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PRELIMINARY ENVIRONMENTAL ASSESSMENT NEW AGRICULTURAL EDUCATION CENTER AND CAREER TECHNICAL EDUCATION CENTER, 1280 FOUNDERS AVENUE, SANTA MARIA, SANTA BARBARA COUNTY, CALIFORNIA

Prepared for:
SANTA MARIA JOINT UNION HIGH SCHOOL DISTRICT

March 2015

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ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

March 9, 2015
Project Number: 1401-0542

California Department of Toxic Substances Control
School Property Evaluation and Cleanup Division
8800 Cal Center Drive
Sacramento, California 95826-3200

Attention: Mr. Jose Luevano, Project Manager

Subject: Preliminary Environmental Assessment Report, New Agricultural Education Center and Career Technical Education Center, 1280 Founders Avenue, Santa Maria, Santa Barbara County, California (Site Code 304651)

Dear Mr. Luevano:

Padre Associates, Inc. (Padre), on behalf of the Santa Maria Joint Union High School District (SMJUHSD), has prepared this Final Preliminary Environmental Assessment (PEA) report for a new Agricultural Education Center and Career Technical Education Center located at 1280 Founders Avenue in Santa Maria, Santa Barbara County, California.

The PEA has been conducted in accordance with the Padre document titled, *Preliminary Environmental Assessment Work Plan, New Agricultural Education Center and Career Technical Education Center, 1280 Founders Avenue, Santa Maria, Santa Barbara County, California,* dated October 2014. The PEA Work Plan received approval by the California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) in a letter to the SMJUHSD dated November 3, 2014.

The PEA results report were made available to the public for review and comment pursuant to Option A of the California Education Code (CEC) §17213.1.a (6). If you have any questions or comments please contact the undersigned at (916) 333-5920, Ext. 24.

Sincerely,
PADRE ASSOCIATES, INC.

Alan Churchill
Project Geologist

PROFESSIONAL GEOLOGIST
JEROME K. SUMMERLIN
EG NO. 1950
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

Alan J. Klein, R.E.P.A., C.P.E.S.C., C.E.M.
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Principal

CC: Gary Wuitshick, Santa Maria Joint Union High School District
John Dominguez, School Site Solutions, Inc.

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EXECUTIVE SUMMARY

Padre Associates, Inc. (Padre), on behalf of the Santa Maria Joint Union High School District (SMJUHSD), has prepared this Preliminary Environmental Assessment (PEA) for a new Agricultural Education Center and Career Technical Education Center located at 1280 Founders Avenue, Santa Maria, Santa Barbara County, California (Project Site).

The PEA was completed in accordance with the Padre document titled, *Preliminary Environmental Assessment Work Plan, new Agricultural Education Center and Career Technical Education Center, 1280 Founder Avenue, Santa Maria, Santa Barbara County, California*, and dated October 2014.

The Project Site is currently used for agricultural crop production (strawberries) and has been since approximately 2006. Prior to 2006 the Project Site was used for cattle grazing. There is a plugged and abandoned former oil-gas well located at the Project Site. Reportedly, this well produced oil for only four months (January-April) in 1978. The well was then reportedly completed as a water/steam injection well that was reportedly in operation from 1978 to 1992. The well was abandoned in October 2000. There is no record of well sump removal activity conducted at the location of this well.

The Project Site is bordered to the north by agricultural property currently used for the production of blackberries; to the east by agricultural property currently used for the production of strawberries, beyond which is the Greka Oil and Gas Company oil field facility consisting of several oil-gas wells, associated piping, and aboveground storage tanks; to the south by the Santa Maria Elk's Rodeo facility; and to the west by undeveloped/grazing land, beyond which is the Polished Pet Grooming and Kennel facility (commercial business), and U.S. Highway 101.

The purpose of this PEA is to establish whether a release or potential release of hazardous substances, which poses a threat to human health, exists at the Project Site. The conceptual site model indicated that exposure to soil, groundwater, and/or soil gas from the identified chemicals of potential concern (COPCs) may be possible along the inhalation, ingestion, and dermal contact pathways.

The results of the PEA screening level risk assessment indicate that soil impacted by the chlorinated pesticides DDE, DDT, and dieldrin does not provide an excess cancer risk greater than 1 in 1,000,000 ($>10^{-6}$). The total risk along each exposure pathway for COPCs identified in surface soils at the Project Site was estimated to be 1.8×10^{-8}. Additionally, the total health hazard from OCPs identified in surface soils at the Project Site was estimated to be 0.0002, which does not present a significant health hazard (i.e., >1).

Arsenic concentrations ranged from 0.85 to 2.2 milligrams per kilogram (mg/kg) in surface soil samples collected throughout the Project Site. The concentrations were evaluated both graphically and statistically, and determined to be representative of ambient concentrations. Therefore, arsenic is not considered a COPC.

Lead concentrations ranged from less than 1.2 to 3.2 mg/kg in surface soil samples collected from the detention basin and subsurface soil samples collected from the approximate location of the former drilling sump. Because lead results for the Project Site are below concentrations of 80 mg/kg, which represents DTSC's school site risk management screening level, lead is not considered a COPC.

Based on the soil gas results, the cumulative increased cancer risk at the Project Site from shallow soil vapor is estimated to be 1.7×10^{-7}, which does not provide an excess cancer risk greater than 1 in 1,000,000 ($>10^{-6}$) for the Project Site. The cumulative hazard is estimated to be 0.22, which does not provide a significant health hazard (>1).

The Project Site will be provided with potable water through the local water purveyor; however the school site will utilize a nearby, offsite water well for irrigation purposes. A groundwater sample was collected and chemically analyzed for the presence of total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), organochlorine pesticides (OCPs), metals, and nitrates. None of these COPCs were reported at concentrations exceeding their respective California MCLs. Therefore, further assessment and/or remediation regarding groundwater beneath the Project Site is not necessary at this time.

The Project Site will continue to be utilized for growing strawberries until school construction activities commence in April 2016. The quantities and types of agricultural chemicals applied to the Project Site are not anticipated to change. However, if the type of agricultural chemicals does change, the chemical use documentation will be obtained and preserved for each year of agricultural farming and provided to DTSC at least three months prior to construction activities for review and evaluation.

The PEA screening level risk assessment indicates that the Project Site has not been significantly impacted by agricultural practices or the presence of a former oil well and drilling sump. Therefore, Padre recommends the issuance of a "No Further Action" designation from the DTSC regarding the proposed new school site.

1.0 INTRODUCTION

This document presents the results of the Preliminary Environmental Assessment (PEA) that was completed by Padre Associates, Inc. (Padre) on behalf of the Santa Maria Joint Union High School District (SMJUHSD) for a new Agricultural Education Center and Career Technical Education Center located at 1280 Founders Avenue, Santa Maria, Santa Barbara County, California (Project Site). The Project Site is identified on Plate 1-1: Site Location and Plate 1-2: Site Plan.

The Project Site consists of approximately 25.32-acres, and the proposed high school education centers have a master planned capacity of approximately 400 to 500 students, which equates to approximately 14 to 17 classrooms. Public water and sewer will be provided to the school site by the City of Santa Maria. Padre understands that irrigation water will be provided by a nearby (off-site) water well under an existing agreement to share irrigation water.

The PEA has been conducted in accordance with the Padre document titled *Preliminary Environmental Assessment Work Plan, new Agricultural Education Center and Career Technical Education Center, 1280 Founder Avenue, Santa Maria, Santa Barbara County, California*, dated October 2014. The PEA Work Plan received approval of the California Environmental Protection Agency (CalEPA) Department of Toxic Substance Control (DTSC) in a letter dated November 3, 2014. A copy of DTSC's letter is presented in **Appendix A**.

This PEA Report will be made available to the public for review and comment pursuant to Option A of the California Education Code (CEC) §17213.1.a (6). A copy of the newspaper notice and proof of publication is presented in **Appendix B**.

1.1 PURPOSE

California Department of Education statutes (Assembly Bill 387, Senate Bill 162 and Assembly Bill 2644) require the CalEPA/DTSC to review environmental assessments for proposed new school sites and/or new construction school expansion projects. The role of the DTSC is to ensure that selected properties do not contain hazardous substances that are a threat to public health and the environment.

1.2 OBJECTIVES

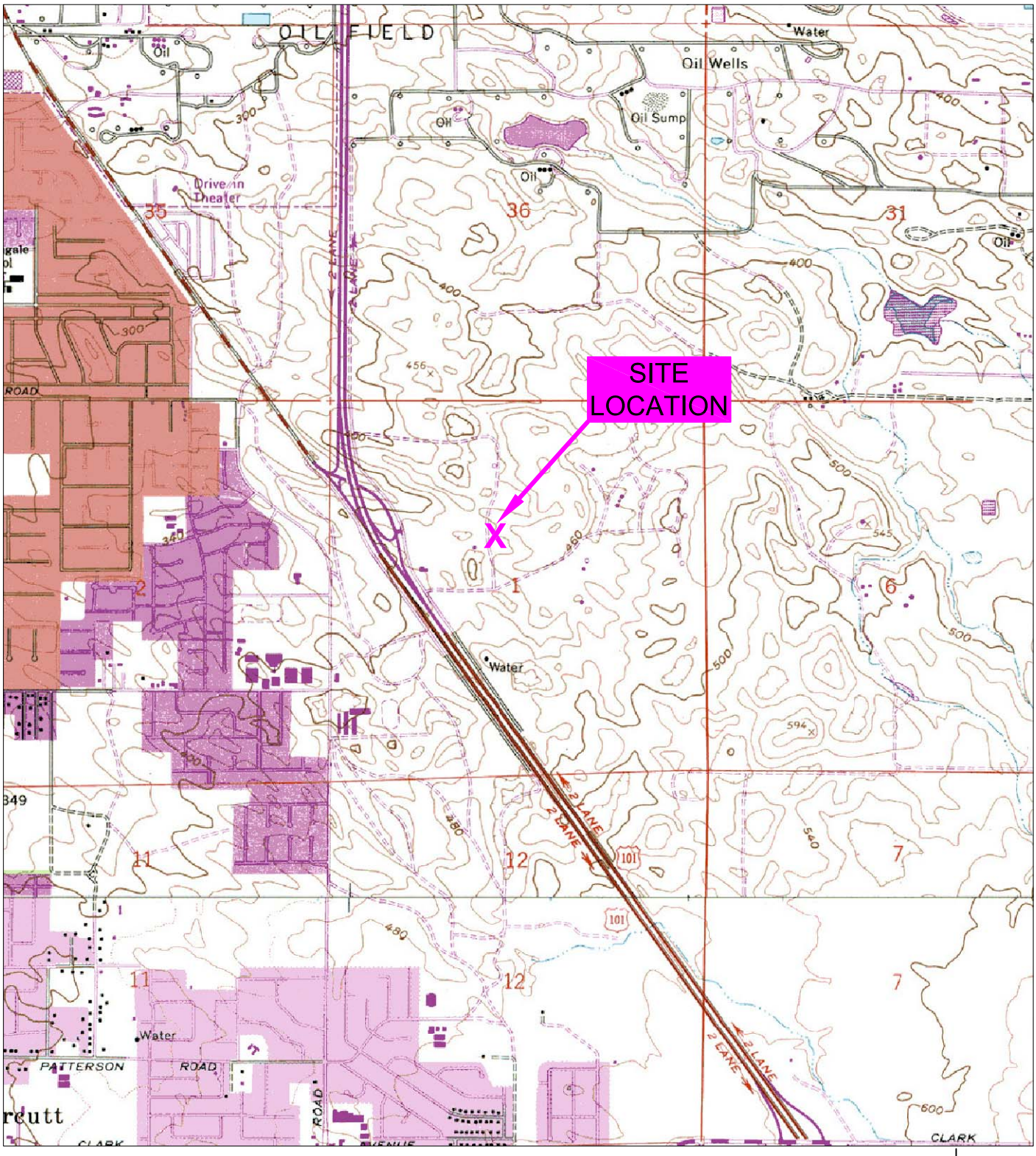
Assembly Bill 387, Senate Bill 162, and Assembly Bill 2644 amended the California Education Code environmental review process for the proposed acquisition and construction of school properties where state funding is utilized. These three statutes require DTSC to assume responsibility for evaluating environmental assessment activities for proposed school sites that will receive state funding for acquisition and/or new construction. Properties with the potential to contain hazardous materials must be evaluated under the standard Preliminary Environmental Assessment (PEA) process.

The overall objectives of the PEA include:

- Evaluating historical information for indications of the past use, storage, disposal, or release of hazardous materials at the Project Site;
- Establishing, through a field sampling and chemical analyses program, the nature and extent of hazardous materials that may be present in soil, surface water and/or groundwater at the Project Site; and
- Estimating the potential threat to public health and/or the environment posed by hazardous constituents at the Project Site using a residential land-use scenario.

Based on information developed during the course of the PEA and the conservative human and ecological risk evaluation using the DTSC's PEA Guidance Manual (January 1994 (Interim Final – Revised October 2013), DTSC will then make an informed decision regarding potential risks posed by the Project Site.

Possible outcomes of the PEA decision include the issuance of a "No Further Action" finding if the Project Site is not found to be significantly impacted and risks to human health and the environment are found to be within acceptable levels based on the conservative screening level risk assessment; the need for further assessment through the Remedial Investigation/ Feasibility Study (RI/FS) process if the Project Site is found to be significantly impacted by hazardous substances release(s); the need to perform a Removal Action if localized impacts by hazardous substances release(s) are found; and abandonment of the Project Site as a potential school site and pursuit of alternative sites.



U.S.G.S. 7.5 MINUTE QUADRANGLE
SANTA MARIA, CA 1959 (PHOTOREVISED 1982)

0 2000'
SCALE

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SANTA MARIA JOINT UNION HIGH S.D.
1280 FOUNDERS AVENUE
SANTA MARIA, CALIFORNIA

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PLATE 1-1

SITE LOCATION

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SANTA MARIA, CALIFORNIA

PROJECT NO.	DATE:	DR. BY:	APP. BY:
1401-0542	1/7/15	AC	AJK

PLATE 1-2

SITE PLAN

2.0 BACKGROUND

Padre completed a Phase I Environmental Site Assessment (ESA) for the Project Site dated May 30, 2014. Two bound copies and an e-copy of the Phase I ESA report was previously submitted to DTSC.

The Project Site is currently used for agricultural crop production (strawberries) and has been since approximately 2006. Prior to 2006 the Project Site was used for cattle grazing. There is one plugged and abandoned former oil-gas well located at the Project Site. Reportedly, this well produced oil for only four months (January-April) in 1978. The well was then reportedly completed as a water/steam injection well that was in operation from 1978 to 1992. The well was abandoned in October 2000. There is no record of well sump removal activity conducted at the location of this well.

According to the Santa Barbara County Air Pollution Control District there are no permitted facilities, which may reasonably be anticipated to emit hazardous air emissions were identified within a ¼-mile radius of the Project Site.

According to the U.S. DOT PHMSA website (www.npms.phmsa.dot.gov), there are no hazardous liquid pipelines and/or natural gas transmission pipelines located within 1,500 feet of the Project Site. According to Greka Oil and Gas there are no natural gas pipelines that operate at >80 pounds per square inch gauge (psig) located within 1,500 feet of the Project Site. There is a new 4-inch diameter oil pipeline located along the Project Site's southern property boundary. This pipeline has never been in use due to permitting issues; however there is a potential that it may be used in the future.

A review of the Environmental Data Resources (EDR) Radius Map Report did not identify any facilities in the database records search located within a one-mile radius of the Project Site that present a recognized environmental concern (REC) to the Project Site.

Based on the current agricultural use, and historic oil-gas well activities at the Project Site and surrounding properties, the completion of a PEA was proposed for the school site.

3.0 PROPERTY DESCRIPTION AND CONTACTS

3.1 SITE LOCATION AND ASSESSOR'S PARCEL NUMBER

The Project Site consists of approximately 25.32-acres of agricultural use property, which is identified by the County of Santa Barbara as Assessor's Parcel Number (APN): 107-150-013. A copy of the parcel map was presented in the PEA Workplan.

3.2 DESIGNATED CONTACT PERSON AND MAILING ADDRESS

Mr. Gary Wuitschick
Director, Support Services
Santa Maria Joint Union High School District
2560 Skyway Drive
Santa Maria, California 93455
Phone No. (805) 922-4573

3.3 PROPERTY USE

The Project Site is currently used for agricultural crop production (strawberries), and has been since approximately 2006. Prior to 2006 the Project Site was used for cattle grazing. There is one plugged and abandoned former oil-gas well located at the Project Site. Reportedly, this well produced oil for only four months (January-April) in 1978. The well was then reportedly completed as a water/steam injection well that was in operation from 1978 to 1992. The well was abandoned in 2001; however, there is no record indicating that the associated well sump was removed. Information regarding the operation of the abandoned well is presented in Section 3.9 of this report.

3.4 ENVIROSTOR DATABASE NUMBER

The EnviroStor database number for the Project Site is 60002035.

3.5 TOWNSHIP, RANGE, AND SECTION

The Project Site is located in Section 1, Township 9 North, Range 34 West, of the Santa Maria Quadrangle, California USGS 7½-Minute Series, Topographic Map, 1959 (photorevised 1982). Approximate latitude and longitude near the center of the Project Site are identified to be:

- Latitude (North) 34° 53' 20.7594" (34.8891)
- Longitude (West) -120° 24' 39.2394" (-120.4109)

3.6 SITE MAPS

A site location map is included as **Plate 1-1** and a site plan map is included as **Plate 1-2.**

3.7 PHYSICAL SETTING

Based on a review of the USGS 7.5-minute series topographic map Santa Maria Quadrangle, California, 1959 (photorevised 1982), the Project Site lies at an approximate elevation of 450 feet above mean sea level (msl) near the center of the Project Site. The overall topographic gradient for the surrounding area is to the northwest. The Project Site is undulating in nature, with storm water runoff generally directed toward a drainage basin located in the southwest corner of the Project Site. Bradley Canyon Creek is located approximately 0.9 miles east of the Project Site and runs in a south-north direction. The Santa Maria River is located approximately 4.7 miles north of the Project Site and runs in an east-west direction. The Santa Maria River is formed at the confluence of the Sisquoc River and Cuyama River, just east of the City of Santa Maria, and flows approximately 24.4 miles where it empties into the Pacific Ocean, near the City of Guadalupe.

The Project Site is situated within the Santa Maria Geologic Basin (Basin), within the southern portion of the Coast Range Geomorphic Province of California. The province is characterized by northwest-trending mountains and valleys located between the Great Valley of California and the Pacific Ocean. The Basin is bounded by the Nipomo Mesa to the north; the Temetatte Range of the Sierra Madre Mountains to the east; the Orcutt upland to the south, and the Pacific Ocean to the west (Norris & Webb, 1975). Within the Basin is the Santa Maria Valley, which is bounded to the north by the San Rafael Mountains, and to the south by the Casmalia and Solomon Hills. The Santa Maria Valley occupies the northwestern part of Santa Barbara County and the extreme southwestern part of San Luis Obispo County. This area comprises the alluvial plans and adjoining terraces, foothills, and mountain slopes of the Santa Maria Valley and lower valley of the Sisquoc River. The Santa Maria River is formed by the convergence of the Cuyama and the Sisquoc Rivers at Fulger Point and flows westward across a broad alluvial plain, called the Santa Maria Plain to the sand dunes and ultimately the Pacific Ocean, a distance of approximately 20 miles. The Santa Maria basin is a significant hydrocarbon (i.e., oil and gas) producing coastal and off-shore basin in California (USGS Water-Supply Paper 1000, 1951).

According to the California Geological Survey Division of Mines and Geology, Geologic Map of the Santa Maria Sheet, 1:250,000 (1959), the Project Site is underlain by Quaternary (Recent) Dune Sand (Qs). The Dibble Geological Foundation Map #DF-51, Geologic Map of Santa Maria and Twitchell Dam Quadrangles (1994), identifies the Project Site is underlain by Quaternary Older Alluvium, wind deposited sand (Qos). The USDA Soil Survey of Northern Santa Barbara Area, California, 1972, identifies the native soil type at the Project Site as Oceano Sand, 2 to 15 percent slopes (OcD). This excessively drained sandy soil formed in old coastal sand dunes. This soil is gently sloping to strongly sloping. It occurs on terrace-like sites in widely scattered areas within 20 miles of the coast. Permeability is rapid. Surface runoff is slow to medium, and the hazard of water erosion is moderate. The hazard of soil blowing is very high. Fertility is considered very low.

The Santa Maria River Valley Groundwater Basin consists of the upper most permeable portion of the Santa Maria Geologic Basin, consisting of unconsolidated plio-pleistocene alluvial

deposits. Groundwater flows due west to west-northwest with a large gradient at the origin of the Santa Maria River, becoming more gently sloped as it approaches the Pacific Ocean. Groundwater elevation decreases from 280 feet msl at the eastern portion of the valley to 40 feet msl at the City of Guadalupe, which is located west of the City of Santa Maria (Luhdorff and Scalmanini, 2000). A review of the State Water Resources Control Board's GeoTracker website (http://geotracker.waterboards.ca.gov), identified groundwater assessment activities that were conducted for a facility located approximately 1.3 miles northwest of the Project Site. Reportedly the depth to first groundwater at the referenced site is approximately 45- to 50-feet below ground surface (bgs) and flows in a northwest direction. The elevation of the referenced site (~280 feet above msl) is much lower than the Project Site (~450 feet above msl). Therefore, the depth to groundwater in the vicinity of the Project Site is anticipated to be greater than 50-feet bgs. Additionally, Padre completed groundwater assessment activities at a facility located approximately 1.25 miles north of the Project Site. The depth to groundwater at this facility was recorded at approximately 85- to 90-feet bgs at a site with a surface elevation of approximately 380 feet above msl.

3.8 SURROUNDING PROPERTY LAND USE

The Project Site is bordered to the north by agricultural property currently used for the production of blackberries; to the east by agricultural property currently used for the production of strawberries, beyond which is the Greka Oil and Gas Company oil field facility consisting of several oil-gas wells, associated piping, and aboveground storage tanks; to the south by the Santa Maria Elk's Rodeo facility; and to the west by undeveloped/grazing land, beyond which is the Polished Pet Grooming and Kennel facility (commercial business), and U.S. Highway 101.

3.9 DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES (DOGGR)

The California Division of Oil, Gas, and Geothermal Resources (DOGGR) oversees the drilling, operation, maintenance, and plugging and abandonment of oil wells, natural gas wells, and geothermal wells. The DOGGR regulatory program emphasizes the wise development of oil, natural gas, and geothermal resources in the state of California through sound engineering practices that protect the environment, prevent pollution, and ensure public safety. Padre reviewed the available DOGGR online mapping system for the Project Site at the California Department of Conservation webpage (http://www.conservation.ca.gov/dog).

According to the DOGGR online database and interactive map, there is one plugged and abandoned former oil-gas well located at the Project Site. This well is referenced as "Shell-Standard Blankenburg 1", American Petroleum Institute (API) number 08320574. Reportedly, this well produced oil for a period of only four months (January-April) in 1978. The well was then completed as a water-flood injection well associated with oil and natural gas production activities, and was in operation from 1978 to 1992. Based on the distance of the this well from other wells and a review of aerial photographs, the most likely scenario is that produced water was transported off-site by truck and transferred to holding tanks prior to well injection. Reportedly the injection zone for the subject well was confined to formations below a depth of 5,997 feet (> 1 mile). Surface plugging of the well was completed on October 21, 2000; a site

inspection by the DOGGR was made on May 13, 2002; and the final report of well abandonment is dated July 22, 2005. Oil-gas well information obtained from DOGGR was presented in the PEA Workplan.

Injection wells are regulated by the DOGGR under the provisions of the state Public Resources Code and the federal Safe Drinking Water Act. The majority of injection fluid consists of salt water and fresh water that is produced during the course of oil and gas extraction (produced water). Current state and federal regulations allow non-hazardous fluids produced from oil or gas wells and several other non-hazardous fluids associated with the production process to be injected. These other fluids include diatomaceous earth-filter backwash, thermally enhanced oil recovery cogeneration plant fluid, water-softener regeneration brine, air scrubber waste, drilling mud filtrate, naturally occurring radioactive materials (NORM), slurrified crude-oil, saturated soils, and tank bottoms (DOGGR, Injection Wells, 2013).

Padre submitted a Well Review Program Application to DOGGR for the abandoned well located at the Project Site. DOGGR submitted a response letter dated October 16, 2014. According to DOGGR plugging of the subject well meets current standards for abandonment. In the DOGGR *Well Review Program Introduction and Application*, DOGGR recommends maintaining rig access to the well and not building over, or in close proximity to the well. Close proximity is defined as being no less than ten feet from a building structure on two adjacent sides, with the third side being no less than 50-feet, and the fourth side shall remain open to the well for potential re-abandonment operations. A copy of the DOGGR letter was presented in the PEA Workplan.

3.10 OFF-SITE WATER WELL

According to Mr. Gary Wuitschick with the SMJUHSD, an existing off-site water production well located approximately 700-feet east northeast of the Project Site will provide water during the construction phase of the school project, and irrigation water post-construction. There is an existing agreement to share well water, and easements for a water transmission pipeline and road access dated December 4, 2012. According to the California Department of Water Resources (DWR) Well Completion Report No.1098079, the water well was completed on October 1, 2006 at a depth of 800-feet, and produces approximately 1,200 gallons per minute (gpm). A copy of the well completion report and a map referenced as Exhibit B, identifying the location of the 100-ft by 100-ft well site and private access and utility easement was presented in the PEA Workplan.

