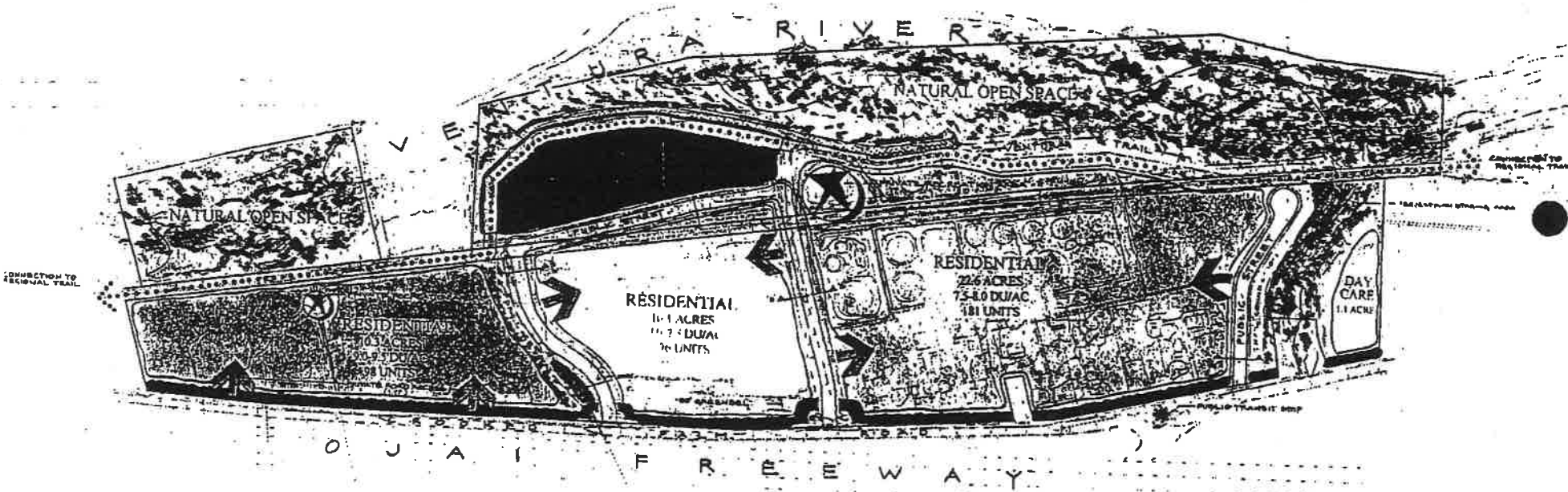

William L. Meagher PLS



Plat to Accompany Descriptions

- Exhibit A
City to owner
Parcel 42 to Parcel 36
- Exhibit B
Trail Property to City
Parcel P
- Exhibit C
Owner's property
Parcel 1 to Parcel 5





TABULATION

USE	ACRES	UNITS	PER ACRE
I RESIDENTIAL	10.1	70	6.9
II RESIDENTIAL	22.6	181	8.0
III PUBLIC PARK	6.1	0	0
IV DAY CARE	1.1	1	0.9
TOTAL	44.9	181	4.0

VENTURA AVENUE



PUBLIC STREET - SECTION "A"



PUBLIC STREET - SECTION "B"