3.11 SANTA BARBARA COUNTY AGRICULTURAL COMMISSIONER'S OFFICE

Padre reviewed the Santa Barbara County Agricultural Commissioner's Office online database for available pesticide use reports (PURs). The Project Site represents a portion of the farming operation referred to as Ranch 05. The listed commodity is "Strawberries", and there are PURs for the years 2009 through 2013. There are no PURs for the Project Site for the years 2006, 2007, and 2008. The majority of the chemicals listed for application to the ground

are fungicides, miticides and herbicides. Based on Padre's review of the PURs, no additional soil analyses were recommended for the PEA. Copies of the available PURs were presented in the PEA Workplan.

4.0 CONCEPTUAL SITE MODEL

The conceptual site model is the tool used to identify the complete exposure pathways for the screening level evaluation of chronic health risks. The objective of this PEA is to evaluate the Project Site for an unrestricted land use scenario. The conceptual site model for the Project Site was developed based on the following assumptions:

- The Project Site has been used for agricultural crop production since 2006. Therefore sampling for organochlorine pesticides (OCPs) and arsenic in surface soil was performed;

- There is one plugged and abandoned oil-gas well (Shell-Standard Blankenburg #1) located at the Project Site. The well was drilled in 1973 and abandoned in 2001. A soil gas survey will be conducted in the vicinity of the abandoned well. COPCs include: methane, H_2S, VOCs, and TPH;

- There is no record of any well sump removal activity at the location of the Project Site abandoned oil-gas well. Therefore, a well sump assessment was performed. Soil samples were collected at the location of sump and chemically analyzed for TPH, metals, PCBs, VOCs, SVOCs, and CO_2.

- The proposed school site will use an off-site water well for irrigation. Therefore, groundwater samples were collected from the well head and chemically analyzed for TPH, VOCs, OCPs, CAM 17 metals, and nitrates.

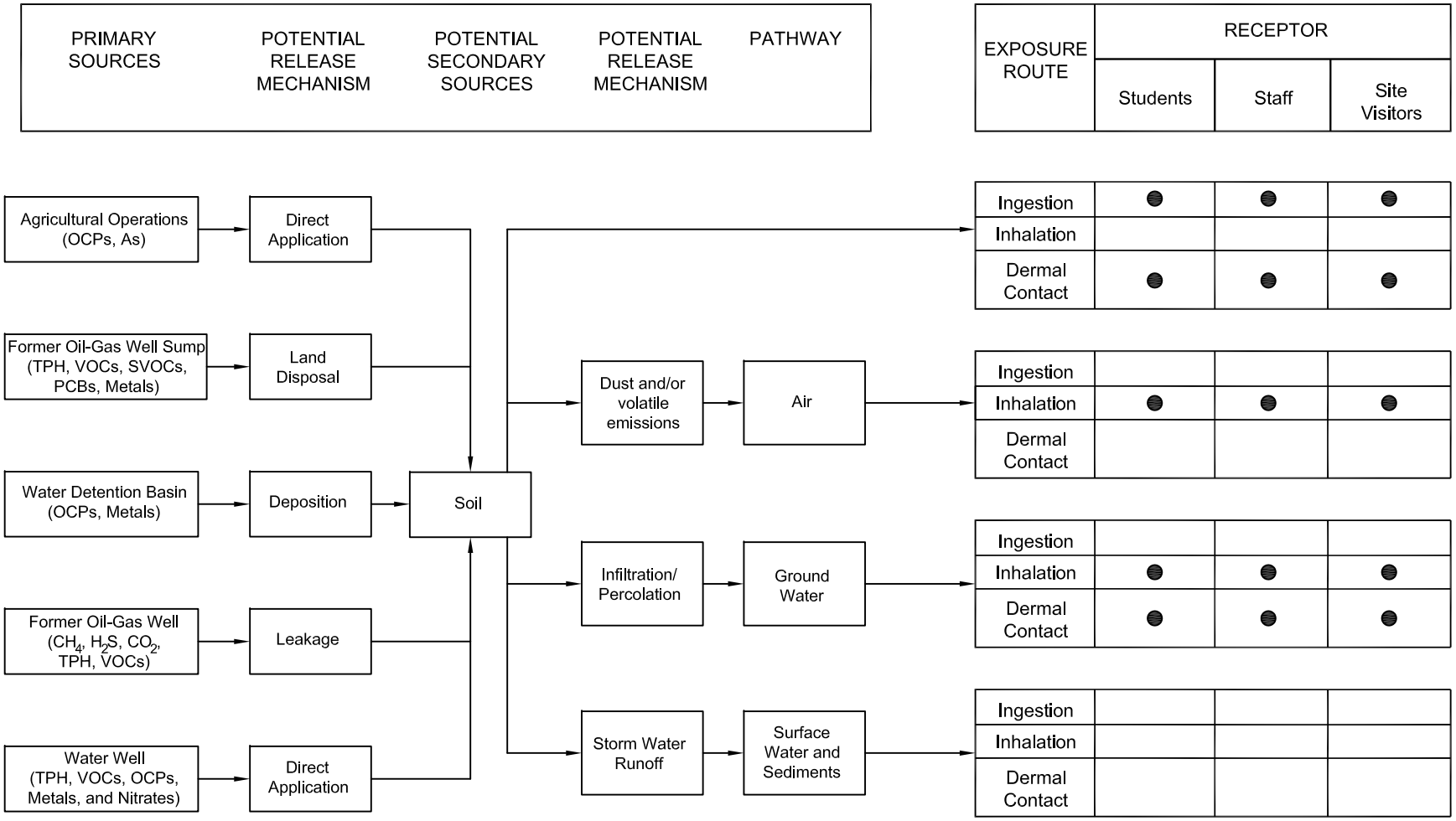
- The Project Site is not located in a drainage pattern within 10 miles of mapped ultramafic rock outcrops. Therefore sampling for naturally occurring asbestos (NOA) in soil was not performed;

- No electrical transformers, either pad-mounted and/or pole-mounted (pre-1979) were identified on the Project Site however, the suspected sump area may have contained drilling mud. Therefore sampling of polychlorinated biphenyls (PCBs) in soil was performed;

- Surface water was not observed during Padre's site reconnaissance. Therefore, exposure to surface water is not considered a complete exposure pathway; and

- Ingestion of vegetation and animals was not considered a complete exposure pathway because of the proposed use as a school site.

A site conceptual model is presented on **Plate 4-1**.



NOTE: This Conceptual Site Model represents a residential scenario, as required for school sites.

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PLATE 4-1

CONCEPTUAL SITE MODEL

5.0 PEA ASSESSMENT

5.1 BACKGROUND

On November 11 and 12, 2014 Padre performed soil, soil gas, and groundwater sample collection activities at the Project Site in accordance with the DTSC-approved PEA work plan prepared by Padre dated November 3, 2014.

5.2 SAMPLE LOCATIONS

The sample collection locations are presented on **Plates 5-1** through **5-3**. The latitudinal and longitudinal coordinates of each sample location were identified and recorded using a Trimble GeoXT handheld electronic navigating device operating with the United States Government's Global Positioning Satellite system. The GeoXT handheld typically obtains submeter accuracy, and the data is presented in **Table 5-1**.

Padre subcontracted with Rick Engineering Company of Santa Maria, California, (CA licensed land surveyor) to identify the location of the plugged oil well identified as "Shell-Standard Blankenburg 1". Information for locating the plugged well head was obtained from DOGGR and Santa Barbara County record mapping and survey control. Additionally, Padre subcontracted with David McNabb Construction (McNabb) of Santa Maria, California to conduct an underground utility survey in the area of the soil vapor drill holes. In performing the utility survey, McNabb was able to locate the steel plate attached to the plugged well head, which coincided with the surveyed location. From the well head location, Padre estimated the center of the suspected drilling sump based on the review of a 1975 aerial photograph. A copy of the survey map prepared by Rick Engineering Company is presented in **Appendix C**.

5.2.1 Soil Sampling

Soil sample collection activities were implemented in general accordance with the guidelines of the following documents:

- California DTSC, *PEA Guidance Manual,* January 1994 (Interim Final – Revised October 2013);
- DTSC's *Interim Guidance for Sampling Agricultural Properties (Third Revision)*, April 30, 2008; and
- DTSC's *Draft Interim Guidance, Evaluating Human Health Risks from Total Petroleum Hydrocarbons (TPH),* April 29, 2008.

Agricultural Soils - Discrete surface soil samples were collected at 12 locations selected from a grid-pattern across the propagated crop area of the Project Site (~23-ac). Three 4-point composite surface soil samples were chemically analyzed for the presence of OCPs, and eight discrete surface soil samples were chemically analyzed for arsenic.

Additionally, each on-site agricultural access road was also evaluated for the presence of agricultural chemicals. A 3-point composite surface soil sample was collected for each section of the roadways that transect the Project Site. Composite soil samples were chemically analyzed for the presence of OCPs, and all discrete surface soil samples were chemically analyzed for arsenic.

Water Detention Basin – Discrete soil samples were collected from four locations within the onsite water detention basin, which encompasses approximately 2.5 acres of the Project Site. The basin receives storm water run-off from the agricultural field; and due to its close proximity to the former oil-gas well, it is conceivable that drilling waste may also have been discharged to the basin. Therefore, soil samples were collected at depths of surface to 0.5-feet and from depths of 2.0- to 2.5-feet. The surface samples were composited and chemically analyzed for the presence of OCPs and CAM 17 metals. The deeper samples were placed on-hold with the analytical laboratory for potential analyses.

Oil-Gas Well Sump – There is one plugged and abandoned oil-gas well (Shell-Standard Blankenburg #1) located at the Project Site. The well was reportedly drilled in 1973 and abandoned in October 2000. A record of the well abandonment activities is provided of the California Department of Conservation, Division of Oil, Gas, & Geothermal Resources website. However, there is no record of well sump removal activity at the location of this oil-gas well. Therefore, well sump assessment activities were performed. The purpose of this task was to assess the potential presence of sump material and to chemically characterize the material, if identified. Delineation of the sump would be completed as an addendum to the PEA or as a supplemental site investigation (SSI), if necessary.

The location of the sump is identified in a 1975 aerial photograph. Initially, drill holes SM-1 through SM-3 were manually advanced to approximate depths of 10 feet in an attempt to locate the well sump. Soil cuttings were observed for visual changes and field screened using hand held photoionization detector (PID) and organic vapor meter (OVM). The results of visual observations and field screening with the PID-OVM did not indicate the presence of residual sump material, so two additional two drill holes (SM-4 and SM-5) were advanced. Soil screening during the advancement of drill holes SM-4 and SM-5 did not indicate the presence of sump material. Soil samples were collected from each drill hole at approximate depths of 2.5 to 3 feet, 5.5 to 6 feet, and 8.5 to 9 feet for a total of 15 soil samples. Based on visual observations during the advancement of SM-1 through SM-5, the soil generally consisted of a medium to coarse, well-sorted sand to depths of approximately 10 feet.

Two soil samples each were selected from drill SM-1, SM-2, and SM-3 at varying depths and chemically analyzed for the presence of TPH fuel fingerprint (gasoline, diesel, motor oil), BTEX constituents, CAM 17 Metals, PCBs, VOCs, and SVOCs.

The soil sample locations are presented on **Plates 5-1** and **5-2**.

5.2.2 Soil Gas Sampling

Soil gas sample collection activities were implemented in general accordance with the guidelines of the following documents:

- California DTSC, *PEA Guidance Manual,* January 1994 (Interim Final – Revised October 2013); and
- CALEPA, DTSC, *Advisory, Active Soil Gas Investigations,* April 2012.

Soil gas samples were collected at four locations using the Drive Point Method. Two of the sample locations are located adjacent to the abandoned oil-gas well, and two locations are located along the Project Site's eastern property boundary nearest to the Greka Oil & Gas Company's oil-gas field facility. At each location discrete soil gas samples were collected at depths of 5-feet and 15-feet in accordance with the DTSC guidance using direct-push technology.

The collected soil gas samples were chemically analyzed for the presence of methane, fixed gases, TPH, and VOCs. A hand held instrument was used for monitoring for the presence of H_2S in the field. The soil gas sample locations are presented on **Plate 5-3**, and the field sampling schedule for soil gas is presented in **Table 5-2**.

5.2.3 Groundwater Sampling

The groundwater sample collection activities were implemented in general accordance with the guidelines of the following document:

- California DTSC, *PEA Guidance Manual,* January 1994 (Interim Final – Revised October 2013).

A grab groundwater sample was collected from an existing sample port located at the well head. According to the farmer and based on Padre's observations, the groundwater pump is in continual operation ensuring that a representative groundwater sample was collected. The groundwater samples were chemically analyzed for TPH identified as gas, diesel, and motor oil, VOCs, OCPs, Nitrates, Nitrites, and CAM 17 Metals. The location of the water well is presented on **Plate 5-3**, and the groundwater sampling schedule is presented in **Table 5-2**.

5.2.4 Quality Analysis/Quality Control Samples

For quality assurance/quality control (QA/QC), approximately 10% of soil and soil gas samples were analyzed as duplicate samples. Padre had the laboratory split selected soil samples to be chemically analyzed as duplicates. A duplicate soil gas sample was collected in the field using a separate canister.

One equipment blank sample and one field blank sample per soil sampling event (water samples) were also collected and analyzed for the presence of arsenic and lead. The collection of these samples is discussed in more detail in the QAPP presented in **Appendix D**.

5.3 SAMPLE COLLECTION

5.3.1 Soil Sample Collection

Surface and shallow subsurface soil samples were collected using hand sampling tools including a hand-pick and hand-auger kit. Soil sampling equipment was decontaminated prior to use at each sample collection location and sampling event. Soil samples were collected in 2-inch x 6-inch stainless steel sleeves. Surface soil was loosened with the hand pick and placed into the sample sleeves. Soil cuttings were placed back in the hole after sample collection.

The soil samples selected for chemical analyses were sealed, labeled, and preserved on ice in the field. After completion of soil sampling activities, the samples were transferred to a State-certified analytical laboratory under chain-of-custody protocol for chemical analyses.

Soil samples analyzed for the presence of TPH by U.S. EPA Method 8015M/5035 and VOCs by U.S. EPA Method 8260B/5035 were collected in a 25-gram EnCore™ container. Initially, a 2-inch x 6-inch stainless steel sample tube was driven into the undisturbed soil, and then the EnCore™ sampler was pushed into the soil within the tube. The samples were sealed and stored for subsequent analysis.

5.3.2 Soil Gas Sample Collection

Soil gas samples were collected from depths of approximately 5-feet and 15-feet using direct-push technology and the following procedure:

- Driving a 1-inch steel rod to the desired depth of the drill hole and then removing the rod;
- Placing a 2 to 3-inch layer of clean sand at the base of the drill hole;
- Installing a new plastic vapor implant connected to ¼-inch new Teflon tubing at the top of the clean sand;
- Placing an additional 3 inches of clean sand into the drill hole to cover the vapor implant;
- Placing approximately 1-foot of dry bentonite above the sand pack;
- Sealing the drill hole with bentonite and hydrated in approximate 1-foot increments; and
- Labeling each drill hole with a unique sample identification and depth.

After subsurface conditions had equilibrated (no less than two hours), initially a shut-in test was performed to check for leaks in the above ground fittings. The shut-in test consisted of assembling the above ground section of the sampling train (e.g. valve lines, fittings, flow controllers, and Summa canister downstream from the top of the probe), and evacuating the

flow lines to a measured vacuum of about 100 inches of water, then shutting the valves at either end of the above ground section of the sampling train including the valve attached to the Summa canister and observing the vacuum for a minimum of one minute. If there was any observable loss of vacuum, the fittings are adjusted as needed until the vacuum in the above ground section of the sample train did not noticeably dissipate. After the shut-in test was successful, a leak check was performed. The leak check consisted of applying the leak check compound (1,1-difluoroethane) to clean towels and placing the towels near the bentonite seal surrounding the drill rod and near connections along the sample train. The leak-check compound was included in the laboratory analyte list, and the laboratory quantified and annotated all detections of the leak-check compound at the reporting limit of the target analytes. The shut-in test and leak check were conducted prior to collecting each soil gas sample.

After performing the shut-in test and leak check, three purge volumes were removed from the sample lines prior to collecting the soil gas sample in 400 milliliter (ml) cannisters. As discussed above, during sampling, a leak check compound was used to confirm that the sample train and probe rod is tight and leak free. After purging was complete, the valve at the top of the sample canister was opened to collect the soil gas sample. The flow rate of vapor was monitored and maintained at less than 200 milliliters (mL) per minute using the flow control provided with the canisters. Additionally, during purging and sampling, a calibrated vacuum gauge was used to maintain a vacuum of less than 100 inches of water to minimize stripping and prevent ambient air from diluting the soil gas samples. As the pressure gauge reached just below 5 inches of mercury, the valve was closed and the pressure reading recorded. New tubing and canisters were used for each sample location. Sample cannisters were pre-cleaned and supplied by the analytical laboratory.

5.3.3 Groundwater Sample Collection

Groundwater samples were collected from an existing sample port located at the well head. The groundwater samples were transferred to the appropriate sample containers provided by the analytical laboratory. The sample bottles were sealed, initialed, labeled with the time and date of collection, project number, and a unique sample identification number, and then placed on ice, in a cooler, for delivery to the analytical laboratory under chain-of-custody protocol.

5.3.4 Decontamination Procedures

Equipment that came into contact with potentially contaminated soil was decontaminated consistently so as to assure the quality of samples collected. Disposable equipment intended for one time use was not decontaminated, but was packaged for appropriate disposal. Decontamination occurred prior to and after each use of a piece of equipment. All sampling devices used were decontaminated using the following procedures:

- Non-phosphate detergent and tap water wash, in a 5-gallon plastic bucket, using a brush;
- Deionized/distilled water rinse, in a 5-gallon plastic bucket; and

- Final deionized/distilled water rinse in a 5-gallon plastic bucket.

At the completion of sampling activities the small amount of wash water was dispersed to the planting field. The wash water consisted of water, non-phosphate detergent, and a small amount of surface soil.

5.4 SAMPLE ANALYSES

The sampling schedule is summarized in **Table 5-2**. Analytical methods, types of containers, preservative, and holding times are summarized in **Table 5-3**. The laboratory analytical program consisted of chemical analyses of soil, soil gas and groundwater samples collected from the Project Site for the presence of:

Soil –

- OCPs by U.S. EPA Method 8081A;
- Arsenic by U.S. EPA Method 6020;
- TPH (Fuel Fingerprint) by U.S. EPA Method 8015B;
- VOCs by U.S. EPA Method 8260;
- SVOCs by U.S. EPA Method 8270;
- PCBs by U.S. EPA Method 8082; and
- CAM 17 Metals U.S. EPA Method 6010/7000 series;

Soil Gas –

- VOCs by U.S. EPA Method TO-15;
- Methane by U.S. EPA Method 8015M;
- TPH by U.S. EPA Method 8015M; and
- Fixed Gases (oxygen, nitrogen, carbon dioxide) by ASTM 1946.

Groundwater –

- VOCs by U.S. EPA Method 8260; and
- TPH as gasoline by U.S. EPA Method 8015M.
- OCPs by U.S. EPA Method 8080A;
- Nitrogen, Nitrates + Nitrites by EPA Method 300.1; and
- CAM 17 Metals U.S. EPA Method 6010B/7400.

One equipment blank (water sample) and one field blank (water sample) per soil sample event was analyzed for the presence of:

- Arsenic and lead by U.S. EPA Method 200.8.

5.4.1 Chain-of-Custody Records

Chain-of-custody (COC) records are used to document sample collection and shipment to the laboratory for analysis. A COC record accompanied all samples shipped for analysis. Form(s) were completed and sent with the samples for each laboratory and each shipment. The COC record identifies the contents of each shipment and maintains the custodial integrity of the samples. Generally, a sample is considered to be in someone's custody if it is either in someone's physical possession, in someone's view, locked up, or kept in a secured area that is restricted to authorized personnel. Until receipt by the laboratory, the custody of the samples were the responsibility of the sample collector.

5.5 FIELD VARIANCES

Due to drilling rig access issues (soft sand), soil vapor sample locations SV-1 and SV-2 were installed using ¾-inch steel rods driven with a hand-held rotary hammer. DTSC was notified of this field variance during their site visit on November 12th, 2014.

Table 5-1. Sample Locations by Latitude and Longitude

Sample Identification	Coordinates	
	Latitude	Longitude
Well Head	34.88876046	-120.4119344
Center of Sump	34.88869285	-120.4115380
Agriculture Field Samples		
AG-1 (surf) F	34.89010175	-120.4123528
AG-2 (surf) R	34.89013921	-120.4114046
AG-3 (surf) F	34.89013175	-120.4103046
AG-4 (surf) R	34.88934544	-120.4123426
AG-5 (surf) F	34.88927968	-120.4113780
AG-6 (surf) R	34.88943728	-120.4103346
AG-7 (surf) R	34.88891946	-120.4114152
AG-8 (surf) F	34.88897234	-120.4103147
AG-9 (surf) F	34.88840702	-120.4111922
AG-10 (surf) R	34.88841346	-120.4102234
AG-11 (surf) R	34.88729534	-120.4111201
AG-12 (surf) F	34.88748320	-120.4102627
Agriculture Road Samples		
RW-1 (surf)	34.88984890	-120.4127609
RW-2 (surf)	34.88860439	-120.4122504
RW-3 (surf)	34.88753894	-120.4114205
RW-4 (surf)	34.89062437	-120.4120574
RW-5 (surf)	34.89061886	-120.4111095
RW-6 (surf)	34.89062985	-120.4103036
RW-7 (surf)	34.88901815	-120.4121503
RW-8 (surf)	34.88907613	-120.4111353
RW-9 (surf)	34.88913448	-120.4100044
RW-10 (surf)	34.88824721	-120.4111494
RW-11 (surf)	34.88827011	-120.4106837
RW-12 (surf)	34.88832340	-120.4097836
RW-13 (surf)	34.88687735	-120.4114105
RW-14 (surf)	34.88703591	-120.4106961
RW-15 (surf)	34.88736727	-120.4097509

Table 5-1. Continued
Sample Locations by Latitude and Longitude

Detention Basin Samples		
DB-1 (surf)	34.88840274	-120.4120941
DB-2 (surf)	34.88825113	-120.4116735
DB-3 (surf)	34.88777872	-120.4118520
DB-4 (surf)	34.88741607	-120.4116694
Soil Vapor Samples		
SV-1	34.88879673	-120.4119349
SV-2	34.88876184	-120.4119680
SV-3	34.88916944	-120.4098297
SV-4	34.88833597	-120.4099928

Table 5-2. Field Sampling Schedule (Groundwater and Soil Gas)

Sample Matrix and Test Method	Sample Depth	Number of Samples	Sample Location	Submittal Status
Soil Gas				
VOCs U.S. EPA Method TO-15	5 feet And 15 feet	4 (discrete) 4 (discrete)	SV-1, SV-2, SV-3, and SV-4 SV-1, SV-2, SV-3, and SV-4	Analyze Dupe SV1 Analyze
Methane U.S. EPA Method 8015M	5 feet And 15 feet	4 (discrete) 4 (discrete)	SV-1, SV-2, SV-3, and SV-4 SV-1, SV-2, SV-3, and SV-4	Analyze Analyze Dupe SV3
TPH U.S. EPA Method 8015M	5 feet And 15 feet	4 (discrete) 4 (discrete)	SV-1, SV-2, SV-3, and SV-4 SV-1, SV-2, SV-3, and SV-4	Analyze Dupe SV2 Analyze
Fixed Gases ASTM 1946	5 feet And 15 feet	4 (discrete) 4 (discrete)	SV-1, SV-2, SV-3, and SV-4 SV-1, SV-2, SV-3, and SV-4	Analyze Analyze Dupe SV4
Groundwater				
VOCs U.S. EPA Method 8260B	From Well Head	1 (grab)	GW-1	Analyze
TPH U.S. EPA 8015M	From Well Head	1 (grab)	GW-1	Analyze
OCPs U.S. EPA 8081A	From Well Head	1 (grab)	GW-1	Analyze
CAM 17 Metals U.S. EPA 6010B/7400	From Well Head	1 (grab)	GW-1	Analyze
Nitrogen, Nitrates + Nitrites U.S. EPA 300.1	From Well Head	1 (grab)	GW-1	Analyze

Table 5-2. Soil Sampling Schedule

Test Method	Sample Depth	Number of Samples	Sample Location	Submittal Status
Organochlorine Pesticides U.S. EPA Method 8081A	Agricultural Field Surface to 0.5 feet	3 (4-pt composites)	CS-1 (AG-1, AG-4, AG-5, AG-7) CS-2 (AG-2, AG-3, AG-6, AG-8) CS-3 (AG-9, AG-10, AG-11, AG-12)	Analyze Dupe CS-2
	Agricultural Road Surface to 0.5 feet	2 (4-pt composites) 2 (3-pt composites)	CS-4 (RW-1, RW-2, RW-3, RW-4) CS-5 (RW-5, RW-6, RW-7, RW-8) CS-6 (RW-9, RW-10, RW-11) CS-7 (RW-12, RW-13, RW-14)	Analyze
	Detention Basin Surface to 0.5 feet	1 (4-pt composite)	CS-8 (DB-1, DB-2, DB-3, DB-4)	Analyze
Arsenic U.S. EPA Method 6020	Agricultural Field Surface to 0.5 feet	8 (discrete)	AG-2, AG-3, AG-4, AG-5, AG-7, AG-8, AG-10, and AG-11	Analyze Dupe AG-8
	Agricultural Road Surface to 0.5 feet	14 (discrete)	RW-1 through RW-14	Analyze Dupe RW-4
TPH Fuel Fingerprint (g, d, mo) U.S. EPA Method 8015M	Sump Material Subsurface: (depths of 2-3 feet, 5-6 feet, and 8-9 feet)	6 (discrete) [minimum 2 samples per drill hole]	SM-1, SM-2, SM-3, SM-4 and SM-5	Analyze Dupe SM-1
VOCs U.S. EPA Method 8260	Sump Material Subsurface: (depths of 2-3 feet, 5-6 feet, and 8-9 feet)	6 (discrete) [minimum 2 samples per drill hole]	SM-1, SM-2, SM-3, SM-4 and SM-5	Analyze Dupe SM-1

Table 5-2. (continued)

Test Method	Sample Depth	Number of Samples	Sample Location	Submittal Status
SVOCs U.S. EPA Method 8270	Sump Material Subsurface: (depths of 2-3 feet, 5-6 feet, and 8-9 feet)	6 (discrete) [minimum 2 samples per drill hole]	SM-1, SM-2, SM-3, SM-4 and SM-5	Analyze Dupe SM-1
PCBs U.S. EPA Method 8082	Sump Material Subsurface: (depths of 2-3 feet, 5-6 feet, and 8-9 feet)	6 (discrete) [minimum 2 samples per drill hole]	SM-1, SM-2, SM-3, SM-4 and SM-5	Analyze Dupe SM-1
CAM 17 Metals ICP-MS 6000/7000 Series	Sump Material Subsurface: (depths of 2-3 feet, 5-6 feet, and 8-9 feet) Detention Basin Surface to 0.5 feet	6 (discrete) [minimum 2 samples per drill hole] 1 (discrete)	SM-1, SM-2, SM-3, SM-4 and SM-5 DB-2	Analyze Dupe SM-1 Analyze
Field Blank and Equipment Blank (Water Sample)				
Arsenic U.S. EPA Method 200.8	-- --	1 sample per event 1 sample per event	Equipment Blank (EB-1) Field Blank (FB-1)	Analyze

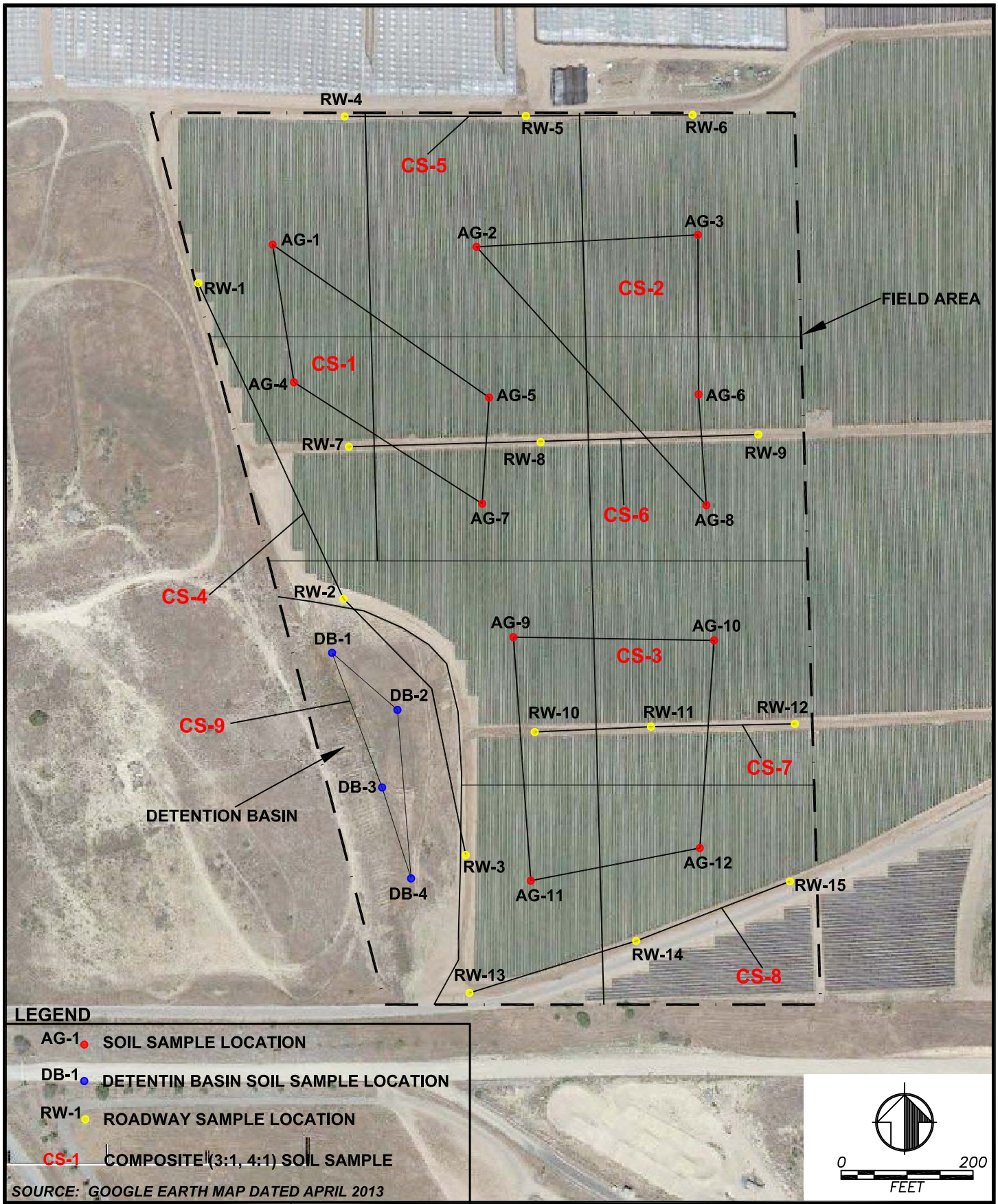
Dupe - sample split by the laboratory

Table 5-3. Sample Collection Information

Test Method	Container	Preservative	Holding Time From Sample Collection to Extraction
Soil			
OCPs U.S. EPA Method 8081A	2 inch x 6 inch stainless steel sample sleeves and plastic end caps	Ice	14 days
Arsenic U.S. EPA Method 6020	2 inch x 6 inch stainless steel sample sleeves and plastic end caps	Ice	180 days
TPH Fuel Fingerprint U.S. EPA Method 8015M	2 inch x 6 inch stainless steel sample sleeves and plastic end caps	Ice	14 days
VOCs U.S. EPA Method 8260	25 gram Encore™ Container	Ice	48 hours
SVOCs U.S. EPA Method 8270	2 inch x 6 inch stainless steel sample sleeves and plastic end caps	Ice	14 days
PCBs U.S. EPA Method 8082	2 inch x 6 inch stainless steel sample sleeves and plastic end caps	Ice	180 days
CAM 17 Metals U.S. EPA Method 6000/7000 Series	2 inch x 6 inch stainless steel sample sleeves and plastic end caps	Ice	180 days
Soil Gas			
Methane U.S. EPA Method 8015M	Canister (400 milliliter)	None	30 days
TPH-g U.S. EPA Method 8015M	Canister (400 milliliter)	None	30 days
VOCs U.S. EPA Method TO-15	Canister (400 milliliter)	None	30 days
Fixed Gases (O, N, CO_2) ASTM 1946	Canister (400 milliliter)	None	30 days
Groundwater			
VOCs U.S. EPA Method 8260	Three 40 mL VOAs	HCl / Ice	14 days
TPH-g U.S. EPA Method 8015M	Three 40 mL VOAs	HCl / Ice	14 days
OCPs U.S. EPA Method 8080A	Two amber 40 mL VOAs	Ice	7 days
Nitrogen, Nitrates + Nitrites U.S. EPA Method 300.1	125 mL poly bottle	Ice	48 hours
CAM 17 Metals U.S. EPA Method 6010B/7400	250 mL poly bottle	HNO_3 / Ice	180 days

Table 5-3. (continued)

Test Method	Container	Preservative	Holding Time From Sample Collection to Extraction
Water (Field and Equipment Blanks			
Arsenic U.S. EPA Method 200.8	250 mL poly bottle	HNO_3 / Ice	180 days
Lead U.S. EPA Method 200.8	250 mL poly bottle	HNO_3 / Ice	180 days



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1401-0542	1/7/15	AC	AJK

PLATE 5-1

FIELD SAMPLING PLAN

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PLATE 5-2

SUMP SAMPLING PLAN

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1401-0542	1/7/15	AC	AJK

PLATE 5-3

SOIL GAS AND GROUNDWATER SAMPLING PLAN

6.0 FINDINGS

The following sections describe the results of the field sampling activities performed at the Project Site during November 11 and 12, 2014. The laboratory analytical results are summarized in Tables 6-1 through 6-11, and are presented on Plates 6-1 and 6-2. Certified analytical laboratory reports and chain-of-custody documentation are provided in **Appendix E**.

6.1 SOIL SAMPLING RESULTS

The following subsections describe soil sample analytical results, locations, and depth intervals for each sample collected at the Project Site.

6.1.1 OCPs

Three, four point composite surface soil samples were collected from 12 locations across the planting area of the Project Site and chemically analyzed for the presence of OCPs by U.S. EPA Method 8081A. Results of the laboratory analyses are summarized in Table 6-1 and below:

- DDT was reported at a concentration of 0.59J (J-Flag indicates estimated value) micrograms per kilogram (µg/kg) in composite soil sample CS-2.

Five, three point composite soil samples were collected from 15 locations on the agricultural roads and chemically analyzed for the presence of OCPs. Results of the laboratory analyses are summarized in Table 6-2 and below:

- DDT was reported at a concentrations ranging from 1.0 to 1.2 µg/kg in composite soil sample CS-4; and
- Dieldrin was reported at a concentration of 0.39J in composite soil sample CS-4.

One composite surface soil sample was collected from four locations within the detention basin located at the Project Site. The composite soil sample was chemically analyzed for the presence of OCPs. Results of the laboratory analysis are summarized in Table 6-1 and below.

- DDE was reported at a concentration of 0.67J µg/kg;
- DDT was reported at a concentration of 0.70J µg/kg; and
- Dieldrin was reported at a concentration of 0.57J µg/kg.

6.1.2 Arsenic

At 23 locations (eight from the planting area, and 15 from the agricultural roads), discrete surface soil samples were collected and chemically analyzed for the presence of arsenic by U.S. EPA Method 6020. Results of the laboratory analysis are summarized in Table 6-2 and below:

- Arsenic concentrations ranged from 0.85 to 2.2 milligrams per kilogram (mg/kg).

6.1.3 CAM 17 Metals

One discrete surface soil sample collected from within the detention basin located at the Project Site was chemically analyzed for the presence of CAM 17 metals by U.S. EPA Method 6000/7000 series. Results of the laboratory analysis are summarized in Table 6-3 and below.

- Antimony, beryllium, cadmium, mercury, molybdenum, selenium, silver and thallium were not detected at concentrations at or above the analytical method reporting limit; and
- Arsenic, barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc were detected at concentrations above their respective reporting limits.

Two soil samples each were selected from drill holes SM-1, SM-2, and SM-3 at varying depths and chemically analyzed for the presence of CAM 17 metals. Results of the laboratory analysis are summarized in Table 6-3 and below.

- Antimony, beryllium, cadmium, mercury, molybdenum, selenium, silver and thallium were not detected at concentrations at or above the analytical method reporting limit; and
- Arsenic, barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc were detected at concentrations above their respective reporting limits.

All of the detected metals concentrations are below their respective RSLs, except for arsenic which is discussed in Section 7.0.

6.1.4 TPH and VOCs

Two soil samples each were selected from drill holes SM-1, SM-2, and SM-3 at varying depths and chemically analyzed for the presence of TPH and VOCs by U.S. EPA Method 8015M and 8260, respectively. Results of the laboratory analysis are summarized in Table 6-4 and below:

- TPH was not reported at concentrations at or or above the laboratory analytical reporting limit; and
- VOC constituents were not reported at concentrations at or above their respective analytical reporting limits.

6.1.5 SVOCs

Two soil samples each were selected from drill holes SM-1, SM-2, and SM-3 at varying depths and chemically analyzed for the presence of SVOCs by U.S. EPA Method 8270. Results of the laboratory analysis are summarized in Table 6-4 and below:

- SVOC constituents were not reported at concentrations at or above their respective analytical reporting limits.

6.1.6 PCBs

Two soil samples each were selected from drill holes SM-1, SM-2, and SM-3 at varying depths and chemically analyzed for the presence of PCBs by U.S. EPA Method 8082. Results of the laboratory analysis are summarized in Table 6-6 and below:

- PCBs constituents were not reported at concentrations at or above their respective analytical reporting limits.

6.2 SOIL GAS SAMPLING RESULTS

The following subsection describes soil gas analytical results, depths, and locations of four drill holes located throughout the Project Site.

6.2.1 TPH and VOCs

Soil gas samples were collected at approximate depths of 5 and 15 feet and chemically analyzed for the presence of TPH and VOCs by U.S. EPA Method TO-15. Results of the laboratory analyses are presented in Table 6-7 and summarized below:

- TPH (C_5–C_{12}) was reported at concentrations ranging from 120 to 510 micrograms per cubic meter (µg/m^3). The highest concentration was detected in soil gas sample SV-1-5';

- Benzene was reported at concentrations ranging from <3.2 to 11 µg/m^3. The highest concentration was detected in soil gas sample SV-4-15';

- Toluene was reported at concentrations ranging from <3.8 to 23 µg/m^3. The highest concentration was detected in soil gas sample SV-3-5';

- Ethylbenzene was reported at concentrations ranging from <4.4 to 18 µg/m^3. The highest concentration was detected in soil gas sample SV-4-15';

- Total xylenes (m,p-xylene, o-xylene) were reported at concentrations ranging from <4.4 to 11 µg/m^3. The highest concentration was detected in soil gas sample SV-3-5';

- Acetone was reported at concentrations ranging from less than 24 to 94 µg/m^3. The highest concentration was detected in soil gas sample SV-1-5';

- Carbon disulfide was reported at concentrations ranging from <6.3 to 9.0 µg/m^3. The highest concentration was detected in soil gas sample SV-4-15';

- Chloroform was reported at concentrations ranging from <4.9 to 7.8 µg/m^3. The highest concentration was detected in soil gas sample SV-4-5';

- Methylene chloride was reported at concentrations ranging from <3.5 to 3.7 µg/m^3. The highest concentration was detected in soil gas sample SV-3-5'; and

- 1,1-difluoroethane (leak check compound) was identified in four of the eight soil gas samples at concentrations ranging from <5.5 to 9.1 µg/m3. The highest concentration was detected in soil vapor sample SV-3-5'.

6.2.2 Methane

Soil gas samples were chemically analyzed for the presence of methane by U.S. EPA Method 8015M. Results of the laboratory analyses are presented in Table 6-7 and summarized below:

- Chemical analyses did not identify the presence of methane at concentrations at or above the laboratory reporting limit of 10 parts per million by volume (ppmV) which is indicative of "ambient fresh air".

6.2.3 Fixed and Biogenic Gases (O_2, CO_2, N)

Soil gas samples were chemically analyzed for fixed and biogenic gases (O_2, CO_2, N) by ASTM 1945-96. Results of the laboratory analyses are presented in Table 6-7 and summarized below:

- Chemical analyses identified O_2 at concentrations ranging from 18 to 21% by volume, which is consistent with that of "ambient fresh air";

- Chemical analysis identified CO_2 at concentrations ranging from 0.4 to 2.4% by volume, which is consistent with that of "ambient fresh air"; and

- Chemical analysis identified nitrogen at concentrations ranging from 78 to 82% by volume, which is consistent with that of "ambient fresh air".

6.2.4 Hydrogen Sulfide

Soil gas samples were screened using a hand-held instrument for the presence of hydrogen sulfide.

- The results of the field screening activities did not identify the presence of hydrogen sulfide at concentrations at or above the instrument's detection limit of 1 ppmV.

6.3 GROUNDWATER SAMPLING RESULTS

A grab groundwater sample was collected from an existing sample port located at the well head. According to the farmer and based on Padre's observations, the groundwater pump

is in continual operation ensuring that a representative groundwater sample was collected. The following summarizes and presents the laboratory analytical results.

6.3.1 VOCs and TPH

A groundwater sample was collected from the irrigation well and chemically analyzed for the presence of TPH and VOCs by U.S. EPA Method 8015M and 8260, respectively. Results of the laboratory analyses are presented in Table 6-8 and summarized below:

- TPH was not reported at concentrations at or above the laboratory analytical reporting limit; and
- VOC constituents were not reported at concentrations at or above their respective analytical reporting limits.

6.3.2 OCPs

A groundwater sample was collected from the irrigation well and chemically analyzed for the presence of OCPs by U.S. EPA Method 8081. Results of the laboratory analyses are presented in Table 6-9 and summarized below:

- OCP constituents were not reported at concentrations at or above their respective analytical reporting limits.

6.3.3 CAM 17 Metals

A groundwater sample was collected from the irrigation well and chemically analyzed for the presence of CAM 17 Metals by U.S. EPA Method 200 Series. Results of the laboratory analyses are presented in Table 6-10 and summarized below:

- Arsenic was reported at a concentration of 0.68 micrograms per liter (µg/l);
- Barium was reported at a concentration of 15 µg/l;
- Chromium was reported at a concentration of 0.92 µg/l;
- Molybdenum was reported at a concentration of 3.8 µg/l;
- Selenium was reported at a concentration of 2.6 µg/l; and
- Vanadium was reported at a concentration of 2.9 µg/l.
- No other metals were detected at concentrations at or above their respective analytical method reporting limits.

6.3.4 Nitrate and Nitrite

A groundwater sample was collected from the irrigation well and chemically analyzed for the presence of nitrates and nitrites by U.S. EPA method 300.1. Results of the laboratory analyses are presented in Table 6-11 and summarized below:

- Nitrate as N was reported at a concentration of 9.2 milligrams per liter (mg/L);
- Nitrate as NO3 was detected at a concentration of 41 mg/L; and
- Nitrate and Nitrite as N was reported at a concentration of 9.2 mg/L.

6.4 QA/QC SAMPLES

6.4.1 Duplicates

The laboratory split soil samples selected by Padre to be chemically analyzed as duplicates for OCPs, arsenic, TPH, SVOCs, PCBs, and CAM 17 metals. The analytical results of the laboratory analysis are presented in Tables 6-1 and 6-2 and summarized below:

- DDT was reported at a concentration of 0.59J µg/kg in composite soil sample CS-2 (Surf). DDT was identified at a concentrations of 0.54J µg/kg in the corresponding duplicate soil sample CS-2 (Surf) Dup;
- Arsenic was reported in soil samples AG-8 (Surf) R and RW-4 (Surf) at a concentrations of 1.6 and 1.0 mg/kg, respectively, and in the corresponding duplicate soil samples AG-8 (Surf) R Dup and RW-4 (Surf) at a concentrations of 1.2 and 1.5 mg/kg, respectively;
- CAM 17 metals arsenic, barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc were reported in soil sample SM-1 (5.5-6') at concentrations of 1.3, 24, 4.7, 1.2, 2.1, 1.8, 3.6, 9.0, and 17 mg/kg, respectively, and in the corresponding duplicate soil sample SM-1 (5.5-6') of 1.3, 25, 4.3, 1.0, 2.0, 1.8, 3.2, 8.3, and 8.3 mg/kg, respectively;
- TPH-g was not reported in soil sample SM-1 (8.5-9') nor the corresponding duplicate soil sample SM-1 (8.5-9') Dup at or above the analytical reporting limit;
- SVOCs were not reported in soil sample SM-1 (5.5-6') nor the corresponding duplicate soil sample SM-1 (5.5-6') Dup at or above the analytical reporting limits; and
- PCBs were not reported in soil sample SM-1 (5.5-6') nor the corresponding duplicate soil sample SM-1 (5.5-6') Dup at or above the analytical reporting limits.

The reported concentrations for OCPs, arsenic, CAM 17 metals, TPH-g, SVOCs, and

PCBs in the selected soil samples and the corresponding duplicate soil samples are comparable in concentrations and the data is considered valid.

6.4.2 Equipment Blank

Distilled water was used as rinseate for decontaminating sampling equipment. The equipment blank samples were collected by pouring rinseate water over and through recently cleaned equipment, and collected directly into the appropriate sample container.

Two equipment blank samples was collected and chemically analyzed for arsenic by U.S. EPA Method 200.8. The results of the laboratory analysis are summarized below:

- The laboratory analyses did not identify arsenic at or above the analytical reporting limit. The reporting limit for arsenic was 0.5 µg/l; and
- The laboratory analyses did not identify lead at or above the analytical reporting limit. The reporting limit for lead was 0.5 µg/l.

6.4.3 Field Blank

Distilled water was used as rinseate for decontaminating sampling equipment. The field blank samples were collected by pouring rinseate water into the appropriate sample container.

Two field blank samples was collected and chemically analyzed for arsenic by U.S. EPA Method 200.8. The results of the laboratory analysis are summarized below:

- The laboratory analyses did not identify arsenic at or above the analytical reporting limit. The reporting limit for arsenic was 0.5 µg/l; and
- The laboratory analyses did not identify lead at or above the analytical reporting limit. The reporting limit for lead was 0.5 µg/l.

6.4.4 Laboratory QA/QC

A cover letter with the signature of the laboratory director accompanies every laboratory report received for this project. According to the lab director, samples were analyzed utilizing EPA or other ELAP approved methodologies, and that the results are in compliance both technically and for completeness. The data quality objectives (DQO) met by the analytical laboratory for this project was level II.

The laboratory reported the following notes regarding OCPs by U.S. EPA Method 8081A (Work Order 1411538):

- The DDT results for the soil samples CS-2, CS-2 Dup, and CS-9 are less than the reporting limit (RL) but greater than the method detection limit (MDL). The reported concentration is J-Flagged as an estimated value.

- The dieldrin results for the soil samples CS-4 and CS-9 are less than the RL but greater than the MDL. The reported concentration is J-Flagged as an estimated value.

- The DDE results for the soil sample CS-9 is less than the RL but greater than the MDL. The reported concentration is J-Flagged as an estimated value.

The laboratory reported the following notes regarding Arsenic by U.S. EPA Method 6020 (Work Order 1411538):

- The surrogate (Tb 350.917) spike recovery for soil sample AG-7(surf)R was outside the accepted limits.

The laboratory reported the following notes regarding Nitrates by U.S. EPA Method 300.1 for the Quality Control Report (Work Order 1411538):

- The groundwater sample (GW-1) was analyzed outside of the hold time though the samples were received within the holding time. The short holding time of 48 hours is due to the potential of nitrate to reduce to nitrite. However, the water sample was also analyzed for nitrite with a reported result of non-detect.

The laboratory reported the following notes regarding CAM 17 metals by U.S. EPA Method 6020 for the Quality Control Report (Work Order 1411538):

- The matrix spike duplicate (MSD) for antimony, barium, beryllium, cadmium, chromium, cobalt, copper, lead, molybdenum, nickel, thallium, vanadium, and zinc were outside of acceptance criteria, however the laboratory control spike (LCS) validated the prep batch.

- The relative percent deviation (RPD) between the matrix spike/matrix spike duplicate (MS/MSD) for antimony, beryllium, and molybdenum was outside of acceptance criteria, however the laboratory control spike (LCS) validated the prep batch.