VENTURA TRAIL - TYPICAL SECTION

CONCEPTUAL LAND USE PLAN
RIVER VIEW VILLAGES

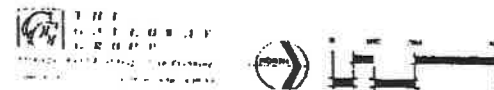
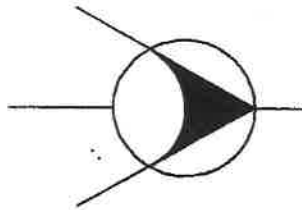
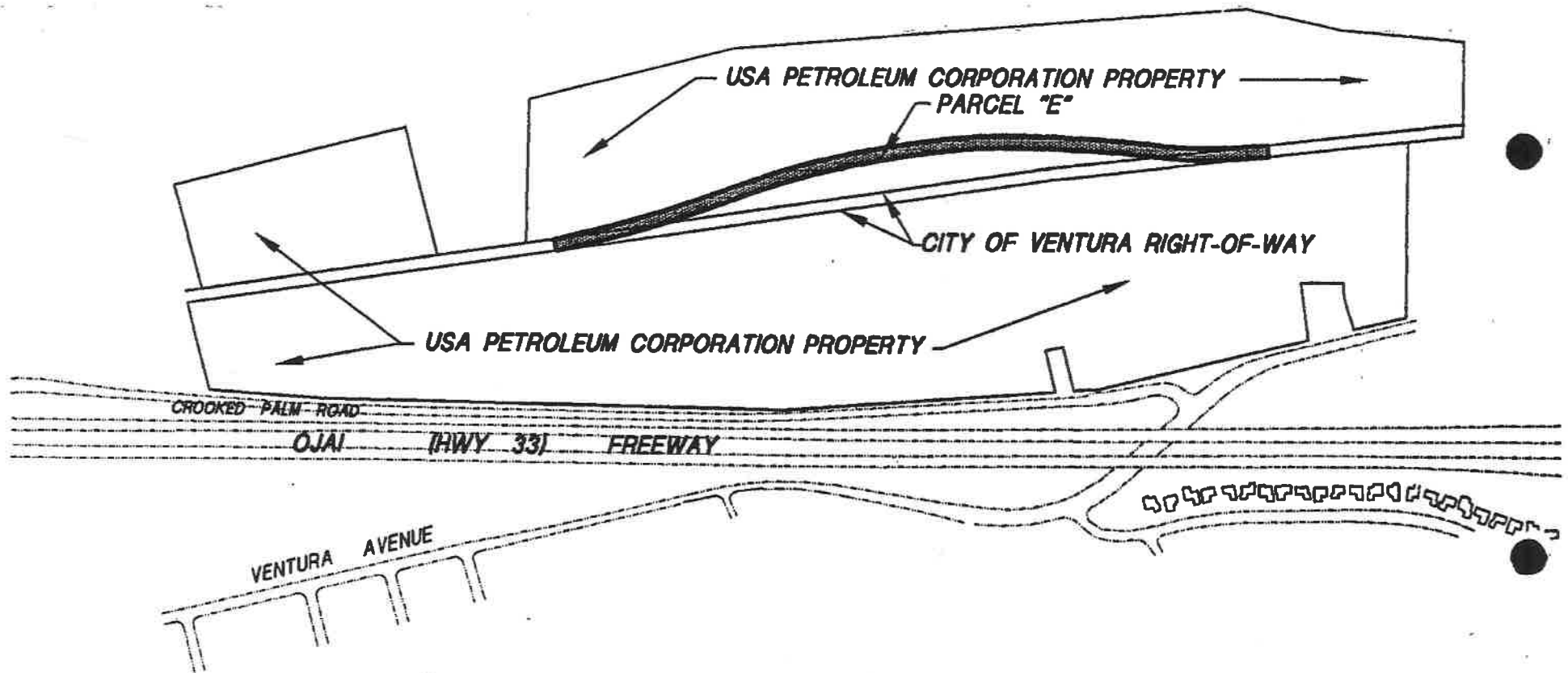


EXHIBIT "D"