Table 6-1. Soil Results for OCPs (µg/kg)

Sample Identification	Aldrin	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC	Chlordane-technical	DDD	DDE	DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Heptachlor	Heptachlor Epoxide	Methoxychlor	Hexachloricyclopentadiene	Toxaphene
Agricultural Field Samples																				
CS-1 (surf) (AG-1, 4, 5, 7)	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<50
CS-2 (surf) (AG-2, 3 ,6 ,8)	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	**0.59J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<50
CS-2 DUP	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	**0.54J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<50
CS-3 (surf) (AG-9, 10, 11, 12)	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<50
Roadway Samples																				
CS-4 (surf) (RW-1, 2, 3)	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	**1.2**	**0.39J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<50
CS-5 (surf) (RW-4, 5, 6)	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<50
CS-6 (surf) (RW-7, 8,9)	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	**1.0**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<50
CS-7 (surf) (RW-10, 11, 12)	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<50
CS-8 (surf) (RW-13, 14, 15)	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<50
RSL	31	--	--	--	560	1,800	2,200	1,600	1,900	33	--	--	--	--	--	120	59	--	--	480

Table 6-1. Soil Results for OCPs (cont.)
(µg/kg)

Sample Identification	Aldrin	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC	Chlordane-technical	DDD	DDE	DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Heptachlor	Heptachlor Epoxide	Methoxychlor	Hexachloricyclopentadiene	Toxaphene
Detention Basin Samples																				
CS-9 (surf) (DB-1, 2, 3, 4)	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	**0.67J**	**0.70J**	**0.57J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<50
RSL	31	--	--	--	560	1,800	2,200	1,600	1,900	33	--	--	--	--	--	120	59	--	--	480

Notes:

µg/kg – micrograms per kilogram
J – Results is below Reporting Limit but above the Method Detection Limit.
RSL – U.S. EPA Regional Screening Levels (January 2015)

Table 6-2 - Soil Results for Arsenic (mg/kg)

Sample Identification	Arsenic
U.S. EPA Method	6020
AG-2 (surf) R	**1.5**
AG-3 (surf) F	**1.0**
AG-4 (surf) R	**1.1**
AG-5 (surf) F	**1.5**
AG-7 (surf) R	**1.6**
AG-8 (surf) F	**1.6**
AG-8 (surf) F DUPE	**1.2**
AG-10 (surf) R	**1.0**
AG-11 (surf) R	**0.98**
RW-1 (surf)	**1.2**
RW-2 (surf)	**1.9**
RW-3 (surf)	**0.99**
RW-4 (surf)	**1.0**
RW-4 (surf) DUPE	**1.5**
RW-5 (surf)	**1.1**
RW-6 (surf)	**1.3**
RW-7 (surf)	**2.2**
RW-8 (surf)	**1.3**
RW-9 (surf)	**1.5**
RW-10 (surf)	**0.85**
RW-11 (surf)	**1.0**
RW-12 (surf)	**1.1**
RW-13 (surf)	**1.2**
RW-14 (surf)	**1.2**
RW-15 (surf)	**1.0**

Notes:

mg/Kg	milligrams per Kilogram

Table 6-3 – Soil Results for CAM 17 Metals by EPA Method 6000/7000 Series (mg/kg)

Sample ID	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
DB-2	<0.50	**1.0**	**36**	<0.50	<0.25	**4.1**	**0.90**	**4.1**	**3.2**	<0.05	<0.50	**3.2**	<0.50	<0.50	<0.50	**7.2**	**17**
SM-1 (5.5-6')	<0.50	**1.3**	**24**	<0.50	<0.25	**4.7**	**1.2**	**2.1**	**1.8**	<0.05	<0.50	**3.6**	<0.50	<0.50	<0.50	**9.0**	**17**
SM-1 (5.5-6') DUP	<0.50	**1.3**	**25**	<0.50	<0.25	**4.3**	**1.0**	**2.0**	**1.8**	<0.05	<0.50	**3.2**	<0.50	<0.50	<0.50	**8.3**	**8.3**
SM-1 (8.5-9')	<0.50	**0.99**	**19**	<0.50	<0.25	**3.3**	**0.97**	**1.8**	**1.3**	<0.05	<0.50	**2.4**	<0.50	<0.50	<0.50	**5.8**	**5.2**
SM-2 (5.5-6')	<0.50	**1.2**	**21**	<0.50	<0.25	**4.5**	**1.1**	**2.1**	**1.7**	<0.05	<0.50	**3.2**	<0.50	<0.50	<0.50	**8.9**	**8.5**
SM-2 (8.5-9')	<0.50	**0.94**	**11**	<0.50	<0.25	**3.3**	**0.55**	**1.4**	**1.2**	<0.05	<0.50	**1.8**	<0.50	<0.50	<0.50	**6.3**	**5.0**
SM-3 (5.5-6')	<0.50	**1.2**	**16**	<0.50	<0.25	**5.2**	**1.3**	**2.0**	**1.8**	<0.05	<0.50	**3.3**	<0.50	<0.50	<0.50	**8.9**	**7.9**
SM-3 (8.5-9')	<0.50	**1.4**	**20**	<0.50	<0.25	**4.0**	**0.86**	**2.2**	**1.6**	<0.05	<0.50	<5.0	<0.50	<0.50	<0.50	**8.4**	**6.6**
RSLs	31	AB	15,000	1,600	70	120,000	23	3,100	80*	9.4	390	820	390	390	1.6	390	23,000

Notes:

mg/kg – milligrams per kilogram
RSLs – U.S. EPA Regional Screening Levels (Nov. 2014)
AB – Ambient Background
* - California Human Health Screening Level based on LEADSPREAD (DTSC)

Table 6-4. Results of TPH and VOC Analyses in Soil (results in mg/kg)

Sample Identification	TPH-Gasoline	TPH-Diesel	TPH-Motor Oil	Benzene	Toluene	Ethyl benzene	Total Xylenes	VOCs
U.S. EPA Method	8015M	8015M	8015M	8260	8260	8260	8260	8260
SM-1 (5.5-6')	<1.0	<1.0	<5.0	<0.0052	<0.0052	<0.0052	<0.0052	ND (<0.0056 - <0.11)
SM-1 (8.5-9')	<1.0	<1.0	<5.0	<0.0045	<0.0045	<0.0045	<0.0045	ND (<0.0056 - <0.11)
SM-1 (8.5-9') DUP	<1.0	<1.0	<5.0	<0.0045	<0.0045	<0.0045	<0.0045	NA
SM-2 (5.5-6')	<1.0	<1.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0048	ND (<0.0056 - <0.11)
SM-2 (8.5-9')	<1.0	<1.0	<5.0	<0.0051	<0.0051	<0.0051	<0.0051	ND (<0.0056 - <0.11)
SM-3 (5.5-6')	<1.0	<1.0	<5.0	<0.0052	<0.0052	<0.0052	<0.0052	ND (<0.0056 - <0.11)
SM-3 (8.5-9')	<1.0	<1.0	<5.0	<0.0056	<0.0056	<0.0056	<0.0056	ND (<0.0056 - <0.11)
RSL	820*	1,100*	2,500*	1.2	490	5.8	58	--

Notes:

TPH – Total Petroleum Hydrocarbons
VOC – Volatile Organic Compound
NA – Not Analyzed
* - Aromatic low (gasoline), medium (diesel), high (motor oil)
RSL – Regional Screening Level (Nov. 2014)

Table 6-5 – Soil Results for SVOCs (mg/kg)

Sample ID	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (g,h,i) perylene	Benzo (a) pyrene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	2-Methylnapthalene	Napthalene	Phenanthrene	Pyrene
SM-1 (5.5-6')	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
SM-1 (5.5-6') DUPE	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
SM-1 (8.5-9')	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
SM-2 (5.5-6')	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
SM-2 (8.5-9')	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
SM-3 (5.5-6')	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
SM-3 (8.5-9')	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
RSL	350*	--	1,700*	0.15	0.15	1.5	--	0.015	15	0.015	230*	230*	0.15	23*	3.8	--	170*

Notes:

SVOC – Semi-Volatile Organic Compound
mg/kg – milligrams per kilogram
RSL – Regional Screening Level (Version May, 2014)
* - Non-carcinogenic

Table 6-6 Results of PCB Analyses in Soil (mg/kg)

Sample Identification	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	TOTAL PCBs
Suspected Sump Area								
SM-1 (5.5-6')	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
SM-1 (5.5-6') DUP	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
SM-1 (8.5-9')	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
SM-2 (5.5-6')	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
SM-2 (8.5-9')	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
SM-3 (5.5-6')	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
SM-3 (8.5-9')	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
RSL	**4.0**	**0.15**	**0.15**	**0.24**	**0.24**	**0.24**	**0.24**	**0.24**

Notes:

mg/kg – milligrams per kilogram
RSL– U.S. EPA Regional Screening Level (Nov. 2014)

Table 6-7- Results of Soil Gas
(µg/m^3 of Vapor)

Sample ID	Depth (feet)	TPH (C5-C12)	Benzene	Toluene	Ethylbenzene	m,p-Xylene	Acetone	Carbon Disulfide	Chloroform	Methylene Chloride	1,1-Difluoroethane*	Nitrogen (%)	Oxygen (%)	Carbon Dioxide (%)	Methane (ppmv)
SV-1-5'	5	**510**	<3.2	<3.8	<4.4	<4.4	**94**	<6.3	<4.9	<3.5	**6.1**	**80**	**20**	**1.2**	<10
SV-1-15'	15	**410**	<3.2	<3.8	<4.4	<4.4	**33**	<6.3	<4.9	<3.5	<5.5	**81**	**20**	**1.5**	<10
SV-2-5'	5	**270**	<3.2	<3.8	<4.4	<4.4	<24	<6.3	<4.9	<3.5	<5.5	**80**	**20**	**1.1**	<10
SV-2-15'	15	**410**	<3.2	<3.8	<4.4	<4.4	**43**	<6.3	<4.9	<3.5	<5.5	**78**	**19**	**1.4**	<10
SV-2-15' REP	15	**360**	<3.2	<3.8	<4.4	<4.4	**56**	<6.3	<4.9	<3.5	**5.6**	**80**	**20**	**1.4**	<10
SV-3-5'	5	**280**	**4.1**	**23**	<4.4	**11**	**61**	<6.3	<4.9	**3.7**	**9.1**	**80**	**21**	**0.40**	<10
SV-3-15'	15	**290**	**6.5**	**14**	<4.4	<4.4	**45**	<6.3	**5.4**	<3.5	<5.5	**81**	**21**	**0.56**	<10
SV-4-5'	5	**120**	**3.5**	**20**	<4.4	<4.4	**69**	<6.3	**7.8**	<3.5	**7.7**	**82**	**20**	**1.6**	<10
SV-4-15'	15	**250**	**11**	**14**	**18**	<4.4	**55**	**9.0**	<4.9	<3.5	<5.5	**80**	**18**	**2.4**	<10
RSL		630	84	310,000	1,100	100,000	32,000,000	730,000	120	960	--	--	--	--	--

Notes:

µg/m^3 – micrograms per cubic meter
***** – Leak check compound
% - percent of ambient air
ppmv – parts per million by volume
RSL – USEPA Regional Screening Level (November 2014). Screening level includes attenuation factor (0.001) for future residential structures.

Table 6-8. Results of TPH and VOC Analyses in Groundwater (results in ug/L)

Sample Identification	TPH-Gasoline	TPH-Diesel	TPH-Motor Oil	Benzene	Toluene	Ethyl benzene	Total Xylenes	VOCs
U.S. EPA Method	8015M	8015M	8015M	8260	8260	8260	8260	8260
GW-1	<1.0	<1.0	<5.0	<0.0052	<0.0052	<0.0052	<0.0052	<0.50
MCL	5[A]	100[A]	--	1.2	490	5.8	58	--

Notes:
µg/L – micrograms per Liter
TPH – Total Petroleum Hydrocarbons
VOCs – Volatile organic compound
MCL – California Maximum Contamination Level for drinking water
A – USEPA health advisory for drinking water; no MCL established
'—' No MCL established

Table 6-9 - Groundwater Results for OCPs (µg/L)

Sample ID	Aldrin	alpha-BHC	beta-BHC	delta-BHC	Gamma-BHC	Chlordane-technical	DDD	DDE	DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Heptachlor	Heptachlor Epoxide	Methoxychlor	Hexachloricyclopentadiene	Toxaphene
GW-1	<0.005	<0.01	<0.005	<0.005	<0.02	<0.1	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.05	<0.01	<0.05	<0.01	<0.01	<0.1	<1.0	<0.5
MCL		--	--	--	0.2	0.1					--	--	--	2.0	--	0.01	0.01	30	50	3.0
RSL	0.005	0.007	0.025	--			0.031	0.23	0.23	0.002	100*	100*	--	--	--	--	--	--	--	--

Notes:

µg/L – micrograms per Liter
OCPs – Organochlorine Pesticides
MCL – California Maximum Contamination Level for drinking water
RSL – Regional Screening Level Resident Tapwater (Nov. 2014)
***** - Health hazard index equal to 1.0 for Endrin
'—' No MCL or RSL established

Table 6-10 - Groundwater Results for CAM 17 Metals (µg/L)

Sample ID	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
GW-1	<0.50	**0.68**	**15**	<0.50	<0.25	**0.92**	<0.50	<2.0	<0.50	<0.025	**3.8**	<0.50	**2.6**	<0.19	<0.50	**2.9**	<15
MCLs	6.0	10	1,000	4.0	5.0	50	--	1,300	15	2.0	--	100	50	--	2.0	--	--

Notes:

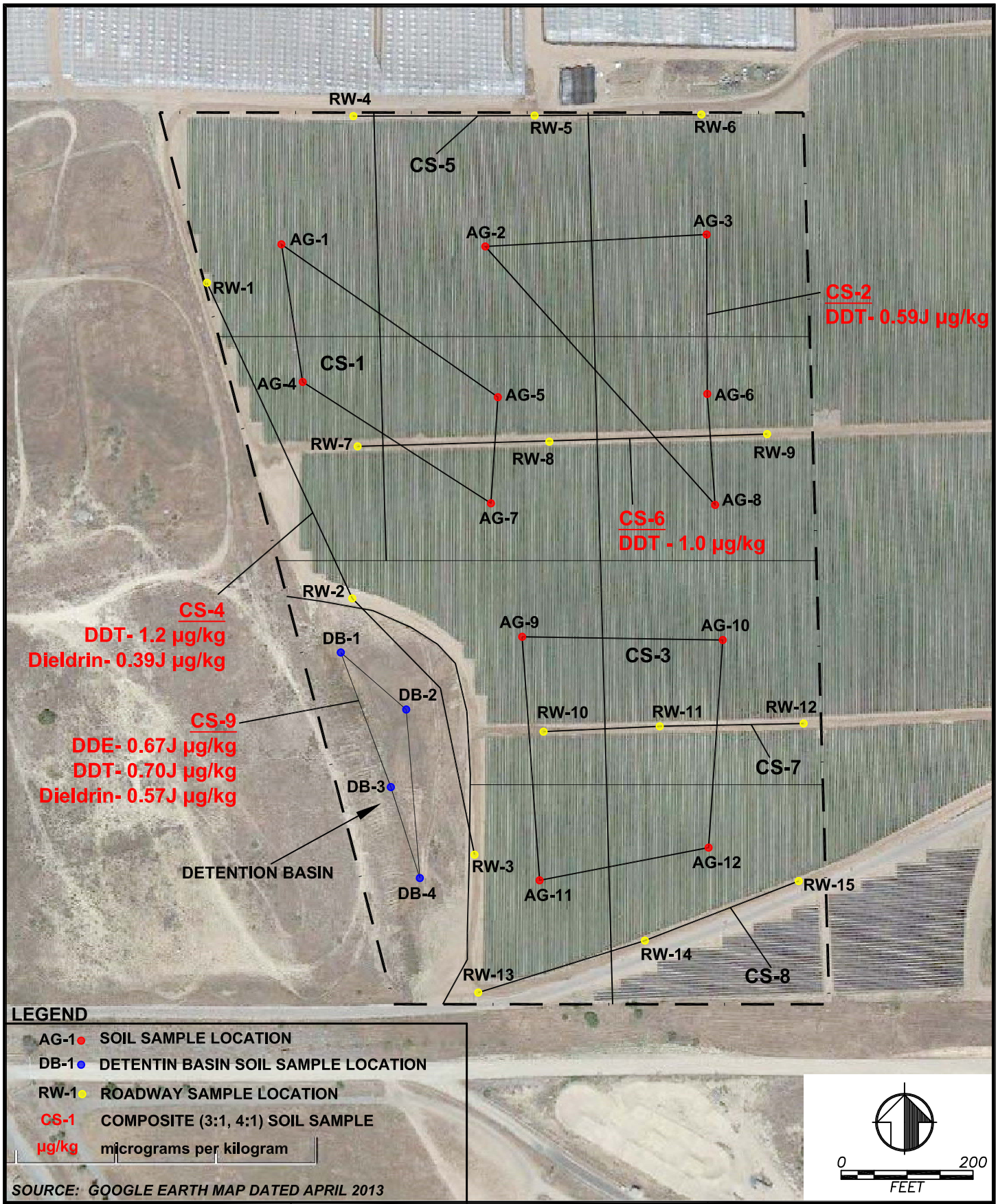
µg/L – micrograms per Liter
MCL – California Maximum Contamination Level for drinking water
'—' No MCL established

Table 6-11 - Groundwater Results for Nitrates (mg/L)

Sample ID	Nitrate as N	Nitrate as NO_3^-	Nitrite as N	Nitrite as NO_2^-	Nitrate and Nitrite as N
GW-1	**9.2**	**41**	<0.10	<0.33	**9.2**
MCLs	--	45	1	--	10

Notes:

mg/L – milligrams per Liter
MCL – California Maximum Contamination Level for drinking water



padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

NEW AG ED. CTR. AND CAREER TECH ED. CTR.
SANTA MARIA JOINT UNION HIGH S.D.
1280 FOUNDERS AVENUE
SANTA MARIA, CALIFORNIA

PROJECT NO.	DATE:	DR. BY:	APP. BY:
1401-0542	2/12/15	AC	AJK

PLATE 6-1

OCP RESULTS (FIELD)

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

NEW AG ED. CTR. AND CAREER TECH ED. CTR.
SANTA MARIA JOINT UNION HIGH S.D.
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SANTA MARIA, CALIFORNIA

PROJECT NO.	DATE:	DR. BY:	APP. BY:
1401-0542	1/7/15	AC	AJK

PLATE 6-2

TPH, BTEX RESULTS (SOIL GAS)

7.0 HUMAN HEALTH SCREENING-LEVEL EVALUATION

7.1 CHEMICALS OF POTENTIAL CONCERN

The COPCs used in the human health screening-level evaluation completed for the Project Site completed by Padre included those compounds that were reported at concentrations at or above their respective analytical laboratory reporting limits. Therefore, the following COPCs in soil and soil gas were evaluated:

Soil

- DDE, DDT, Dieldrin

Soil Gas

- VOCs: TPH (C_5-C_{12}), BTEX, Acetone, Carbon Disulfide, Chloroform, and Methylene Chloride

Arsenic concentrations ranged from 0.85 to 2.2 mg/kg in surface soil samples collected throughout the Project Site. A graphical evaluation was completed by creating a normality plot of the collected arsenic soil data. The inflection point of the arsenic distribution data was interpreted to be approximately 1.6 mg/kg. A statistical evaluation was completed by calculating the 95% Upper Confidence Limit (UCL) for the arsenic data set. The 95% UCL for arsenic in soil at the Project Site was calculated to be 1.4 mg/kg. Therefore, concentrations of arsenic identified in surface soil at the Project Site are representative of ambient concentrations and arsenic is not considered a COPC. A copy of the graphical and statistical evaluation is presented in **Appendix F**.

Lead concentrations ranged from less than 1.2 to 3.2 mg/kg in surface soil samples collected from the detention basin and subsurface soil samples collected from the approximate location of the former drilling sump. Because lead results for the Project Site are below concentrations of 80 mg/kg, which represents DTSC's school site risk management screening level, lead is not considered a COPC.

The Project Site will be provided with potable water through the local water purveyor. However, a nearby offsite water well will be utilized for irrigation purposes. Therefore, a groundwater sample was collected and chemically analyzed for the presence of TPH, VOCs, OCPs, CAM 17 metals, and nitrates. No TPH, VOCs, nor OCPs were identified in the groundwater sample. The metals, arsenic, barium, chromium, molybdenum, selenium, and vanadium were identified at concentrations above laboratory reporting limits, however are below their respective California Maximum Contaminant Levels (MCL) established for drinking water. Additionally, nitrates (nitrate as NO_3 and nitrates and nitrate as N) were identified above laboratory reporting limits, however are below their respective MCLs. Therefore, metals and nitrates identified in groundwater are not considered COPCs.

7.2 RISK ASSESSMENT

The U.S. EPA Risk Screening Levels (RSLs) were used to conduct a screening-level human health risk assessment using the residential land-use scenario. For compounds without established RSLs, Preliminary Remediation Goals (PRGs) and/or 'Cal-modified' PRGs were used. Screening levels are used to evaluate carcinogenic (cancer causing) impacts and non-carcinogenic impacts (i.e., liver or kidney damage). Carcinogenic screening levels are typically based on a predicted excess long-term cancer risk of one in a million (1.0E-06). Non-carcinogenic screening levels are based on maintaining the daily COPC intake below the level at which deleterious health effects are considered possible.

In accordance with PEA guidance documents and DTSC's Human Health Risk Assessment (HHRA) Note 3, dated May 21, 2013, the maximum detected chemical concentrations in soil were evaluated as potential exposure point concentrations (EPCs). The EPCs were compared to the RSLs for residential soil. The screening evaluation was conducted by calculating the ratio of the EPCs to the corresponding carcinogenic and non-carcinogenic screening levels for each COPC. The ratios for each of the COPCs were added together to provide a total value for evaluating potential cumulative impacts. The total risk from OCPs identified in surface soils at the Project Site was estimated to be 1.8×10^{-8} which does not provide an excess cancer risk of 1 in 1,000,000 ($>10^{-6}$) for the Project Site. The total health hazard from OCPs identified in surface soils at the Project Site was estimated to be 0.0002 which does not present a significant health hazard (i.e., >1). The results of the screening-level evaluation are presented in Table 7.1.

7.3 SOIL GAS RISK ASSESSMENT

The objective of the soil gas survey was to evaluate shallow soil gas beneath the Project Site for potential impacts from the former presence of an abandoned oil-gas well and the proximity of the Greka Oil & Gas Company's oil-gas field facility located east of the Project Site. At each location discrete soil gas samples were collected at depths of 5-feet and 15-feet in accordance with the DTSC guidance using direct-push drilling technology.

DTSC's *SG Screen* Version 2.0 (4/03) (DTSC modification March 2014) Screening Level Model for Soil Gas Contamination (based on the Johnson-Ettinger Indoor Vapor Intrusion Model) was used to estimate the cumulative risk and hazard associated with the carcinogenic and the non-carcinogenic constituents detected in soil gas. The constituent TPH (C_5-C_{12}) is not included in DTSC's *SG Screen* constituent lookup table. Therefore, the highest concentration of TPH (C_5-C_{12}) identified at the Project Site was divided by the RSL for TPH (aliphatic low) for residential air, along with the attenuation factor of 0.001 for future residential structures (DTSC *Vapor Intrusion Guidance*, 2011). Based on the soil conditions encountered and the proposed building construction, the following parameters were used:

- Soil gas sample collection depths were approximately 5 and 15 feet;
- Static groundwater was not encountered;

- The highest constituent concentrations were used from each sample depth;
- The depth below grade to bottom of enclosed space floor (L_F) is 15 centimeters (slab-on-grade);
- The general soil type encountered (within upper 15 feet) was classified as loamy sand (LS); and
- Conservative default values were used for the remaining input parameters.

The leak check compound 1,1-difluoroethane (DFA) was identified in four of the eight soil gas samples at concentrations ranging from <5.5 to 9.1 µg/m^3. DTSC (2012) indicates that a concentration of the leak check compound greater than or equal to 10 times the reporting limit for the target analyte(s) suggests that the sample was influenced by ambient air. The concentrations of the leak detection compound identified in soil gas samples are all below 10 times the specified reporting limit. Therefore, it is determined that the soil gas samples were not influenced by ambient air.

Based on the soil gas analytical results, the cumulative increased cancer risk at the Project Site from shallow soil vapor is estimated to be 1.7 x 10^{-7}, which does not provide an excess cancer risk greater than 1 in 1,000,000 (>10^{-6}) for the Project Site. The cumulative hazard is estimated to be 0.22, which does not provide a significant health hazard (>1). Results of the soil gas model are summarized in Table 7-2 and copies of the screening level model spreadsheets are included as **Appendix G**.

Table 7.1
Soil Exposure Screening Evaluation
New Agricultural Education and Career Tech Education Center
Santa Maria Joint Union High School District

COPC	Exposure-Point Concentration (mg/kg)	Carcinogenic Risk			Non-carcinogenic Hazard		
		Screening Level (mg/kg)	Source	Ratio of EPC to Screening Level	Screening Level (mg/kg)	Source	Ration of EPC to Screening Level
DDE	0.00067	1.6	RSL	4.19E-04	36	Surrogate RSL	1.86E-05
DDT	0.012	1.9	RSL	6.32E-03	36	RSL	3.33E-04
Dieldrin	0.00057	0.033	RSL	1.73E-02	3.1	RSL	1.84E-04
			Total Risk ($x10^{-6}$):	**2.40E-08**	**Total Hazard:**		**5.36E-04**
Notes:							
COPC = chemical of potential concern							
EPC = exposure point concentration							
Exposure Point Concentration = maximum detected concentration in soil samples collected at the site							
RSL = regional screening level for residential soil (U.S.EPA May 2013)							
mg/kg = milligrams per kilogram							
Surrogate RSL = RSL not established for DDE. RSL for DDT was used as a surrogate value.							
nc = non-carcinogenic							

Table 7-2. Results of Soil Gas Screening Level Risk Assessment

Project Site Soils (0-15 feet bgs)		Project Site Soils (0-15 feet bgs)	
COPC (1)	**Risk by COPC (2)**	**COPC (1)**	**Hazard by COPC (3)**
TPH (C_5-C_{12})	NA	TPH (C_5-C_{12})	8.0E-04
Benzene	6.7E-08	Benzene	1.8E-03
Toluene	NA	Toluene	9.5E-05
Ethylbenzene	1.1E-08	Ethylbenzene	9.8E-06
m-Xylene	NA	m-Xylene	1.3E-04
p-Xylene	NA	p-Xylene	1.3E-04
Acetone	NA	Acetone	4.3E-06
Carbon Disulfide	NA	Carbon Disulfide	1.8E-05
Chloroform	9.4E-08	Chloroform	9.8E-05
Methylene chloride	2.2E-09	Methylene chloride	1.3E-05
Risk by Pathway	**Total Risk (4)** **1.7E-07**	**Hazard by Pathway**	**Total Hazard (5)** **2.2E-01**

Notes	
(1)	Chemical of Potential Concern (COPC)
(2)	Risk from each COPC (Cumulative)
(3)	Hazard from each COPC (Cumulative)
(4)	Total calculated cancer risk
(5)	Total calculated hazard quotient
NA	Not Applicable

8.0 ECOLOGICAL SCREENING

A detailed ecological screening evaluation was not performed during this PEA because the Project Site has historically been utilized as an oil field and as agricultural land. Natural wildlife areas were not noted on the Project Site during the course of the PEA. Therefore, based on the available information, there does not appear to be a pathway of exposure to nonhuman, sensitive ecological species.

9.0 CONCLUSIONS

The purpose of this PEA is to establish whether a release or potential release of hazardous substances, which poses a threat to human health or the environment, exists at the Project Site. The conceptual site model indicated that exposure to soil, groundwater, and/or soil gas from the identified COPCs may be possible along the inhalation, ingestion, and dermal contact pathways.

The results of the PEA screening level risk assessment indicate that soil impacted by the chlorinated pesticides DDE, DDT, and dieldrin does not provide an excess cancer risk greater than 1 in 1,000,000 ($>10^{-6}$). The total risk along each exposure pathway for COPCs identified in surface soils at the Project Site was estimated to be 1.8×10^{-8}. Additionally, the total health hazard from OCPs identified in surface soils at the Project Site was estimated to be 0.0002, which does not present a significant health hazard (i.e., >1).

Arsenic concentrations ranged from 0.85 to 2.2 mg/kg in surface soil samples collected throughout the Project Site. A graphical evaluation was completed by creating a normality plot of the collected arsenic soil data. The inflection point of the arsenic distribution data was interpreted to be approximately 1.6 mg/kg. A statistical evaluation was completed by calculating the 95% UCL for the arsenic data set. The 95% UCL for arsenic in soil at the Project Site was calculated to be 1.4 mg/kg. Therefore, concentrations of arsenic identified in surface soil at the Project Site are representative of ambient concentrations and arsenic is not considered a COPC.

Lead concentrations ranged from less than 1.2 to 3.2 mg/kg in surface soil samples collected from the detention basin and subsurface soil samples collected from the approximate location of the former drilling sump. Because lead results for the Project Site are below concentrations of 80 mg/kg, which represents DTSC's school site risk management screening level, lead is not considered a COPC at the Project Site.

Based on soil gas results, the cumulative increased cancer risk at the Project Site from shallow soil vapor is estimated to be 1.7×10^{-7}, which does not provide an excess cancer risk greater than 1 in 1,000,000 ($>10^{-6}$) for the Project Site. The cumulative hazard is estimated to be 0.22 which does not provide a significant health hazard (>1).

The Project Site will be provided with potable water through the local water purveyor; however the school site will utilize a nearby, offsite water will for irrigation purposes. A groundwater sample was collected and chemically analyzed for the presence of TPH, VOCs, OCPs, metals, and nitrates. None of the COPCs were reported at concentrations exceeding their respective California MCLs. Therefore, further assessment and/or remediation regarding groundwater beneath the Project Site is unwarranted.

The PEA screening level risk assessment indicates that the Project Site has not been significantly impacted by agricultural practices or the presence of a former oil well and drilling sump. Therefore, Padre recommends the issuance of a “No Further Action” designation from the DTSC regarding the proposed new school site.

10.0 REFERENCES

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APPENDIX A
DTSC CORRESPONDENCE

Department of Toxic Substances Control

Miriam Barcellona Ingenito, Acting Director
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Sacramento, California 95826-3200

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

November 3, 2014

Mr. Gary Wuitschick
Director of Support Services
Santa Maria Joint Union High School District
2560 Skyway Drive
Santa Maria, California 93455

APPROVAL OF REVISED PRELIMINARY ENVIRONMENTAL ASSESSMENT WORKPLAN, SANTA MARIA JOINT UNION HIGH SCHOOL DISTRICT, PROPOSED NEW AGRICULTURAL EDUCATION CENTER AND CAREER TECHNICAL EDUCATION CENTER, 1280 FOUNDERS AVENUE, SANTA MARIA (SITE CODE 304651)

Dear Mr. Wuitschick:

The Department of Toxic Substances Control (DTSC) reviewed the revised Preliminary Environmental Assessment Workplan (PEA Workplan – Padre Associates, Inc., October 20, 2014) received on October 27, 2014. The PEA Workplan was revised in response to DTSC comments on the draft version forwarded in a letter dated September 25, 2014. The PEA Workplan includes project background information as well as proposed investigation activities.

According to the Preliminary Environmental Assessment (PEA) Workplan, the approximately 25.32-acre parcel identified by the County of Santa Barbara as Assessor's Parcel Number (APN): 107-150-013, located at 1280 Founders Avenue, Santa Maria, Santa Barbara County, California (Site). The Site is bordered to the north by agricultural property currently used for the production of blackberries; to the east by agricultural property currently used for the production of strawberries, beyond which is the Greka Oil and Gas Company oil field facility consisting of several oil-gas wells, associated piping, and aboveground storage tanks; to the south by the Santa Maria Elks Rodeo facility; and to the west by undeveloped/grazing land, beyond which is the Polished Pet Grooming and Kennel facility, and U.S. Highway 101. The Site is currently used for agricultural crop production (strawberries), and has been since approximately 2006. Prior to 2006 the Site was used for cattle grazing. A plugged and abandoned former oil-gas well is located on-site. Reportedly, this well produced oil for only four months (January-April) in 1978. The well was then reportedly completed as a

water/steam injection well in operation from 1978 to 1992. The well was abandoned in 2001. There is no record of well sump removal activity conducted at the location of this well. The Santa Maria Joint Union High School District (District) plans to develop the Site with an Agricultural Education Center and Career Technical Education Center. The schools will be designed to facilitate 500 students in 28 classrooms.

The PEA Workplan will investigate Site soil for: potential residual organochlorine pesticides and arsenic from agricultural use; total petroleum hydrocarbons (TPH) and other petroleum by-products associated with drilling mud in soil from an abandoned onsite oil-gas well sump; methane, hydrogen sulfide, volatile organic compounds (VOCs), and TPH in soil gas associated with the operation of the former on-site oil-gas well, and oil-gas well activity present in the surrounding area; and VOCs and TPH in groundwater from an existing (off-site) water well, which is planned to be used for irrigation purposes at the Site.

DTSC comments have been adequately addressed, and the PEA Workplan is hereby approved. In accordance with Education Code section 17210.1(b), the District shall provide written notice to residents in the immediate area, approved in form by DTSC, at least five days in advance of field investigation activities. The intent of this requirement is to provide advance notice of fieldwork such as drilling, sampling, and other environmental data collection activities to anyone who lives or works in the line of sight of the proposed Site. Please notify DTSC a minimum of 48 hours in advance of field work or schedule changes.

The PEA Workplan indicated that the District is intending to make the PEA Report available for public review by Option A of the Education Code section 17213.1(a)(6)(A).

If you have any questions regarding the project, please contact me at (916) 255-3577 or via e-mail at Jose.Luevano@dtsc.ca.gov.

Sincerely,

Jose Luevano, Project Manager
Northern California Schools Unit
Brownfields and Environmental Restoration Program

cc: See next page.

cc: (via e-mail)

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APPENDIX B
PUBLIC NOTICE INFORMATION

*** Proof of Publication ***

PROOF OF PUBLICATION
(2015.5 C.C.P.)

STATE OF CALIFORNIA.

SANTA MARIA TIMES

SANTA MARIA JOINT UNION HS DISTRICT
2560 SKYWAY DRIVE
Santa Maria, CA 93455

ORDER NUMBER 49062

I AM THE PRINCIPAL CLERK OF THE PRINTER OF THE SANTA MARIA TIMES, NEWSPAPER OF GENERAL CIRCULATION, PRINTED AND PUBLISHED IN THE CITY OF SANTA MARIA, COUNTY OF SANTA BARBARA, AND WHICH NEWSPAPER HAS BEEN ADJUDGED A NEWSPAPER OF GENERAL CIRCULATON BY THE SUPERIOR COURT OF THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, ADJUDICATION #463687.

THAT THE NOTICE OF WHICH THE ANNEXED IS A PRINTED COPY (SET IN TYPE NOT SMALLER THAT NONPAREIL), HAS BEEN PUBLISHED IN EACH REGULAR AND ENTIRE ISSUE OF SAID NEWSPAPER AND NOT IN ANY SUPPLEMENT THEREOF ON THE FOLLOWING DATES, TO-WIT:

I CERTIFY (OR DECLARE) UNDER PENALTY OF PERJURE THAT THE FOREGOING IS TRUE AND CORRECT.

PUBLISHED ON: 02/02/2015

TOTAL AD COST: 265.00
FILED ON: 2/2/2015

DATED AT SANTA MARIA, CA THIS 2nd DAY OF Feb, 20 15

Teresa Ramirez
SIGNATURE

PUBLIC NOTICE
SANTA MARIA JOINT UNION HIGH SCHOOL DISTRICT
PUBLIC COMMENT PERIOD AND PUBLIC HEARING
PRELIMINARY ENVIRONMENTAL ASSESSMENT

Project Title and Location: Proposed New Agricultural Education Center and Career Technical Education Center (CTE) School site located at 1280 Founders Avenue, Santa Maria, Santa Barbara County, California.

Description of Assessment: The Santa Maria Joint Union High School District (SMJUHSD) has prepared a Preliminary Environmental Assessment (PEA) for the proposed New CTE School site. As a condition of receiving State funds, any project on a school site that requires review under the California Environmental Quality Act (CEQA) must also undergo a complete environmental review, and if necessary, a cleanup to protect students, faculty and staff who will occupy the school.

Lead Agency: The PEA process is being completed with the oversight of the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC).

Compliance with California Environmental Quality Act (CEQA): The SMJUHSD will be completing a thirty (30) day public comment period for the Draft Mitigated Negative Declaration (MND) for the proposed New CTE School. The MND will circulate for public review and a public hearing will be held to receive comments on the MND in accordance with CEQA and the State CEQA Guidelines. The MND will be adopted by the District's governing board at a later date.

The PEA and Supporting Documents are available for review at the following locations and also on the SMJUHSD website at www.smjuhsd.k12.ca.us.

Santa Maria Joint Union School District
2560 Skyway Drive
Santa Maria, CA 93455
(805) 922-4573

Santa Maria Public Library
421 S. McClelland Street
Santa Maria, CA 93454
(805) 925-0994

DTSC "EnviroStor" database:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60002035

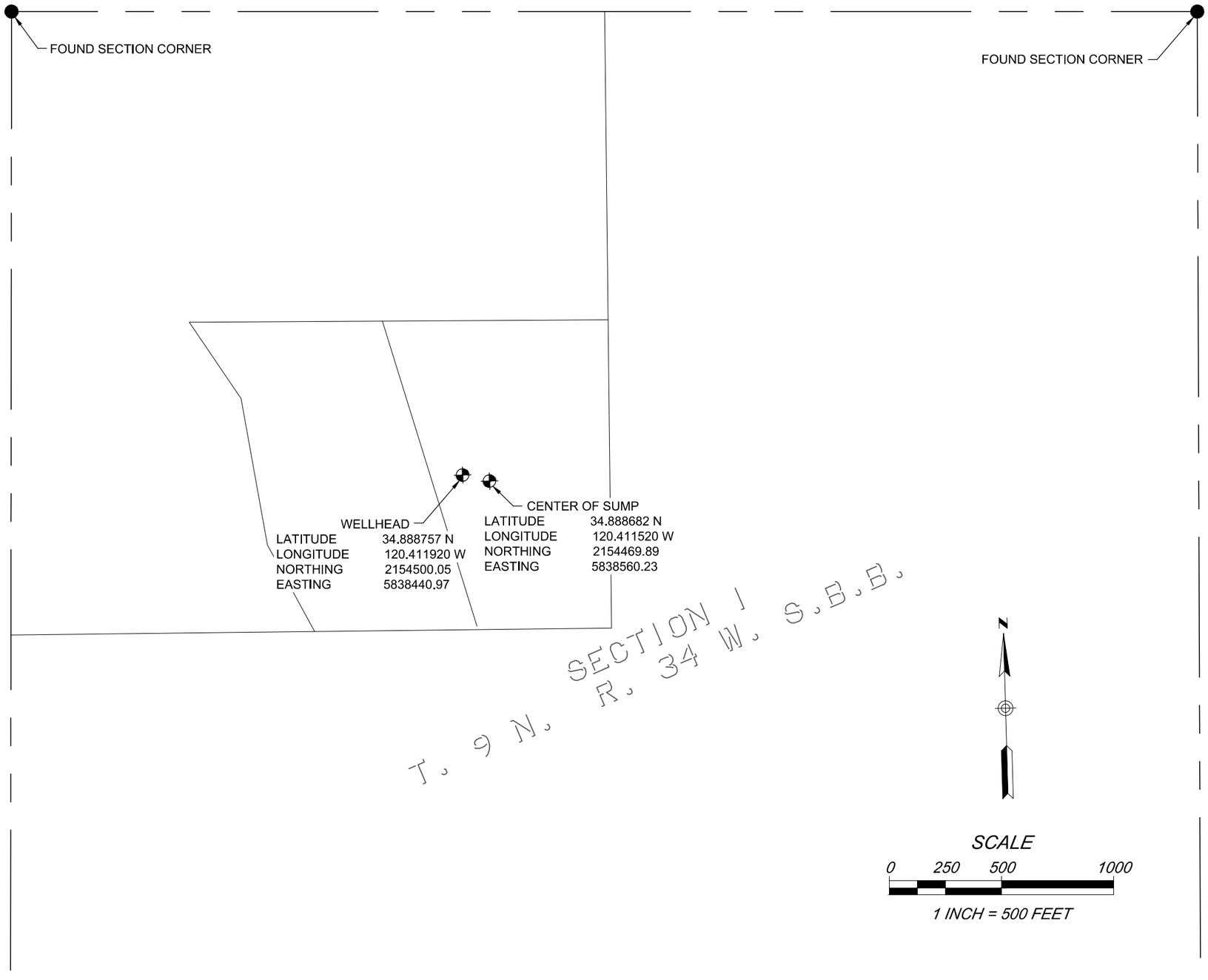
Public Comment Period: The SMJUHSD will receive written comments on the PEA report from February 2, 2015 to March 3, 2015. The SMJUHSD hours of operation are Monday through Friday, 7:30am-4:30pm. All comments should be directed to Mr. Gary Wuitschick, Director of Support Services, at the address listed above.

Public Hearing: A public hearing to discuss the PEA report will be held on February 10, 2015 at 6:30pm, in the Professional Development Center at 2560 Skyway Drive in Santa Maria. All comments (verbal and written) on the PEA report will be received during the public hearing.

Aviso Publico: El Distrito Escolar Unificado de las Escuelas Preparatorias de Santa Maria (SMJUHSD) ha preparado una Evaluación Preliminar Ambiental (PEA) para el nuevo sitio propuesto para la Escuela de Educacion Técnica localizada en 1280 Founders Avenue, Santa Maria, California. Un periodo de comentarios público de 30 días será iniciado el 2 de febrero de 2015 al 3 de marzo de 2015. Todos los comentarios deben ser dirigidos a Gary Wuitschick. Una audiencia pública para discutir el informe de la PEA se llevara a cabo el 10 de febrero de 2015 a las 6:30pm, en el Centro de Desarrollo Profesional en 2560 Skyway Drive en Santa Maria.

Legal #49062 Pub date: February 2, 2015

APPENDIX C
SURVEYOR MAP



SURVEY NOTES

1. *THE HORIZONTAL DATUM FOR THIS SURVEY IS THE NORTH AMERICAN DATUM OF 1983, [NAD83(1992)].*

2. *THE PROJECTION USED IS THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE 5 PROJECTION.*

3. *THIS SURVEY IS TIED TO TWO SANTA MARIA VALLEY CONTROL MOUMENTS SHOWN ON THE MAP FILED IN BOOK 147 AT PAGES 57-61 IN RECORDER'S OFFICE OF THE COUNTY OF SANTA BARBARA. DESIGNATED AS:*

1115	
NORTHING	*2160624.28'*
EASTING	*5831455.34'*
ELEVATION	*258.27'*
CONVERGANCE ANGLE	*-1° 23' 18.17"*
COMBINED SCALE FACTOR	*0.99991888*

1122	
NORTHING	*2164714.04'*
EASTING	*5837055.32'*
ELEVATION	*264.02'*
CONVERGANCE ANGLE	*-1° 22' 40.52"*
COMBINED SCALE FACTOR	*0.99991917*

THE CALCULATED AND MEASURED BEARING FROM POINT 1115 TO 1122 IS N 53°51'31" E.

4. *THE ORTHOMETRIC HEIGHTS (ELEVATIONS) ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), AS REALIZED BY THE SANTA MARIA VALLEY CONTROL NETWORK.*

5. *THE WELLHEAD LOCATION WAS DERIVED BY RECORD TIES TO THE SECTION LINES PER DIVISION OF OIL AND GAS RECORDS.*

SURVEYOR'S STATEMENT

THIS MAP REPRESENTS A SURVEY MADE BY ME AT THE REQUEST OF PADRE ASSOCIATES, ON 10/30/2014.

DATE: DECEMBER 2, 2014

Peter Moreci

PETER R. MORECI, LS 8372

LICENSED LAND SURVEYOR
PETER R. MORECI
No. 8372
STATE OF CALIFORNIA

RICK ENGINEERING COMPANY
711 TANK FARM ROAD - SUITE 110
SAN LUIS OBISPO, CA 93401
805.544.0707
(FAX)805.544.2052

Drawing File Name: 17326 construction.dwg

SHELL-STANDARD BLANCKENBURG #1
WELLHEAD LOCATION SURVEY

DATE: Dec 02, 2014
DRAWN BY: PRM
CHECKED BY: PRM
SCALE: 1"=500'
SHEET: 1 OF 1

APPENDIX D
QUALITY ASSURANCE PROJECT PLAN

APPENDIX D

QUALITY ASSURANCE PROJECT PLAN (QAPP)

The QA/QC procedures were employed in both the field and the laboratory. QA/QC samples include the collection of equipment rinseate samples, field blank samples, and duplicate split samples.

FIELD QA/QC PROCEDURES

Field QA/QC procedures were performed at the site and consist of the following measures:

- COC forms were used for sample submittal to the laboratory; and
- Daily information regarding sample collection was recorded by Padre in Field Logbooks. Sample types, soil descriptions, sample identification numbers, and sample times were collected and recorded on Field Data Sheets and in the Field Logbooks. Pages were numbered, dated, and signed by the person performing data entry.

Field QA/QC samples were collected and submitted for analysis along with the discrete soil samples using the following sampling frequency:

- Equipment blanks - One equipment rinseate blank per sample event;
- Field blanks - One field blank sample per sample event; and
- Field duplicates – Approximately 10% of the discrete soil samples for arsenic were split by the laboratory and analyzed as duplicate soil samples.

Equipment Rinseate Blanks

An equipment rinseate blank (equipment blank) was collected from the final water rinsed over equipment after cleaning activities had been performed. The equipment blank was collected from non-dedicated (reusable) sampling equipment such as soil sampling tools. The equipment blank was analyzed for arsenic and lead using the same analytical methods used on the unique soil samples.

To collect an equipment blank sample, rinse water was carefully poured over or through the recently cleaned equipment, and collected directly into an appropriate sample container held over a bucket. Equipment blank samples was labeled and handled in the same manner as all other samples.

Field Blanks

Field blank samples consist of a sample of the deionized water that was used to rinse sampling equipment during equipment cleaning activities. The purpose of the field blank sample is to evaluate the rinse water for compounds detected in the soil samples. A field blank sample was collected by pouring rinse water into the appropriate sample container. The field blank samples was handled in the same manner as all other samples.

Duplicate Sample(s)

Duplicate soil and soil gas sample(s) were analyzed in order to evaluate the analytical procedures and methods employed by the laboratory. The duplicate sample(s) for soil were selected from the original soil samples, and split by the laboratory. The duplicate sample(s) for soil gas were collected in the field in separated sample containers at the same time that the original gas sample was collected. Duplicate soil and soil gas samples were analyzed for each COPC.

Laboratory QA/QC Procedures

Laboratory QA/QC procedures include the following:

- Laboratory analyses will be performed within the required holding time for all samples;
- Appropriate minimum reporting limits (RLs) will be used for each analysis;
- A state-certified hazardous waste testing laboratory will conduct the required analysis;
- The laboratory will provide the following information for each sample:
  - Method blank data;
  - Surrogate recovery, instrument tuning, and calibration data; and
  - Signed laboratory reports including the sample designation, date of sample collection, date of sample analysis, laboratory analytical method employed, sample volume, and the minimum RL.

To determine whether Quality Assurance/Quality Control (QA/QC) requirements for sampling and analysis were met for the project, and to determine whether the data are usable for risk assessment purposes, a cursory data validation review will be done on the data summary package provided by the laboratory. This review will include an evaluation of chain-of-custody documentation, holding times, reporting limits, precision and accuracy of goals, representativeness, and completeness of the data. QA/QC requirements that are not met will be evaluated in the 'uncertainty' portion of the risk assessment. Documentation of the data validation review will be included with the PEA report.

Detection Limits

Detection limits for OCPs and metals that were met by the analytical laboratory are listed in the following DTSC document(s), and are attached:

- Table 2, DTSC's *Interim Guidance for Sampling Agricultural Properties (Third Revision)* dated April 30, 2008 will be met by the analytical laboratory; and

- Table 9, DTSC, *Interim Guidance, Evaluation of School Sites with Potential Contamination as a Result of Lead from Lead-Based-Paint, Organochlorine Pesticides from Temiticides, and Polychlorinated Biphenyls from Electrical Transformers*, revised June 9, 2006.

Padre utilized McCampbell Analytical Inc. (McCampbell) located in Pittsburg, California to provide the required chemical analyses of collected soil and water samples. McCampbell is certified (No. 1644) by the California State Environmental Laboratory Accreditation Program Branch to provide the required chemical analyses.

APPENDIX E
ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODYS
SITE SPECIFIC

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1411538

Report Created for: Padre Associates. Inc.
555 University Ave., Suite 110
Sacramento, CA 95825

Project Contact: Alan J. Klein
Project P.O.:
Project Name: #1401-0542; Santa Maria JUHSD

Project Received: 11/13/2014

Analytical Report reviewed & approved for release on 11/20/2014 by:

Question about your data?

Click here to email McCampbell

Angela Rydelius,
Laboratory Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Padre Associates. Inc.
Project: #1401-0542; Santa Maria JUHSD
WorkOrder: 1411538

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
TEQ	Toxicity Equivalence

Analytical Qualifiers

J	Result is less than the RL but greater than the MDL. The reported concentration is an estimated value.
H	samples were analyzed out of holding time
S	spike recovery outside accepted recovery limits
a9	reporting limit near, but not identical to, our standard reporting limit due to variable Encore/Solid sample weight

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch.

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	E300.1
Date Received:	11/13/14 20:00	**Analytical Method:**	E300.1
Date Prepared:	11/14/14	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
GW-1	**1411538-029E**	**Water**	**11/12/2014 11:20**	**IC3**	**97804**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Nitrate as N	**9.2**	H	1.0	10	11/14/2014 15:00
Nitrate as $NO3^{-}$	**41**	H	4.5	10	11/14/2014 15:00
Nitrite as N	ND	H	0.10	1	11/14/2014 14:22
Nitrite as $NO2^{-}$	ND	H	0.33	1	11/14/2014 14:22
Nitrate & Nitrite as N	**9.2**	H	1.0	10	11/14/2014 15:00

Surrogates	REC (%)	Limits	
Formate	99	90-115	11/14/2014 14:22

Analyst(s): AE

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8081A
Date Prepared:	11/13/14	**Unit:**	mg/kg

Organochlorine Pesticides (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
CS-1	**1411538-001A**	**Soil**	**11/11/2014 10:43**	**GC40**	**97771**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	11/17/2014 18:40
a-BHC	ND	0.00010	0.0010	1	11/17/2014 18:40
b-BHC	ND	0.00025	0.0010	1	11/17/2014 18:40
d-BHC	ND	0.00037	0.0010	1	11/17/2014 18:40
g-BHC	ND	0.000097	0.0010	1	11/17/2014 18:40
Chlordane (Technical)	ND	0.016	0.025	1	11/17/2014 18:40
a-Chlordane	ND	0.00047	0.0010	1	11/17/2014 18:40
g-Chlordane	ND	0.00021	0.0010	1	11/17/2014 18:40
p,p-DDD	ND	0.00014	0.0010	1	11/17/2014 18:40
p,p-DDE	ND	0.00032	0.0010	1	11/17/2014 18:40
p,p-DDT	ND	0.00043	0.0010	1	11/17/2014 18:40
Dieldrin	ND	0.00033	0.0010	1	11/17/2014 18:40
Endosulfan I	ND	0.00065	0.0010	1	11/17/2014 18:40
Endosulfan II	ND	0.00020	0.0010	1	11/17/2014 18:40
Endosulfan sulfate	ND	0.00063	0.0010	1	11/17/2014 18:40
Endrin	ND	0.00042	0.0010	1	11/17/2014 18:40
Endrin aldehyde	ND	0.00020	0.0010	1	11/17/2014 18:40
Endrin ketone	ND	0.00013	0.0010	1	11/17/2014 18:40
Heptachlor	ND	0.00021	0.0010	1	11/17/2014 18:40
Heptachlor epoxide	ND	0.00020	0.0010	1	11/17/2014 18:40
Hexachlorobenzene	ND	0.00027	0.010	1	11/17/2014 18:40
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	11/17/2014 18:40
Methoxychlor	ND	0.00089	0.0010	1	11/17/2014 18:40
Toxaphene	ND	0.035	0.050	1	11/17/2014 18:40

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	112	70-130	11/17/2014 18:40

Analyst(s): SS

(Cont.)