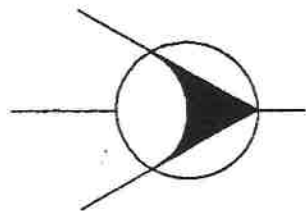
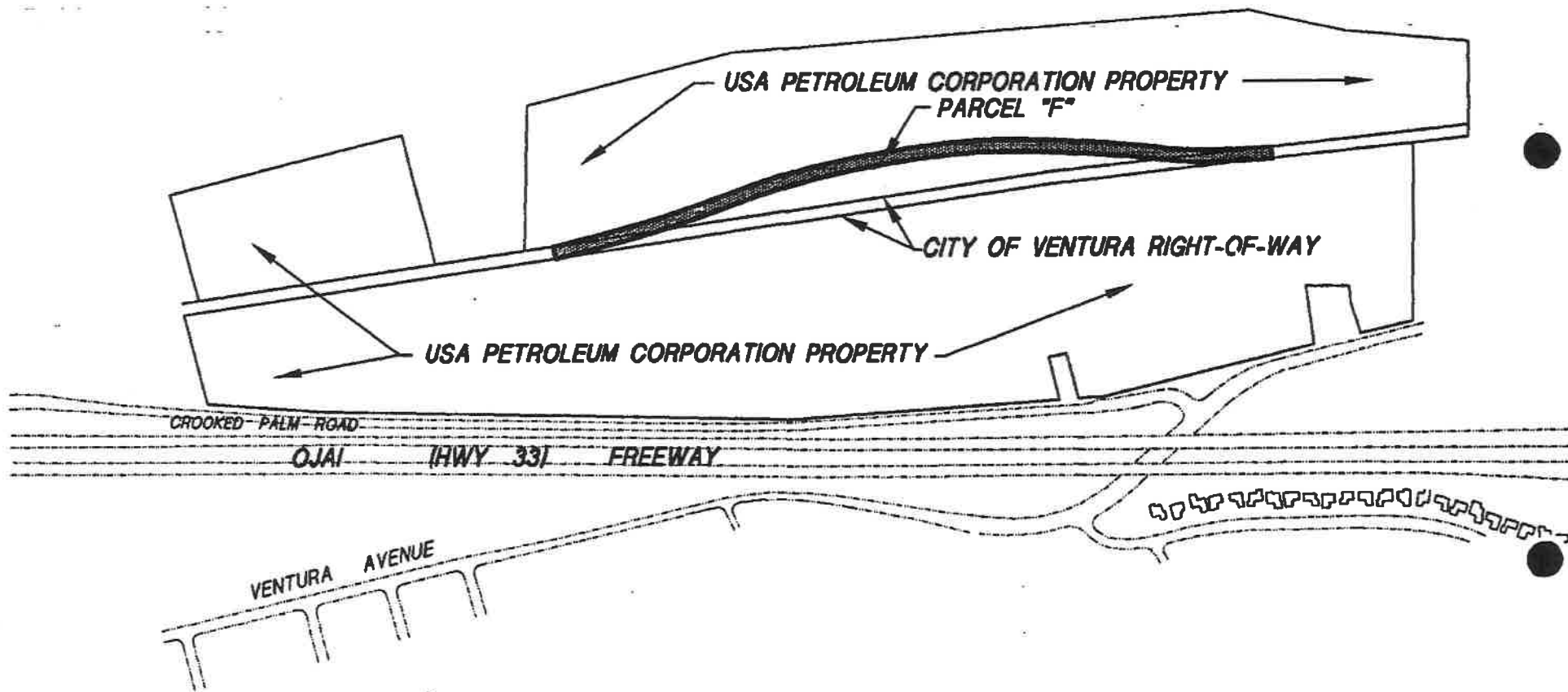
OWNER'S FUTURE IMPROVEMENT PROJECT



NO SCALE

EXHIBIT "E"

OWNER'S RIGHT-OF-WAY MEETING RAILWAY
REPLACEMENT CRITERIA



NO SCALE

EXHIBIT "F"

OWNER'S RIGHT-OF-WAY FOR PERMANENT TRAIL

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Los Angeles
On May 28, 1998 before me, Michelle M. Corey, Notary Public
Date Name and Title of Officer (e.g., Jane Doe, Notary Public)
personally appeared John J. Moller
Name(s) of Signer(s)

personally known to me - OR - proved to me on the basis of satisfactory evidence to be the person ^(s) whose name ~~is~~ ^{is/are} subscribed to the within instrument and acknowledged to me that he/~~she~~ ^{they} executed the same in his/~~her~~ ^{their} authorized capacity ^(ies); and that by his/~~her~~ ^{their} signature ^(s) on the instrument the person ^(s), or the entity upon behalf of which the person ^(s) acted, executed the instrument.



WITNESS my hand and official seal.

Michelle M. Corey
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

- Individual
- Corporate Officer
Title(s): _____
- Partner — Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT
OF SIGNER
Top of thumb here

Signer Is Representing:

Signer's Name: _____

- Individual
- Corporate Officer
Title(s): _____
- Partner — Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT
OF SIGNER
Top of thumb here

Signer Is Representing:

City of San Buenaventura
CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by RECIPROCAL EASEMENT AGREEMENT dated October 6, 1998 from USA PETROLEUM CORPORATION, to the CITY OF SAN BUENAVENTURA, a Municipal Corporation, is hereby accepted by the City Manager on behalf of the City of San Buenaventura pursuant to authority conferred by Resolution No. 97-44 of the Council adopted on June 2, 1997, and recorded on June 27, 1997, as Document No. 97-080677, in the Office of the County Recorder of Ventura County. The Grantee consents to recordation thereof by its duly authorized officer.

Dated this 12th day of October, 1998.

CITY OF SAN BUENAVENTURA,
a Municipal Corporation

By *Donna Landeros*
Donna Landeros
City Manager

ATTEST:

Barbara J. [Signature]
City Clerk