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8081A
Date Prepared:	11/13/14	**Unit:**	mg/kg

Organochlorine Pesticides (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
CS-2	**1411538-002A**	**Soil**	**11/11/2014 11:18**	**GC40**	**97771**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	11/17/2014 19:15
a-BHC	ND		0.00010	0.0010	1	11/17/2014 19:15
b-BHC	ND		0.00025	0.0010	1	11/17/2014 19:15
d-BHC	ND		0.00037	0.0010	1	11/17/2014 19:15
g-BHC	ND		0.000097	0.0010	1	11/17/2014 19:15
Chlordane (Technical)	ND		0.016	0.025	1	11/17/2014 19:15
a-Chlordane	ND		0.00047	0.0010	1	11/17/2014 19:15
g-Chlordane	ND		0.00021	0.0010	1	11/17/2014 19:15
p,p-DDD	ND		0.00014	0.0010	1	11/17/2014 19:15
p,p-DDE	ND		0.00032	0.0010	1	11/17/2014 19:15
p,p-DDT	**0.00059**	J	0.00043	0.0010	1	11/17/2014 19:15
Dieldrin	ND		0.00033	0.0010	1	11/17/2014 19:15
Endosulfan I	ND		0.00065	0.0010	1	11/17/2014 19:15
Endosulfan II	ND		0.00020	0.0010	1	11/17/2014 19:15
Endosulfan sulfate	ND		0.00063	0.0010	1	11/17/2014 19:15
Endrin	ND		0.00042	0.0010	1	11/17/2014 19:15
Endrin aldehyde	ND		0.00020	0.0010	1	11/17/2014 19:15
Endrin ketone	ND		0.00013	0.0010	1	11/17/2014 19:15
Heptachlor	ND		0.00021	0.0010	1	11/17/2014 19:15
Heptachlor epoxide	ND		0.00020	0.0010	1	11/17/2014 19:15
Hexachlorobenzene	ND		0.00027	0.010	1	11/17/2014 19:15
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	11/17/2014 19:15
Methoxychlor	ND		0.00089	0.0010	1	11/17/2014 19:15
Toxaphene	ND		0.035	0.050	1	11/17/2014 19:15

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	109	70-130	11/17/2014 19:15

Analyst(s): SS

(Cont.)

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8081A
Date Prepared:	11/13/14	**Unit:**	mg/kg

Organochlorine Pesticides (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
CS-2 DUP	**1411538-002B**	**Soil**	**11/11/2014 11:18**	**GC40**	**97771**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	11/17/2014 19:51
a-BHC	ND		0.00010	0.0010	1	11/17/2014 19:51
b-BHC	ND		0.00025	0.0010	1	11/17/2014 19:51
d-BHC	ND		0.00037	0.0010	1	11/17/2014 19:51
g-BHC	ND		0.000097	0.0010	1	11/17/2014 19:51
Chlordane (Technical)	ND		0.016	0.025	1	11/17/2014 19:51
a-Chlordane	ND		0.00047	0.0010	1	11/17/2014 19:51
g-Chlordane	ND		0.00021	0.0010	1	11/17/2014 19:51
p,p-DDD	ND		0.00014	0.0010	1	11/17/2014 19:51
p,p-DDE	ND		0.00032	0.0010	1	11/17/2014 19:51
p,p-DDT	**0.00054**	J	0.00043	0.0010	1	11/17/2014 19:51
Dieldrin	ND		0.00033	0.0010	1	11/17/2014 19:51
Endosulfan I	ND		0.00065	0.0010	1	11/17/2014 19:51
Endosulfan II	ND		0.00020	0.0010	1	11/17/2014 19:51
Endosulfan sulfate	ND		0.00063	0.0010	1	11/17/2014 19:51
Endrin	ND		0.00042	0.0010	1	11/17/2014 19:51
Endrin aldehyde	ND		0.00020	0.0010	1	11/17/2014 19:51
Endrin ketone	ND		0.00013	0.0010	1	11/17/2014 19:51
Heptachlor	ND		0.00021	0.0010	1	11/17/2014 19:51
Heptachlor epoxide	ND		0.00020	0.0010	1	11/17/2014 19:51
Hexachlorobenzene	ND		0.00027	0.010	1	11/17/2014 19:51
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	11/17/2014 19:51
Methoxychlor	ND		0.00089	0.0010	1	11/17/2014 19:51
Toxaphene	ND		0.035	0.050	1	11/17/2014 19:51

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	103	70-130	11/17/2014 19:51

Analyst(s): SS

(Cont.)

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8081A
Date Prepared:	11/13/14	**Unit:**	mg/kg

Organochlorine Pesticides (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
CS-4	**1411538-003A**	**Soil**	**11/11/2014 08:18**	**GC40**	**97771**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	11/17/2014 20:26
a-BHC	ND		0.00010	0.0010	1	11/17/2014 20:26
b-BHC	ND		0.00025	0.0010	1	11/17/2014 20:26
d-BHC	ND		0.00037	0.0010	1	11/17/2014 20:26
g-BHC	ND		0.000097	0.0010	1	11/17/2014 20:26
Chlordane (Technical)	ND		0.016	0.025	1	11/17/2014 20:26
a-Chlordane	ND		0.00047	0.0010	1	11/17/2014 20:26
g-Chlordane	**0.00028**	J	0.00021	0.0010	1	11/17/2014 20:26
p,p-DDD	ND		0.00014	0.0010	1	11/17/2014 20:26
p,p-DDE	ND		0.00032	0.0010	1	11/17/2014 20:26
p,p-DDT	**0.0012**		0.00043	0.0010	1	11/17/2014 20:26
Dieldrin	**0.00039**	J	0.00033	0.0010	1	11/17/2014 20:26
Endosulfan I	ND		0.00065	0.0010	1	11/17/2014 20:26
Endosulfan II	ND		0.00020	0.0010	1	11/17/2014 20:26
Endosulfan sulfate	ND		0.00063	0.0010	1	11/17/2014 20:26
Endrin	ND		0.00042	0.0010	1	11/17/2014 20:26
Endrin aldehyde	ND		0.00020	0.0010	1	11/17/2014 20:26
Endrin ketone	ND		0.00013	0.0010	1	11/17/2014 20:26
Heptachlor	ND		0.00021	0.0010	1	11/17/2014 20:26
Heptachlor epoxide	ND		0.00020	0.0010	1	11/17/2014 20:26
Hexachlorobenzene	ND		0.00027	0.010	1	11/17/2014 20:26
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	11/17/2014 20:26
Methoxychlor	ND		0.00089	0.0010	1	11/17/2014 20:26
Toxaphene	ND		0.035	0.050	1	11/17/2014 20:26

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	100	70-130	11/17/2014 20:26

Analyst(s): SS

(Cont.)

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8081A
Date Prepared:	11/13/14	**Unit:**	mg/kg

Organochlorine Pesticides (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
CS-3	**1411538-004A**	**Soil**	**11/11/2014 08:33**	**GC40**	**97771**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	11/17/2014 21:02
a-BHC	ND	0.00010	0.0010	1	11/17/2014 21:02
b-BHC	ND	0.00025	0.0010	1	11/17/2014 21:02
d-BHC	ND	0.00037	0.0010	1	11/17/2014 21:02
g-BHC	ND	0.000097	0.0010	1	11/17/2014 21:02
Chlordane (Technical)	ND	0.016	0.025	1	11/17/2014 21:02
a-Chlordane	ND	0.00047	0.0010	1	11/17/2014 21:02
g-Chlordane	ND	0.00021	0.0010	1	11/17/2014 21:02
p,p-DDD	ND	0.00014	0.0010	1	11/17/2014 21:02
p,p-DDE	ND	0.00032	0.0010	1	11/17/2014 21:02
p,p-DDT	ND	0.00043	0.0010	1	11/17/2014 21:02
Dieldrin	ND	0.00033	0.0010	1	11/17/2014 21:02
Endosulfan I	ND	0.00065	0.0010	1	11/17/2014 21:02
Endosulfan II	ND	0.00020	0.0010	1	11/17/2014 21:02
Endosulfan sulfate	ND	0.00063	0.0010	1	11/17/2014 21:02
Endrin	ND	0.00042	0.0010	1	11/17/2014 21:02
Endrin aldehyde	ND	0.00020	0.0010	1	11/17/2014 21:02
Endrin ketone	ND	0.00013	0.0010	1	11/17/2014 21:02
Heptachlor	ND	0.00021	0.0010	1	11/17/2014 21:02
Heptachlor epoxide	ND	0.00020	0.0010	1	11/17/2014 21:02
Hexachlorobenzene	ND	0.00027	0.010	1	11/17/2014 21:02
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	11/17/2014 21:02
Methoxychlor	ND	0.00089	0.0010	1	11/17/2014 21:02
Toxaphene	ND	0.035	0.050	1	11/17/2014 21:02

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	106	70-130	11/17/2014 21:02

Analyst(s): SS

(Cont.)

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8081A
Date Prepared:	11/13/14	**Unit:**	mg/kg

Organochlorine Pesticides (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
CS-5	**1411538-005A**	**Soil**	**11/11/2014 11:41**	**GC40**	**97771**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	11/17/2014 21:37
a-BHC	ND	0.00010	0.0010	1	11/17/2014 21:37
b-BHC	ND	0.00025	0.0010	1	11/17/2014 21:37
d-BHC	ND	0.00037	0.0010	1	11/17/2014 21:37
g-BHC	ND	0.000097	0.0010	1	11/17/2014 21:37
Chlordane (Technical)	ND	0.016	0.025	1	11/17/2014 21:37
a-Chlordane	ND	0.00047	0.0010	1	11/17/2014 21:37
g-Chlordane	ND	0.00021	0.0010	1	11/17/2014 21:37
p,p-DDD	ND	0.00014	0.0010	1	11/17/2014 21:37
p,p-DDE	ND	0.00032	0.0010	1	11/17/2014 21:37
p,p-DDT	ND	0.00043	0.0010	1	11/17/2014 21:37
Dieldrin	ND	0.00033	0.0010	1	11/17/2014 21:37
Endosulfan I	ND	0.00065	0.0010	1	11/17/2014 21:37
Endosulfan II	ND	0.00020	0.0010	1	11/17/2014 21:37
Endosulfan sulfate	ND	0.00063	0.0010	1	11/17/2014 21:37
Endrin	ND	0.00042	0.0010	1	11/17/2014 21:37
Endrin aldehyde	ND	0.00020	0.0010	1	11/17/2014 21:37
Endrin ketone	ND	0.00013	0.0010	1	11/17/2014 21:37
Heptachlor	ND	0.00021	0.0010	1	11/17/2014 21:37
Heptachlor epoxide	ND	0.00020	0.0010	1	11/17/2014 21:37
Hexachlorobenzene	ND	0.00027	0.010	1	11/17/2014 21:37
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	11/17/2014 21:37
Methoxychlor	ND	0.00089	0.0010	1	11/17/2014 21:37
Toxaphene	ND	0.035	0.050	1	11/17/2014 21:37

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	107	70-130	11/17/2014 21:37

Analyst(s): SS

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8081A
Date Prepared:	11/13/14	**Unit:**	mg/kg

Organochlorine Pesticides (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
CS-6	**1411538-006A**	**Soil**	**11/11/2014 10:37**	**GC40**	**97771**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	11/17/2014 22:12
a-BHC	ND		0.00010	0.0010	1	11/17/2014 22:12
b-BHC	ND		0.00025	0.0010	1	11/17/2014 22:12
d-BHC	ND		0.00037	0.0010	1	11/17/2014 22:12
g-BHC	ND		0.000097	0.0010	1	11/17/2014 22:12
Chlordane (Technical)	ND		0.016	0.025	1	11/17/2014 22:12
a-Chlordane	ND		0.00047	0.0010	1	11/17/2014 22:12
g-Chlordane	**0.00033**	J	0.00021	0.0010	1	11/17/2014 22:12
p,p-DDD	ND		0.00014	0.0010	1	11/17/2014 22:12
p,p-DDE	ND		0.00032	0.0010	1	11/17/2014 22:12
p,p-DDT	**0.0010**		0.00043	0.0010	1	11/17/2014 22:12
Dieldrin	ND		0.00033	0.0010	1	11/17/2014 22:12
Endosulfan I	ND		0.00065	0.0010	1	11/17/2014 22:12
Endosulfan II	ND		0.00020	0.0010	1	11/17/2014 22:12
Endosulfan sulfate	ND		0.00063	0.0010	1	11/17/2014 22:12
Endrin	ND		0.00042	0.0010	1	11/17/2014 22:12
Endrin aldehyde	ND		0.00020	0.0010	1	11/17/2014 22:12
Endrin ketone	ND		0.00013	0.0010	1	11/17/2014 22:12
Heptachlor	ND		0.00021	0.0010	1	11/17/2014 22:12
Heptachlor epoxide	ND		0.00020	0.0010	1	11/17/2014 22:12
Hexachlorobenzene	ND		0.00027	0.010	1	11/17/2014 22:12
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	11/17/2014 22:12
Methoxychlor	ND		0.00089	0.0010	1	11/17/2014 22:12
Toxaphene	ND		0.035	0.050	1	11/17/2014 22:12

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	105	70-130	11/17/2014 22:12

Analyst(s): SS

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Angela Rydelius, Lab Manager

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8081A
Date Prepared:	11/13/14	**Unit:**	mg/kg

Organochlorine Pesticides (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
CS-7	**1411538-007A**	**Soil**	**11/11/2014 08:55**	**GC40**	**97771**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	11/17/2014 22:47
a-BHC	ND	0.00010	0.0010	1	11/17/2014 22:47
b-BHC	ND	0.00025	0.0010	1	11/17/2014 22:47
d-BHC	ND	0.00037	0.0010	1	11/17/2014 22:47
g-BHC	ND	0.000097	0.0010	1	11/17/2014 22:47
Chlordane (Technical)	ND	0.016	0.025	1	11/17/2014 22:47
a-Chlordane	ND	0.00047	0.0010	1	11/17/2014 22:47
g-Chlordane	ND	0.00021	0.0010	1	11/17/2014 22:47
p,p-DDD	ND	0.00014	0.0010	1	11/17/2014 22:47
p,p-DDE	ND	0.00032	0.0010	1	11/17/2014 22:47
p,p-DDT	ND	0.00043	0.0010	1	11/17/2014 22:47
Dieldrin	ND	0.00033	0.0010	1	11/17/2014 22:47
Endosulfan I	ND	0.00065	0.0010	1	11/17/2014 22:47
Endosulfan II	ND	0.00020	0.0010	1	11/17/2014 22:47
Endosulfan sulfate	ND	0.00063	0.0010	1	11/17/2014 22:47
Endrin	ND	0.00042	0.0010	1	11/17/2014 22:47
Endrin aldehyde	ND	0.00020	0.0010	1	11/17/2014 22:47
Endrin ketone	ND	0.00013	0.0010	1	11/17/2014 22:47
Heptachlor	ND	0.00021	0.0010	1	11/17/2014 22:47
Heptachlor epoxide	ND	0.00020	0.0010	1	11/17/2014 22:47
Hexachlorobenzene	ND	0.00027	0.010	1	11/17/2014 22:47
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	11/17/2014 22:47
Methoxychlor	ND	0.00089	0.0010	1	11/17/2014 22:47
Toxaphene	ND	0.035	0.050	1	11/17/2014 22:47

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	107	70-130	11/17/2014 22:47

Analyst(s): SS

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8081A
Date Prepared:	11/13/14	**Unit:**	mg/kg

Organochlorine Pesticides (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
CS-9	**1411538-009A**	**Soil**	**11/11/2014 12:31**	**GC40**	**97771**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	11/17/2014 23:23
a-BHC	ND		0.00010	0.0010	1	11/17/2014 23:23
b-BHC	ND		0.00025	0.0010	1	11/17/2014 23:23
d-BHC	ND		0.00037	0.0010	1	11/17/2014 23:23
g-BHC	ND		0.000097	0.0010	1	11/17/2014 23:23
Chlordane (Technical)	ND		0.016	0.025	1	11/17/2014 23:23
a-Chlordane	ND		0.00047	0.0010	1	11/17/2014 23:23
g-Chlordane	**0.00024**	J	0.00021	0.0010	1	11/17/2014 23:23
p,p-DDD	ND		0.00014	0.0010	1	11/17/2014 23:23
p,p-DDE	**0.00067**	J	0.00032	0.0010	1	11/17/2014 23:23
p,p-DDT	**0.00070**	J	0.00043	0.0010	1	11/17/2014 23:23
Dieldrin	**0.00057**	J	0.00033	0.0010	1	11/17/2014 23:23
Endosulfan I	ND		0.00065	0.0010	1	11/17/2014 23:23
Endosulfan II	ND		0.00020	0.0010	1	11/17/2014 23:23
Endosulfan sulfate	ND		0.00063	0.0010	1	11/17/2014 23:23
Endrin	ND		0.00042	0.0010	1	11/17/2014 23:23
Endrin aldehyde	ND		0.00020	0.0010	1	11/17/2014 23:23
Endrin ketone	ND		0.00013	0.0010	1	11/17/2014 23:23
Heptachlor	ND		0.00021	0.0010	1	11/17/2014 23:23
Heptachlor epoxide	ND		0.00020	0.0010	1	11/17/2014 23:23
Hexachlorobenzene	ND		0.00027	0.010	1	11/17/2014 23:23
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	11/17/2014 23:23
Methoxychlor	ND		0.00089	0.0010	1	11/17/2014 23:23
Toxaphene	ND		0.035	0.050	1	11/17/2014 23:23

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	103	70-130	11/17/2014 23:23

Analyst(s): SS

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B/3620B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8081A
Date Prepared:	11/13/14	**Unit:**	mg/kg

Organochlorine Pesticides (Basic Target List) w/ Florisil Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
CS-8	**1411538-008A**	**Soil**	**11/11/2014 08:00**	**GC22**	**97771**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	11/18/2014 14:36
a-BHC	ND	0.00010	0.0010	1	11/18/2014 14:36
b-BHC	ND	0.00025	0.0010	1	11/18/2014 14:36
d-BHC	ND	0.00037	0.0010	1	11/18/2014 14:36
g-BHC	ND	0.000097	0.0010	1	11/18/2014 14:36
Chlordane (Technical)	ND	0.016	0.025	1	11/18/2014 14:36
a-Chlordane	ND	0.00047	0.0010	1	11/18/2014 14:36
g-Chlordane	ND	0.00021	0.0010	1	11/18/2014 14:36
p,p-DDD	ND	0.00014	0.0010	1	11/18/2014 14:36
p,p-DDE	ND	0.00032	0.0010	1	11/18/2014 14:36
p,p-DDT	ND	0.00043	0.0010	1	11/18/2014 14:36
Dieldrin	ND	0.00033	0.0010	1	11/18/2014 14:36
Endosulfan I	ND	0.00065	0.0010	1	11/18/2014 14:36
Endosulfan II	ND	0.00020	0.0010	1	11/18/2014 14:36
Endosulfan sulfate	ND	0.00063	0.0010	1	11/18/2014 14:36
Endrin	ND	0.00097	0.0010	1	11/18/2014 14:36
Endrin aldehyde	ND	0.00020	0.0010	1	11/18/2014 14:36
Endrin ketone	ND	0.00013	0.0010	1	11/18/2014 14:36
Heptachlor	ND	0.00021	0.0010	1	11/18/2014 14:36
Heptachlor epoxide	ND	0.00020	0.0010	1	11/18/2014 14:36
Hexachlorobenzene	ND	0.00027	0.010	1	11/18/2014 14:36
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	11/18/2014 14:36
Methoxychlor	ND	0.00089	0.0010	1	11/18/2014 14:36
Toxaphene	ND	0.035	0.050	1	11/18/2014 14:36

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	116	70-130	11/18/2014 14:36

Analyst(s): SS

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3510C
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8081A
Date Prepared:	11/13/14	**Unit:**	µg/L

Organochlorine Pesticides (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
GW-1	**1411538-029B**	**Water**	**11/12/2014 11:20**	**GC20**	**97779**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.0010	0.0050	1	11/14/2014 20:11
a-BHC	ND	0.0017	0.010	1	11/14/2014 20:11
b-BHC	ND	0.0023	0.0050	1	11/14/2014 20:11
d-BHC	ND	0.0013	0.0050	1	11/14/2014 20:11
g-BHC	ND	0.0018	0.020	1	11/14/2014 20:11
Chlordane (Technical)	ND	0.050	0.10	1	11/14/2014 20:11
a-Chlordane	ND	0.0018	0.050	1	11/14/2014 20:11
g-Chlordane	ND	0.0033	0.050	1	11/14/2014 20:11
p,p-DDD	ND	0.0027	0.010	1	11/14/2014 20:11
p,p-DDE	ND	0.0040	0.010	1	11/14/2014 20:11
p,p-DDT	ND	0.0017	0.010	1	11/14/2014 20:11
Dieldrin	ND	0.0027	0.010	1	11/14/2014 20:11
Endosulfan I	ND	0.0016	0.020	1	11/14/2014 20:11
Endosulfan II	ND	0.0011	0.020	1	11/14/2014 20:11
Endosulfan sulfate	ND	0.0017	0.050	1	11/14/2014 20:11
Endrin	ND	0.0010	0.010	1	11/14/2014 20:11
Endrin aldehyde	ND	0.0029	0.050	1	11/14/2014 20:11
Endrin ketone	ND	0.0012	0.050	1	11/14/2014 20:11
Heptachlor	ND	0.0019	0.010	1	11/14/2014 20:11
Heptachlor epoxide	ND	0.0015	0.010	1	11/14/2014 20:11
Hexachlorobenzene	ND	0.0016	0.50	1	11/14/2014 20:11
Hexachlorocyclopentadiene	ND	0.0018	1.0	1	11/14/2014 20:11
Methoxychlor	ND	0.0029	0.10	1	11/14/2014 20:11
Toxaphene	ND	0.23	0.50	1	11/14/2014 20:11

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	105	70-130	11/14/2014 20:11

Analyst(s): CK

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8082
Date Prepared:	11/13/14	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (5.5-6')	**1411538-015A**	**Soil**	**11/12/2014 07:43**	**GC23**	**97777**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.050	1	11/15/2014 16:01
Aroclor1221	ND	0.050	1	11/15/2014 16:01
Aroclor1232	ND	0.050	1	11/15/2014 16:01
Aroclor1242	ND	0.050	1	11/15/2014 16:01
Aroclor1248	ND	0.050	1	11/15/2014 16:01
Aroclor1254	ND	0.050	1	11/15/2014 16:01
Aroclor1260	ND	0.050	1	11/15/2014 16:01
PCBs, total	ND	0.050	1	11/15/2014 16:01

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	86	70-130	11/15/2014 16:01

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1(5.5-6') DUP	**1411538-015C**	**Soil**	**11/12/2014 07:43**	**GC23**	**97777**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.050	1	11/16/2014 00:06
Aroclor1221	ND	0.050	1	11/16/2014 00:06
Aroclor1232	ND	0.050	1	11/16/2014 00:06
Aroclor1242	ND	0.050	1	11/16/2014 00:06
Aroclor1248	ND	0.050	1	11/16/2014 00:06
Aroclor1254	ND	0.050	1	11/16/2014 00:06
Aroclor1260	ND	0.050	1	11/16/2014 00:06
PCBs, total	ND	0.050	1	11/16/2014 00:06

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	89	70-130	11/16/2014 00:06

Analyst(s): SS

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8082
Date Prepared:	11/13/14	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9')	**1411538-016A**	**Soil**	**11/12/2014 07:57**	**GC23**	**97777**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.050	1	11/18/2014 11:21
Aroclor1221	ND	0.050	1	11/18/2014 11:21
Aroclor1232	ND	0.050	1	11/18/2014 11:21
Aroclor1242	ND	0.050	1	11/18/2014 11:21
Aroclor1248	ND	0.050	1	11/18/2014 11:21
Aroclor1254	ND	0.050	1	11/18/2014 11:21
Aroclor1260	ND	0.050	1	11/18/2014 11:21
PCBs, total	ND	0.050	1	11/18/2014 11:21

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	126	70-130	11/18/2014 11:21

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (5.5-6')	**1411538-018A**	**Soil**	**11/12/2014 08:30**	**GC23**	**97777**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.050	1	11/15/2014 23:29
Aroclor1221	ND	0.050	1	11/15/2014 23:29
Aroclor1232	ND	0.050	1	11/15/2014 23:29
Aroclor1242	ND	0.050	1	11/15/2014 23:29
Aroclor1248	ND	0.050	1	11/15/2014 23:29
Aroclor1254	ND	0.050	1	11/15/2014 23:29
Aroclor1260	ND	0.050	1	11/15/2014 23:29
PCBs, total	ND	0.050	1	11/15/2014 23:29

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	82	70-130	11/15/2014 23:29

Analyst(s): SS

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8082
Date Prepared:	11/13/14	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (8.5-9')	**1411538-019A**	**Soil**	**11/12/2014 08:38**	**GC23**	**97777**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.050	1	11/16/2014 05:01
Aroclor1221	ND	0.050	1	11/16/2014 05:01
Aroclor1232	ND	0.050	1	11/16/2014 05:01
Aroclor1242	ND	0.050	1	11/16/2014 05:01
Aroclor1248	ND	0.050	1	11/16/2014 05:01
Aroclor1254	ND	0.050	1	11/16/2014 05:01
Aroclor1260	ND	0.050	1	11/16/2014 05:01
PCBs, total	ND	0.050	1	11/16/2014 05:01

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	90	70-130	11/16/2014 05:01

Analyst(s): SS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (5.5-6')	**1411538-021A**	**Soil**	**11/12/2014 09:04**	**GC23**	**97777**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.050	1	11/16/2014 00:43
Aroclor1221	ND	0.050	1	11/16/2014 00:43
Aroclor1232	ND	0.050	1	11/16/2014 00:43
Aroclor1242	ND	0.050	1	11/16/2014 00:43
Aroclor1248	ND	0.050	1	11/16/2014 00:43
Aroclor1254	ND	0.050	1	11/16/2014 00:43
Aroclor1260	ND	0.050	1	11/16/2014 00:43
PCBs, total	ND	0.050	1	11/16/2014 00:43

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	91	70-130	11/16/2014 00:43

Analyst(s): SS

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8082
Date Prepared:	11/13/14	**Unit:**	mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (8.5-9')	**1411538-022A**	**Soil**	**11/12/2014 09:17**	**GC23**	**97777**

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	0.050	1	11/15/2014 20:23
Aroclor1221	ND	0.050	1	11/15/2014 20:23
Aroclor1232	ND	0.050	1	11/15/2014 20:23
Aroclor1242	ND	0.050	1	11/15/2014 20:23
Aroclor1248	ND	0.050	1	11/15/2014 20:23
Aroclor1254	ND	0.050	1	11/15/2014 20:23
Aroclor1260	ND	0.050	1	11/15/2014 20:23
PCBs, total	ND	0.050	1	11/15/2014 20:23

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	91	70-130	11/15/2014 20:23

Analyst(s): SS

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (5.5-6')	**1411538-015B**	**Soil**	**11/12/2014 07:43**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/14/2014 10:42
tert-Amyl methyl ether (TAME)	ND	0.0052	1	11/14/2014 10:42
Benzene	ND	0.0052	1	11/14/2014 10:42
Bromobenzene	ND	0.0052	1	11/14/2014 10:42
Bromochloromethane	ND	0.0052	1	11/14/2014 10:42
Bromodichloromethane	ND	0.0052	1	11/14/2014 10:42
Bromoform	ND	0.0052	1	11/14/2014 10:42
Bromomethane	ND	0.0052	1	11/14/2014 10:42
2-Butanone (MEK)	ND	0.021	1	11/14/2014 10:42
t-Butyl alcohol (TBA)	ND	0.052	1	11/14/2014 10:42
n-Butyl benzene	ND	0.0052	1	11/14/2014 10:42
sec-Butyl benzene	ND	0.0052	1	11/14/2014 10:42
tert-Butyl benzene	ND	0.0052	1	11/14/2014 10:42
Carbon Disulfide	ND	0.0052	1	11/14/2014 10:42
Carbon Tetrachloride	ND	0.0052	1	11/14/2014 10:42
Chlorobenzene	ND	0.0052	1	11/14/2014 10:42
Chloroethane	ND	0.0052	1	11/14/2014 10:42
Chloroform	ND	0.0052	1	11/14/2014 10:42
Chloromethane	ND	0.0052	1	11/14/2014 10:42
2-Chlorotoluene	ND	0.0052	1	11/14/2014 10:42
4-Chlorotoluene	ND	0.0052	1	11/14/2014 10:42
Dibromochloromethane	ND	0.0052	1	11/14/2014 10:42
1,2-Dibromo-3-chloropropane	ND	0.0041	1	11/14/2014 10:42
1,2-Dibromoethane (EDB)	ND	0.0041	1	11/14/2014 10:42
Dibromomethane	ND	0.0052	1	11/14/2014 10:42
1,2-Dichlorobenzene	ND	0.0052	1	11/14/2014 10:42
1,3-Dichlorobenzene	ND	0.0052	1	11/14/2014 10:42
1,4-Dichlorobenzene	ND	0.0052	1	11/14/2014 10:42
Dichlorodifluoromethane	ND	0.0052	1	11/14/2014 10:42
1,1-Dichloroethane	ND	0.0052	1	11/14/2014 10:42
1,2-Dichloroethane (1,2-DCA)	ND	0.0052	1	11/14/2014 10:42
1,1-Dichloroethene	ND	0.0052	1	11/14/2014 10:42
cis-1,2-Dichloroethene	ND	0.0052	1	11/14/2014 10:42
trans-1,2-Dichloroethene	ND	0.0052	1	11/14/2014 10:42
1,2-Dichloropropane	ND	0.0052	1	11/14/2014 10:42
1,3-Dichloropropane	ND	0.0052	1	11/14/2014 10:42
2,2-Dichloropropane	ND	0.0052	1	11/14/2014 10:42
1,1-Dichloropropene	ND	0.0052	1	11/14/2014 10:42

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (5.5-6')	**1411538-015B**	**Soil**	**11/12/2014 07:43**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0052	1	11/14/2014 10:42
trans-1,3-Dichloropropene	ND	0.0052	1	11/14/2014 10:42
Diisopropyl ether (DIPE)	ND	0.0052	1	11/14/2014 10:42
Ethylbenzene	ND	0.0052	1	11/14/2014 10:42
Ethyl tert-butyl ether (ETBE)	ND	0.0052	1	11/14/2014 10:42
Freon 113	ND	0.052	1	11/14/2014 10:42
Hexachlorobutadiene	ND	0.0052	1	11/14/2014 10:42
Hexachloroethane	ND	0.0052	1	11/14/2014 10:42
2-Hexanone	ND	0.0052	1	11/14/2014 10:42
Isopropylbenzene	ND	0.0052	1	11/14/2014 10:42
4-Isopropyl toluene	ND	0.0052	1	11/14/2014 10:42
Methyl-t-butyl ether (MTBE)	ND	0.0052	1	11/14/2014 10:42
Methylene chloride	ND	0.0052	1	11/14/2014 10:42
4-Methyl-2-pentanone (MIBK)	ND	0.0052	1	11/14/2014 10:42
Naphthalene	ND	0.0052	1	11/14/2014 10:42
n-Propyl benzene	ND	0.0052	1	11/14/2014 10:42
Styrene	ND	0.0052	1	11/14/2014 10:42
1,1,1,2-Tetrachloroethane	ND	0.0052	1	11/14/2014 10:42
1,1,2,2-Tetrachloroethane	ND	0.0052	1	11/14/2014 10:42
Tetrachloroethene	ND	0.0052	1	11/14/2014 10:42
Toluene	ND	0.0052	1	11/14/2014 10:42
1,2,3-Trichlorobenzene	ND	0.0052	1	11/14/2014 10:42
1,2,4-Trichlorobenzene	ND	0.0052	1	11/14/2014 10:42
1,1,1-Trichloroethane	ND	0.0052	1	11/14/2014 10:42
1,1,2-Trichloroethane	ND	0.0052	1	11/14/2014 10:42
Trichloroethene	ND	0.0052	1	11/14/2014 10:42
Trichlorofluoromethane	ND	0.0052	1	11/14/2014 10:42
1,2,3-Trichloropropane	ND	0.0052	1	11/14/2014 10:42
1,2,4-Trimethylbenzene	ND	0.0052	1	11/14/2014 10:42
1,3,5-Trimethylbenzene	ND	0.0052	1	11/14/2014 10:42
Vinyl Chloride	ND	0.0052	1	11/14/2014 10:42
Xylenes, Total	ND	0.0052	1	11/14/2014 10:42

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (5.5-6')	**1411538-015B**	**Soil**	**11/12/2014 07:43**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits	Analytical Comments: a9	
Dibromofluoromethane	89	70-130		11/14/2014 10:42
Toluene-d8	98	70-130		11/14/2014 10:42
4-BFB	92	70-130		11/14/2014 10:42

Analyst(s): KBO

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9')	**1411538-016B**	**Soil**	**11/12/2014 07:57**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.090	1	11/14/2014 12:08
tert-Amyl methyl ether (TAME)	ND	0.0045	1	11/14/2014 12:08
Benzene	ND	0.0045	1	11/14/2014 12:08
Bromobenzene	ND	0.0045	1	11/14/2014 12:08
Bromochloromethane	ND	0.0045	1	11/14/2014 12:08
Bromodichloromethane	ND	0.0045	1	11/14/2014 12:08
Bromoform	ND	0.0045	1	11/14/2014 12:08
Bromomethane	ND	0.0045	1	11/14/2014 12:08
2-Butanone (MEK)	ND	0.018	1	11/14/2014 12:08
t-Butyl alcohol (TBA)	ND	0.045	1	11/14/2014 12:08
n-Butyl benzene	ND	0.0045	1	11/14/2014 12:08
sec-Butyl benzene	ND	0.0045	1	11/14/2014 12:08
tert-Butyl benzene	ND	0.0045	1	11/14/2014 12:08
Carbon Disulfide	ND	0.0045	1	11/14/2014 12:08
Carbon Tetrachloride	ND	0.0045	1	11/14/2014 12:08
Chlorobenzene	ND	0.0045	1	11/14/2014 12:08
Chloroethane	ND	0.0045	1	11/14/2014 12:08
Chloroform	ND	0.0045	1	11/14/2014 12:08
Chloromethane	ND	0.0045	1	11/14/2014 12:08
2-Chlorotoluene	ND	0.0045	1	11/14/2014 12:08
4-Chlorotoluene	ND	0.0045	1	11/14/2014 12:08
Dibromochloromethane	ND	0.0045	1	11/14/2014 12:08
1,2-Dibromo-3-chloropropane	ND	0.0036	1	11/14/2014 12:08
1,2-Dibromoethane (EDB)	ND	0.0036	1	11/14/2014 12:08
Dibromomethane	ND	0.0045	1	11/14/2014 12:08
1,2-Dichlorobenzene	ND	0.0045	1	11/14/2014 12:08
1,3-Dichlorobenzene	ND	0.0045	1	11/14/2014 12:08
1,4-Dichlorobenzene	ND	0.0045	1	11/14/2014 12:08
Dichlorodifluoromethane	ND	0.0045	1	11/14/2014 12:08
1,1-Dichloroethane	ND	0.0045	1	11/14/2014 12:08
1,2-Dichloroethane (1,2-DCA)	ND	0.0045	1	11/14/2014 12:08
1,1-Dichloroethene	ND	0.0045	1	11/14/2014 12:08
cis-1,2-Dichloroethene	ND	0.0045	1	11/14/2014 12:08
trans-1,2-Dichloroethene	ND	0.0045	1	11/14/2014 12:08
1,2-Dichloropropane	ND	0.0045	1	11/14/2014 12:08
1,3-Dichloropropane	ND	0.0045	1	11/14/2014 12:08
2,2-Dichloropropane	ND	0.0045	1	11/14/2014 12:08
1,1-Dichloropropene	ND	0.0045	1	11/14/2014 12:08

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9')	**1411538-016B**	**Soil**	**11/12/2014 07:57**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0045	1	11/14/2014 12:08
trans-1,3-Dichloropropene	ND	0.0045	1	11/14/2014 12:08
Diisopropyl ether (DIPE)	ND	0.0045	1	11/14/2014 12:08
Ethylbenzene	ND	0.0045	1	11/14/2014 12:08
Ethyl tert-butyl ether (ETBE)	ND	0.0045	1	11/14/2014 12:08
Freon 113	ND	0.045	1	11/14/2014 12:08
Hexachlorobutadiene	ND	0.0045	1	11/14/2014 12:08
Hexachloroethane	ND	0.0045	1	11/14/2014 12:08
2-Hexanone	ND	0.0045	1	11/14/2014 12:08
Isopropylbenzene	ND	0.0045	1	11/14/2014 12:08
4-Isopropyl toluene	ND	0.0045	1	11/14/2014 12:08
Methyl-t-butyl ether (MTBE)	ND	0.0045	1	11/14/2014 12:08
Methylene chloride	ND	0.0045	1	11/14/2014 12:08
4-Methyl-2-pentanone (MIBK)	ND	0.0045	1	11/14/2014 12:08
Naphthalene	ND	0.0045	1	11/14/2014 12:08
n-Propyl benzene	ND	0.0045	1	11/14/2014 12:08
Styrene	ND	0.0045	1	11/14/2014 12:08
1,1,1,2-Tetrachloroethane	ND	0.0045	1	11/14/2014 12:08
1,1,2,2-Tetrachloroethane	ND	0.0045	1	11/14/2014 12:08
Tetrachloroethene	ND	0.0045	1	11/14/2014 12:08
Toluene	ND	0.0045	1	11/14/2014 12:08
1,2,3-Trichlorobenzene	ND	0.0045	1	11/14/2014 12:08
1,2,4-Trichlorobenzene	ND	0.0045	1	11/14/2014 12:08
1,1,1-Trichloroethane	ND	0.0045	1	11/14/2014 12:08
1,1,2-Trichloroethane	ND	0.0045	1	11/14/2014 12:08
Trichloroethene	ND	0.0045	1	11/14/2014 12:08
Trichlorofluoromethane	ND	0.0045	1	11/14/2014 12:08
1,2,3-Trichloropropane	ND	0.0045	1	11/14/2014 12:08
1,2,4-Trimethylbenzene	ND	0.0045	1	11/14/2014 12:08
1,3,5-Trimethylbenzene	ND	0.0045	1	11/14/2014 12:08
Vinyl Chloride	ND	0.0045	1	11/14/2014 12:08
Xylenes, Total	ND	0.0045	1	11/14/2014 12:08

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9')	**1411538-016B**	**Soil**	**11/12/2014 07:57**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits	Analytical Comments: a9	
Dibromofluoromethane	89	70-130		11/14/2014 12:08
Toluene-d8	102	70-130		11/14/2014 12:08
4-BFB	97	70-130		11/14/2014 12:08

Analyst(s): KBO

(Cont.)

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (5.5-6')	**1411538-018B**	**Soil**	**11/12/2014 08:30**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.096	1	11/14/2014 12:52
tert-Amyl methyl ether (TAME)	ND	0.0048	1	11/14/2014 12:52
Benzene	ND	0.0048	1	11/14/2014 12:52
Bromobenzene	ND	0.0048	1	11/14/2014 12:52
Bromochloromethane	ND	0.0048	1	11/14/2014 12:52
Bromodichloromethane	ND	0.0048	1	11/14/2014 12:52
Bromoform	ND	0.0048	1	11/14/2014 12:52
Bromomethane	ND	0.0048	1	11/14/2014 12:52
2-Butanone (MEK)	ND	0.019	1	11/14/2014 12:52
t-Butyl alcohol (TBA)	ND	0.048	1	11/14/2014 12:52
n-Butyl benzene	ND	0.0048	1	11/14/2014 12:52
sec-Butyl benzene	ND	0.0048	1	11/14/2014 12:52
tert-Butyl benzene	ND	0.0048	1	11/14/2014 12:52
Carbon Disulfide	ND	0.0048	1	11/14/2014 12:52
Carbon Tetrachloride	ND	0.0048	1	11/14/2014 12:52
Chlorobenzene	ND	0.0048	1	11/14/2014 12:52
Chloroethane	ND	0.0048	1	11/14/2014 12:52
Chloroform	ND	0.0048	1	11/14/2014 12:52
Chloromethane	ND	0.0048	1	11/14/2014 12:52
2-Chlorotoluene	ND	0.0048	1	11/14/2014 12:52
4-Chlorotoluene	ND	0.0048	1	11/14/2014 12:52
Dibromochloromethane	ND	0.0048	1	11/14/2014 12:52
1,2-Dibromo-3-chloropropane	ND	0.0039	1	11/14/2014 12:52
1,2-Dibromoethane (EDB)	ND	0.0039	1	11/14/2014 12:52
Dibromomethane	ND	0.0048	1	11/14/2014 12:52
1,2-Dichlorobenzene	ND	0.0048	1	11/14/2014 12:52
1,3-Dichlorobenzene	ND	0.0048	1	11/14/2014 12:52
1,4-Dichlorobenzene	ND	0.0048	1	11/14/2014 12:52
Dichlorodifluoromethane	ND	0.0048	1	11/14/2014 12:52
1,1-Dichloroethane	ND	0.0048	1	11/14/2014 12:52
1,2-Dichloroethane (1,2-DCA)	ND	0.0048	1	11/14/2014 12:52
1,1-Dichloroethene	ND	0.0048	1	11/14/2014 12:52
cis-1,2-Dichloroethene	ND	0.0048	1	11/14/2014 12:52
trans-1,2-Dichloroethene	ND	0.0048	1	11/14/2014 12:52
1,2-Dichloropropane	ND	0.0048	1	11/14/2014 12:52
1,3-Dichloropropane	ND	0.0048	1	11/14/2014 12:52
2,2-Dichloropropane	ND	0.0048	1	11/14/2014 12:52
1,1-Dichloropropene	ND	0.0048	1	11/14/2014 12:52

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (5.5-6')	**1411538-018B**	**Soil**	**11/12/2014 08:30**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0048	1	11/14/2014 12:52
trans-1,3-Dichloropropene	ND	0.0048	1	11/14/2014 12:52
Diisopropyl ether (DIPE)	ND	0.0048	1	11/14/2014 12:52
Ethylbenzene	ND	0.0048	1	11/14/2014 12:52
Ethyl tert-butyl ether (ETBE)	ND	0.0048	1	11/14/2014 12:52
Freon 113	ND	0.048	1	11/14/2014 12:52
Hexachlorobutadiene	ND	0.0048	1	11/14/2014 12:52
Hexachloroethane	ND	0.0048	1	11/14/2014 12:52
2-Hexanone	ND	0.0048	1	11/14/2014 12:52
Isopropylbenzene	ND	0.0048	1	11/14/2014 12:52
4-Isopropyl toluene	ND	0.0048	1	11/14/2014 12:52
Methyl-t-butyl ether (MTBE)	ND	0.0048	1	11/14/2014 12:52
Methylene chloride	ND	0.0048	1	11/14/2014 12:52
4-Methyl-2-pentanone (MIBK)	ND	0.0048	1	11/14/2014 12:52
Naphthalene	ND	0.0048	1	11/14/2014 12:52
n-Propyl benzene	ND	0.0048	1	11/14/2014 12:52
Styrene	ND	0.0048	1	11/14/2014 12:52
1,1,1,2-Tetrachloroethane	ND	0.0048	1	11/14/2014 12:52
1,1,2,2-Tetrachloroethane	ND	0.0048	1	11/14/2014 12:52
Tetrachloroethene	ND	0.0048	1	11/14/2014 12:52
Toluene	ND	0.0048	1	11/14/2014 12:52
1,2,3-Trichlorobenzene	ND	0.0048	1	11/14/2014 12:52
1,2,4-Trichlorobenzene	ND	0.0048	1	11/14/2014 12:52
1,1,1-Trichloroethane	ND	0.0048	1	11/14/2014 12:52
1,1,2-Trichloroethane	ND	0.0048	1	11/14/2014 12:52
Trichloroethene	ND	0.0048	1	11/14/2014 12:52
Trichlorofluoromethane	ND	0.0048	1	11/14/2014 12:52
1,2,3-Trichloropropane	ND	0.0048	1	11/14/2014 12:52
1,2,4-Trimethylbenzene	ND	0.0048	1	11/14/2014 12:52
1,3,5-Trimethylbenzene	ND	0.0048	1	11/14/2014 12:52
Vinyl Chloride	ND	0.0048	1	11/14/2014 12:52
Xylenes, Total	ND	0.0048	1	11/14/2014 12:52

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (5.5-6')	**1411538-018B**	**Soil**	**11/12/2014 08:30**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits	Analytical Comments: a9	
Dibromofluoromethane	89	70-130		11/14/2014 12:52
Toluene-d8	100	70-130		11/14/2014 12:52
4-BFB	90	70-130		11/14/2014 12:52

Analyst(s): KBO

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (8.5-9')	**1411538-019B**	**Soil**	**11/12/2014 08:38**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/14/2014 13:34
tert-Amyl methyl ether (TAME)	ND	0.0051	1	11/14/2014 13:34
Benzene	ND	0.0051	1	11/14/2014 13:34
Bromobenzene	ND	0.0051	1	11/14/2014 13:34
Bromochloromethane	ND	0.0051	1	11/14/2014 13:34
Bromodichloromethane	ND	0.0051	1	11/14/2014 13:34
Bromoform	ND	0.0051	1	11/14/2014 13:34
Bromomethane	ND	0.0051	1	11/14/2014 13:34
2-Butanone (MEK)	ND	0.021	1	11/14/2014 13:34
t-Butyl alcohol (TBA)	ND	0.051	1	11/14/2014 13:34
n-Butyl benzene	ND	0.0051	1	11/14/2014 13:34
sec-Butyl benzene	ND	0.0051	1	11/14/2014 13:34
tert-Butyl benzene	ND	0.0051	1	11/14/2014 13:34
Carbon Disulfide	ND	0.0051	1	11/14/2014 13:34
Carbon Tetrachloride	ND	0.0051	1	11/14/2014 13:34
Chlorobenzene	ND	0.0051	1	11/14/2014 13:34
Chloroethane	ND	0.0051	1	11/14/2014 13:34
Chloroform	ND	0.0051	1	11/14/2014 13:34
Chloromethane	ND	0.0051	1	11/14/2014 13:34
2-Chlorotoluene	ND	0.0051	1	11/14/2014 13:34
4-Chlorotoluene	ND	0.0051	1	11/14/2014 13:34
Dibromochloromethane	ND	0.0051	1	11/14/2014 13:34
1,2-Dibromo-3-chloropropane	ND	0.0041	1	11/14/2014 13:34
1,2-Dibromoethane (EDB)	ND	0.0041	1	11/14/2014 13:34
Dibromomethane	ND	0.0051	1	11/14/2014 13:34
1,2-Dichlorobenzene	ND	0.0051	1	11/14/2014 13:34
1,3-Dichlorobenzene	ND	0.0051	1	11/14/2014 13:34
1,4-Dichlorobenzene	ND	0.0051	1	11/14/2014 13:34
Dichlorodifluoromethane	ND	0.0051	1	11/14/2014 13:34
1,1-Dichloroethane	ND	0.0051	1	11/14/2014 13:34
1,2-Dichloroethane (1,2-DCA)	ND	0.0051	1	11/14/2014 13:34
1,1-Dichloroethene	ND	0.0051	1	11/14/2014 13:34
cis-1,2-Dichloroethene	ND	0.0051	1	11/14/2014 13:34
trans-1,2-Dichloroethene	ND	0.0051	1	11/14/2014 13:34
1,2-Dichloropropane	ND	0.0051	1	11/14/2014 13:34
1,3-Dichloropropane	ND	0.0051	1	11/14/2014 13:34
2,2-Dichloropropane	ND	0.0051	1	11/14/2014 13:34
1,1-Dichloropropene	ND	0.0051	1	11/14/2014 13:34

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (8.5-9')	**1411538-019B**	**Soil**	**11/12/2014 08:38**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0051	1	11/14/2014 13:34
trans-1,3-Dichloropropene	ND	0.0051	1	11/14/2014 13:34
Diisopropyl ether (DIPE)	ND	0.0051	1	11/14/2014 13:34
Ethylbenzene	ND	0.0051	1	11/14/2014 13:34
Ethyl tert-butyl ether (ETBE)	ND	0.0051	1	11/14/2014 13:34
Freon 113	ND	0.051	1	11/14/2014 13:34
Hexachlorobutadiene	ND	0.0051	1	11/14/2014 13:34
Hexachloroethane	ND	0.0051	1	11/14/2014 13:34
2-Hexanone	ND	0.0051	1	11/14/2014 13:34
Isopropylbenzene	ND	0.0051	1	11/14/2014 13:34
4-Isopropyl toluene	ND	0.0051	1	11/14/2014 13:34
Methyl-t-butyl ether (MTBE)	ND	0.0051	1	11/14/2014 13:34
Methylene chloride	ND	0.0051	1	11/14/2014 13:34
4-Methyl-2-pentanone (MIBK)	ND	0.0051	1	11/14/2014 13:34
Naphthalene	ND	0.0051	1	11/14/2014 13:34
n-Propyl benzene	ND	0.0051	1	11/14/2014 13:34
Styrene	ND	0.0051	1	11/14/2014 13:34
1,1,1,2-Tetrachloroethane	ND	0.0051	1	11/14/2014 13:34
1,1,2,2-Tetrachloroethane	ND	0.0051	1	11/14/2014 13:34
Tetrachloroethene	ND	0.0051	1	11/14/2014 13:34
Toluene	ND	0.0051	1	11/14/2014 13:34
1,2,3-Trichlorobenzene	ND	0.0051	1	11/14/2014 13:34
1,2,4-Trichlorobenzene	ND	0.0051	1	11/14/2014 13:34
1,1,1-Trichloroethane	ND	0.0051	1	11/14/2014 13:34
1,1,2-Trichloroethane	ND	0.0051	1	11/14/2014 13:34
Trichloroethene	ND	0.0051	1	11/14/2014 13:34
Trichlorofluoromethane	ND	0.0051	1	11/14/2014 13:34
1,2,3-Trichloropropane	ND	0.0051	1	11/14/2014 13:34
1,2,4-Trimethylbenzene	ND	0.0051	1	11/14/2014 13:34
1,3,5-Trimethylbenzene	ND	0.0051	1	11/14/2014 13:34
Vinyl Chloride	ND	0.0051	1	11/14/2014 13:34
Xylenes, Total	ND	0.0051	1	11/14/2014 13:34

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (8.5-9')	**1411538-019B**	**Soil**	**11/12/2014 08:38**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits	Analytical Comments: a9	
Dibromofluoromethane	88	70-130		11/14/2014 13:34
Toluene-d8	97	70-130		11/14/2014 13:34
4-BFB	90	70-130		11/14/2014 13:34

Analyst(s): KBO

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (5.5-6')	**1411538-021B**	**Soil**	**11/12/2014 09:04**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/14/2014 14:15
tert-Amyl methyl ether (TAME)	ND	0.0052	1	11/14/2014 14:15
Benzene	ND	0.0052	1	11/14/2014 14:15
Bromobenzene	ND	0.0052	1	11/14/2014 14:15
Bromochloromethane	ND	0.0052	1	11/14/2014 14:15
Bromodichloromethane	ND	0.0052	1	11/14/2014 14:15
Bromoform	ND	0.0052	1	11/14/2014 14:15
Bromomethane	ND	0.0052	1	11/14/2014 14:15
2-Butanone (MEK)	ND	0.021	1	11/14/2014 14:15
t-Butyl alcohol (TBA)	ND	0.052	1	11/14/2014 14:15
n-Butyl benzene	ND	0.0052	1	11/14/2014 14:15
sec-Butyl benzene	ND	0.0052	1	11/14/2014 14:15
tert-Butyl benzene	ND	0.0052	1	11/14/2014 14:15
Carbon Disulfide	ND	0.0052	1	11/14/2014 14:15
Carbon Tetrachloride	ND	0.0052	1	11/14/2014 14:15
Chlorobenzene	ND	0.0052	1	11/14/2014 14:15
Chloroethane	ND	0.0052	1	11/14/2014 14:15
Chloroform	ND	0.0052	1	11/14/2014 14:15
Chloromethane	ND	0.0052	1	11/14/2014 14:15
2-Chlorotoluene	ND	0.0052	1	11/14/2014 14:15
4-Chlorotoluene	ND	0.0052	1	11/14/2014 14:15
Dibromochloromethane	ND	0.0052	1	11/14/2014 14:15
1,2-Dibromo-3-chloropropane	ND	0.0042	1	11/14/2014 14:15
1,2-Dibromoethane (EDB)	ND	0.0042	1	11/14/2014 14:15
Dibromomethane	ND	0.0052	1	11/14/2014 14:15
1,2-Dichlorobenzene	ND	0.0052	1	11/14/2014 14:15
1,3-Dichlorobenzene	ND	0.0052	1	11/14/2014 14:15
1,4-Dichlorobenzene	ND	0.0052	1	11/14/2014 14:15
Dichlorodifluoromethane	ND	0.0052	1	11/14/2014 14:15
1,1-Dichloroethane	ND	0.0052	1	11/14/2014 14:15
1,2-Dichloroethane (1,2-DCA)	ND	0.0052	1	11/14/2014 14:15
1,1-Dichloroethene	ND	0.0052	1	11/14/2014 14:15
cis-1,2-Dichloroethene	ND	0.0052	1	11/14/2014 14:15
trans-1,2-Dichloroethene	ND	0.0052	1	11/14/2014 14:15
1,2-Dichloropropane	ND	0.0052	1	11/14/2014 14:15
1,3-Dichloropropane	ND	0.0052	1	11/14/2014 14:15
2,2-Dichloropropane	ND	0.0052	1	11/14/2014 14:15
1,1-Dichloropropene	ND	0.0052	1	11/14/2014 14:15

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (5.5-6')	**1411538-021B**	**Soil**	**11/12/2014 09:04**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0052	1	11/14/2014 14:15
trans-1,3-Dichloropropene	ND	0.0052	1	11/14/2014 14:15
Diisopropyl ether (DIPE)	ND	0.0052	1	11/14/2014 14:15
Ethylbenzene	ND	0.0052	1	11/14/2014 14:15
Ethyl tert-butyl ether (ETBE)	ND	0.0052	1	11/14/2014 14:15
Freon 113	ND	0.052	1	11/14/2014 14:15
Hexachlorobutadiene	ND	0.0052	1	11/14/2014 14:15
Hexachloroethane	ND	0.0052	1	11/14/2014 14:15
2-Hexanone	ND	0.0052	1	11/14/2014 14:15
Isopropylbenzene	ND	0.0052	1	11/14/2014 14:15
4-Isopropyl toluene	ND	0.0052	1	11/14/2014 14:15
Methyl-t-butyl ether (MTBE)	ND	0.0052	1	11/14/2014 14:15
Methylene chloride	ND	0.0052	1	11/14/2014 14:15
4-Methyl-2-pentanone (MIBK)	ND	0.0052	1	11/14/2014 14:15
Naphthalene	ND	0.0052	1	11/14/2014 14:15
n-Propyl benzene	ND	0.0052	1	11/14/2014 14:15
Styrene	ND	0.0052	1	11/14/2014 14:15
1,1,1,2-Tetrachloroethane	ND	0.0052	1	11/14/2014 14:15
1,1,2,2-Tetrachloroethane	ND	0.0052	1	11/14/2014 14:15
Tetrachloroethene	ND	0.0052	1	11/14/2014 14:15
Toluene	ND	0.0052	1	11/14/2014 14:15
1,2,3-Trichlorobenzene	ND	0.0052	1	11/14/2014 14:15
1,2,4-Trichlorobenzene	ND	0.0052	1	11/14/2014 14:15
1,1,1-Trichloroethane	ND	0.0052	1	11/14/2014 14:15
1,1,2-Trichloroethane	ND	0.0052	1	11/14/2014 14:15
Trichloroethene	ND	0.0052	1	11/14/2014 14:15
Trichlorofluoromethane	ND	0.0052	1	11/14/2014 14:15
1,2,3-Trichloropropane	ND	0.0052	1	11/14/2014 14:15
1,2,4-Trimethylbenzene	ND	0.0052	1	11/14/2014 14:15
1,3,5-Trimethylbenzene	ND	0.0052	1	11/14/2014 14:15
Vinyl Chloride	ND	0.0052	1	11/14/2014 14:15
Xylenes, Total	ND	0.0052	1	11/14/2014 14:15

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (5.5-6')	**1411538-021B**	**Soil**	**11/12/2014 09:04**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits	Analytical Comments: a9	
Dibromofluoromethane	88	70-130		11/14/2014 14:15
Toluene-d8	100	70-130		11/14/2014 14:15
4-BFB	91	70-130		11/14/2014 14:15

Analyst(s): KBO

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (8.5-9')	**1411538-022B**	**Soil**	**11/12/2014 09:17**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.11	1	11/14/2014 14:56
tert-Amyl methyl ether (TAME)	ND	0.0056	1	11/14/2014 14:56
Benzene	ND	0.0056	1	11/14/2014 14:56
Bromobenzene	ND	0.0056	1	11/14/2014 14:56
Bromochloromethane	ND	0.0056	1	11/14/2014 14:56
Bromodichloromethane	ND	0.0056	1	11/14/2014 14:56
Bromoform	ND	0.0056	1	11/14/2014 14:56
Bromomethane	ND	0.0056	1	11/14/2014 14:56
2-Butanone (MEK)	ND	0.022	1	11/14/2014 14:56
t-Butyl alcohol (TBA)	ND	0.056	1	11/14/2014 14:56
n-Butyl benzene	ND	0.0056	1	11/14/2014 14:56
sec-Butyl benzene	ND	0.0056	1	11/14/2014 14:56
tert-Butyl benzene	ND	0.0056	1	11/14/2014 14:56
Carbon Disulfide	ND	0.0056	1	11/14/2014 14:56
Carbon Tetrachloride	ND	0.0056	1	11/14/2014 14:56
Chlorobenzene	ND	0.0056	1	11/14/2014 14:56
Chloroethane	ND	0.0056	1	11/14/2014 14:56
Chloroform	ND	0.0056	1	11/14/2014 14:56
Chloromethane	ND	0.0056	1	11/14/2014 14:56
2-Chlorotoluene	ND	0.0056	1	11/14/2014 14:56
4-Chlorotoluene	ND	0.0056	1	11/14/2014 14:56
Dibromochloromethane	ND	0.0056	1	11/14/2014 14:56
1,2-Dibromo-3-chloropropane	ND	0.0045	1	11/14/2014 14:56
1,2-Dibromoethane (EDB)	ND	0.0045	1	11/14/2014 14:56
Dibromomethane	ND	0.0056	1	11/14/2014 14:56
1,2-Dichlorobenzene	ND	0.0056	1	11/14/2014 14:56
1,3-Dichlorobenzene	ND	0.0056	1	11/14/2014 14:56
1,4-Dichlorobenzene	ND	0.0056	1	11/14/2014 14:56
Dichlorodifluoromethane	ND	0.0056	1	11/14/2014 14:56
1,1-Dichloroethane	ND	0.0056	1	11/14/2014 14:56
1,2-Dichloroethane (1,2-DCA)	ND	0.0056	1	11/14/2014 14:56
1,1-Dichloroethene	ND	0.0056	1	11/14/2014 14:56
cis-1,2-Dichloroethene	ND	0.0056	1	11/14/2014 14:56
trans-1,2-Dichloroethene	ND	0.0056	1	11/14/2014 14:56
1,2-Dichloropropane	ND	0.0056	1	11/14/2014 14:56
1,3-Dichloropropane	ND	0.0056	1	11/14/2014 14:56
2,2-Dichloropropane	ND	0.0056	1	11/14/2014 14:56
1,1-Dichloropropene	ND	0.0056	1	11/14/2014 14:56

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (8.5-9')	**1411538-022B**	**Soil**	**11/12/2014 09:17**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0056	1	11/14/2014 14:56
trans-1,3-Dichloropropene	ND	0.0056	1	11/14/2014 14:56
Diisopropyl ether (DIPE)	ND	0.0056	1	11/14/2014 14:56
Ethylbenzene	ND	0.0056	1	11/14/2014 14:56
Ethyl tert-butyl ether (ETBE)	ND	0.0056	1	11/14/2014 14:56
Freon 113	ND	0.056	1	11/14/2014 14:56
Hexachlorobutadiene	ND	0.0056	1	11/14/2014 14:56
Hexachloroethane	ND	0.0056	1	11/14/2014 14:56
2-Hexanone	ND	0.0056	1	11/14/2014 14:56
Isopropylbenzene	ND	0.0056	1	11/14/2014 14:56
4-Isopropyl toluene	ND	0.0056	1	11/14/2014 14:56
Methyl-t-butyl ether (MTBE)	ND	0.0056	1	11/14/2014 14:56
Methylene chloride	ND	0.0056	1	11/14/2014 14:56
4-Methyl-2-pentanone (MIBK)	ND	0.0056	1	11/14/2014 14:56
Naphthalene	ND	0.0056	1	11/14/2014 14:56
n-Propyl benzene	ND	0.0056	1	11/14/2014 14:56
Styrene	ND	0.0056	1	11/14/2014 14:56
1,1,1,2-Tetrachloroethane	ND	0.0056	1	11/14/2014 14:56
1,1,2,2-Tetrachloroethane	ND	0.0056	1	11/14/2014 14:56
Tetrachloroethene	ND	0.0056	1	11/14/2014 14:56
Toluene	ND	0.0056	1	11/14/2014 14:56
1,2,3-Trichlorobenzene	ND	0.0056	1	11/14/2014 14:56
1,2,4-Trichlorobenzene	ND	0.0056	1	11/14/2014 14:56
1,1,1-Trichloroethane	ND	0.0056	1	11/14/2014 14:56
1,1,2-Trichloroethane	ND	0.0056	1	11/14/2014 14:56
Trichloroethene	ND	0.0056	1	11/14/2014 14:56
Trichlorofluoromethane	ND	0.0056	1	11/14/2014 14:56
1,2,3-Trichloropropane	ND	0.0056	1	11/14/2014 14:56
1,2,4-Trimethylbenzene	ND	0.0056	1	11/14/2014 14:56
1,3,5-Trimethylbenzene	ND	0.0056	1	11/14/2014 14:56
Vinyl Chloride	ND	0.0056	1	11/14/2014 14:56
Xylenes, Total	ND	0.0056	1	11/14/2014 14:56

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5035
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS (Basic Target List) [Encore Sampling]

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (8.5-9')	**1411538-022B**	**Soil**	**11/12/2014 09:17**	**GC10**	**97778**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits	Analytical Comments: a9	
Dibromofluoromethane	87	70-130		11/14/2014 14:56
Toluene-d8	99	70-130		11/14/2014 14:56
4-BFB	91	70-130		11/14/2014 14:56

Analyst(s): KBO

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5030B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/17/14	**Unit:**	µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
GW-1	**1411538-029C**	**Water**	**11/12/2014 11:20**	**GC28**	**97913**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	11/17/2014 19:17
tert-Amyl methyl ether (TAME)	ND	0.50	1	11/17/2014 19:17
Benzene	ND	0.50	1	11/17/2014 19:17
Bromobenzene	ND	0.50	1	11/17/2014 19:17
Bromochloromethane	ND	0.50	1	11/17/2014 19:17
Bromodichloromethane	ND	0.50	1	11/17/2014 19:17
Bromoform	ND	0.50	1	11/17/2014 19:17
Bromomethane	ND	0.50	1	11/17/2014 19:17
2-Butanone (MEK)	ND	2.0	1	11/17/2014 19:17
t-Butyl alcohol (TBA)	ND	2.0	1	11/17/2014 19:17
n-Butyl benzene	ND	0.50	1	11/17/2014 19:17
sec-Butyl benzene	ND	0.50	1	11/17/2014 19:17
tert-Butyl benzene	ND	0.50	1	11/17/2014 19:17
Carbon Disulfide	ND	0.50	1	11/17/2014 19:17
Carbon Tetrachloride	ND	0.50	1	11/17/2014 19:17
Chlorobenzene	ND	0.50	1	11/17/2014 19:17
Chloroethane	ND	0.50	1	11/17/2014 19:17
Chloroform	ND	0.50	1	11/17/2014 19:17
Chloromethane	ND	0.50	1	11/17/2014 19:17
2-Chlorotoluene	ND	0.50	1	11/17/2014 19:17
4-Chlorotoluene	ND	0.50	1	11/17/2014 19:17
Dibromochloromethane	ND	0.50	1	11/17/2014 19:17
1,2-Dibromo-3-chloropropane	ND	0.20	1	11/17/2014 19:17
1,2-Dibromoethane (EDB)	ND	0.50	1	11/17/2014 19:17
Dibromomethane	ND	0.50	1	11/17/2014 19:17
1,2-Dichlorobenzene	ND	0.50	1	11/17/2014 19:17
1,3-Dichlorobenzene	ND	0.50	1	11/17/2014 19:17
1,4-Dichlorobenzene	ND	0.50	1	11/17/2014 19:17
Dichlorodifluoromethane	ND	0.50	1	11/17/2014 19:17
1,1-Dichloroethane	ND	0.50	1	11/17/2014 19:17
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	11/17/2014 19:17
1,1-Dichloroethene	ND	0.50	1	11/17/2014 19:17
cis-1,2-Dichloroethene	ND	0.50	1	11/17/2014 19:17
trans-1,2-Dichloroethene	ND	0.50	1	11/17/2014 19:17
1,2-Dichloropropane	ND	0.50	1	11/17/2014 19:17
1,3-Dichloropropane	ND	0.50	1	11/17/2014 19:17
2,2-Dichloropropane	ND	0.50	1	11/17/2014 19:17
1,1-Dichloropropene	ND	0.50	1	11/17/2014 19:17

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5030B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/17/14	**Unit:**	µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
GW-1	**1411538-029C**	**Water**	**11/12/2014 11:20**	**GC28**	**97913**

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	11/17/2014 19:17
trans-1,3-Dichloropropene	ND	0.50	1	11/17/2014 19:17
Diisopropyl ether (DIPE)	ND	0.50	1	11/17/2014 19:17
Ethylbenzene	ND	0.50	1	11/17/2014 19:17
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	11/17/2014 19:17
Freon 113	ND	0.50	1	11/17/2014 19:17
Hexachlorobutadiene	ND	0.50	1	11/17/2014 19:17
Hexachloroethane	ND	0.50	1	11/17/2014 19:17
2-Hexanone	ND	0.50	1	11/17/2014 19:17
Isopropylbenzene	ND	0.50	1	11/17/2014 19:17
4-Isopropyl toluene	ND	0.50	1	11/17/2014 19:17
Methyl-t-butyl ether (MTBE)	ND	0.50	1	11/17/2014 19:17
Methylene chloride	ND	0.50	1	11/17/2014 19:17
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	11/17/2014 19:17
Naphthalene	ND	0.50	1	11/17/2014 19:17
n-Propyl benzene	ND	0.50	1	11/17/2014 19:17
Styrene	ND	0.50	1	11/17/2014 19:17
1,1,1,2-Tetrachloroethane	ND	0.50	1	11/17/2014 19:17
1,1,2,2-Tetrachloroethane	ND	0.50	1	11/17/2014 19:17
Tetrachloroethene	ND	0.50	1	11/17/2014 19:17
Toluene	ND	0.50	1	11/17/2014 19:17
1,2,3-Trichlorobenzene	ND	0.50	1	11/17/2014 19:17
1,2,4-Trichlorobenzene	ND	0.50	1	11/17/2014 19:17
1,1,1-Trichloroethane	ND	0.50	1	11/17/2014 19:17
1,1,2-Trichloroethane	ND	0.50	1	11/17/2014 19:17
Trichloroethene	ND	0.50	1	11/17/2014 19:17
Trichlorofluoromethane	ND	0.50	1	11/17/2014 19:17
1,2,3-Trichloropropane	ND	0.50	1	11/17/2014 19:17
1,2,4-Trimethylbenzene	ND	0.50	1	11/17/2014 19:17
1,3,5-Trimethylbenzene	ND	0.50	1	11/17/2014 19:17
Vinyl Chloride	ND	0.50	1	11/17/2014 19:17
Xylenes, Total	ND	0.50	1	11/17/2014 19:17

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5030B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8260B
Date Prepared:	11/17/14	**Unit:**	µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
GW-1	**1411538-029C**	**Water**	**11/12/2014 11:20**	**GC28**	**97913**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	103	73-131		11/17/2014 19:17
Toluene-d8	96	72-117		11/17/2014 19:17
4-BFB	98	74-116		11/17/2014 19:17

Analyst(s): KBO

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (5.5-6')	**1411538-015A**	**Soil**	**11/12/2014 07:43**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	11/17/2014 18:09
Acenaphthylene	ND	0.25	1	11/17/2014 18:09
Acetochlor	ND	0.25	1	11/17/2014 18:09
Anthracene	ND	0.25	1	11/17/2014 18:09
Benzidine	ND	1.3	1	11/17/2014 18:09
Benzo (a) anthracene	ND	0.25	1	11/17/2014 18:09
Benzo (b) fluoranthene	ND	0.25	1	11/17/2014 18:09
Benzo (k) fluoranthene	ND	0.25	1	11/17/2014 18:09
Benzo (g,h,i) perylene	ND	0.25	1	11/17/2014 18:09
Benzo (a) pyrene	ND	0.25	1	11/17/2014 18:09
Benzyl Alcohol	ND	1.3	1	11/17/2014 18:09
1,1-Biphenyl	ND	0.25	1	11/17/2014 18:09
Bis (2-chloroethoxy) Methane	ND	0.25	1	11/17/2014 18:09
Bis (2-chloroethyl) Ether	ND	0.25	1	11/17/2014 18:09
Bis (2-chloroisopropyl) Ether	ND	0.25	1	11/17/2014 18:09
Bis (2-ethylhexyl) Adipate	ND	0.25	1	11/17/2014 18:09
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	11/17/2014 18:09
4-Bromophenyl Phenyl Ether	ND	0.25	1	11/17/2014 18:09
Butylbenzyl Phthalate	ND	0.25	1	11/17/2014 18:09
4-Chloroaniline	ND	0.25	1	11/17/2014 18:09
4-Chloro-3-methylphenol	ND	0.25	1	11/17/2014 18:09
2-Chloronaphthalene	ND	0.25	1	11/17/2014 18:09
2-Chlorophenol	ND	0.25	1	11/17/2014 18:09
4-Chlorophenyl Phenyl Ether	ND	0.25	1	11/17/2014 18:09
Chrysene	ND	0.25	1	11/17/2014 18:09
Dibenzo (a,h) anthracene	ND	0.25	1	11/17/2014 18:09
Dibenzofuran	ND	0.25	1	11/17/2014 18:09
Di-n-butyl Phthalate	ND	0.25	1	11/17/2014 18:09
1,2-Dichlorobenzene	ND	0.25	1	11/17/2014 18:09
1,3-Dichlorobenzene	ND	0.25	1	11/17/2014 18:09
1,4-Dichlorobenzene	ND	0.25	1	11/17/2014 18:09
3,3-Dichlorobenzidine	ND	0.50	1	11/17/2014 18:09
2,4-Dichlorophenol	ND	0.25	1	11/17/2014 18:09
Diethyl Phthalate	ND	0.25	1	11/17/2014 18:09
2,4-Dimethylphenol	ND	0.25	1	11/17/2014 18:09
Dimethyl Phthalate	ND	0.25	1	11/17/2014 18:09
4,6-Dinitro-2-methylphenol	ND	1.3	1	11/17/2014 18:09
2,4-Dinitrophenol	ND	6.3	1	11/17/2014 18:09

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (5.5-6')	**1411538-015A**	**Soil**	**11/12/2014 07:43**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	11/17/2014 18:09
2,6-Dinitrotoluene	ND	0.25	1	11/17/2014 18:09
Di-n-octyl Phthalate	ND	0.50	1	11/17/2014 18:09
1,2-Diphenylhydrazine	ND	0.25	1	11/17/2014 18:09
Fluoranthene	ND	0.25	1	11/17/2014 18:09
Fluorene	ND	0.25	1	11/17/2014 18:09
Hexachlorobenzene	ND	0.25	1	11/17/2014 18:09
Hexachlorobutadiene	ND	0.25	1	11/17/2014 18:09
Hexachlorocyclopentadiene	ND	1.3	1	11/17/2014 18:09
Hexachloroethane	ND	0.25	1	11/17/2014 18:09
Indeno (1,2,3-cd) pyrene	ND	0.25	1	11/17/2014 18:09
Isophorone	ND	0.25	1	11/17/2014 18:09
2-Methylnaphthalene	ND	0.25	1	11/17/2014 18:09
2-Methylphenol (o-Cresol)	ND	0.25	1	11/17/2014 18:09
3 &/or 4-Methylphenol (m,p-Cresol)	ND	0.25	1	11/17/2014 18:09
Naphthalene	ND	0.25	1	11/17/2014 18:09
2-Nitroaniline	ND	1.3	1	11/17/2014 18:09
3-Nitroaniline	ND	1.3	1	11/17/2014 18:09
4-Nitroaniline	ND	1.3	1	11/17/2014 18:09
Nitrobenzene	ND	0.25	1	11/17/2014 18:09
2-Nitrophenol	ND	1.3	1	11/17/2014 18:09
4-Nitrophenol	ND	1.3	1	11/17/2014 18:09
N-Nitrosodiphenylamine	ND	0.25	1	11/17/2014 18:09
N-Nitrosodi-n-propylamine	ND	0.25	1	11/17/2014 18:09
Pentachlorophenol	ND	1.3	1	11/17/2014 18:09
Phenanthrene	ND	0.25	1	11/17/2014 18:09
Phenol	ND	0.25	1	11/17/2014 18:09
Pyrene	ND	0.25	1	11/17/2014 18:09
1,2,4-Trichlorobenzene	ND	0.25	1	11/17/2014 18:09
2,4,5-Trichlorophenol	ND	0.25	1	11/17/2014 18:09
2,4,6-Trichlorophenol	ND	0.25	1	11/17/2014 18:09

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (5.5-6')	**1411538-015A**	**Soil**	**11/12/2014 07:43**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	93	30-130		11/17/2014 18:09
Phenol-d5	86	30-130		11/17/2014 18:09
Nitrobenzene-d5	82	30-130		11/17/2014 18:09
2-Fluorobiphenyl	87	30-130		11/17/2014 18:09
2,4,6-Tribromophenol	59	16-130		11/17/2014 18:09
4-Terphenyl-d14	82	30-130		11/17/2014 18:09

Analyst(s): HK

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1(5.5-6') DUP	**1411538-015C**	**Soil**	**11/12/2014 07:43**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	11/17/2014 17:41
Acenaphthylene	ND	0.25	1	11/17/2014 17:41
Acetochlor	ND	0.25	1	11/17/2014 17:41
Anthracene	ND	0.25	1	11/17/2014 17:41
Benzidine	ND	1.3	1	11/17/2014 17:41
Benzo (a) anthracene	ND	0.25	1	11/17/2014 17:41
Benzo (b) fluoranthene	ND	0.25	1	11/17/2014 17:41
Benzo (k) fluoranthene	ND	0.25	1	11/17/2014 17:41
Benzo (g,h,i) perylene	ND	0.25	1	11/17/2014 17:41
Benzo (a) pyrene	ND	0.25	1	11/17/2014 17:41
Benzyl Alcohol	ND	1.3	1	11/17/2014 17:41
1,1-Biphenyl	ND	0.25	1	11/17/2014 17:41
Bis (2-chloroethoxy) Methane	ND	0.25	1	11/17/2014 17:41
Bis (2-chloroethyl) Ether	ND	0.25	1	11/17/2014 17:41
Bis (2-chloroisopropyl) Ether	ND	0.25	1	11/17/2014 17:41
Bis (2-ethylhexyl) Adipate	ND	0.25	1	11/17/2014 17:41
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	11/17/2014 17:41
4-Bromophenyl Phenyl Ether	ND	0.25	1	11/17/2014 17:41
Butylbenzyl Phthalate	ND	0.25	1	11/17/2014 17:41
4-Chloroaniline	ND	0.25	1	11/17/2014 17:41
4-Chloro-3-methylphenol	ND	0.25	1	11/17/2014 17:41
2-Chloronaphthalene	ND	0.25	1	11/17/2014 17:41
2-Chlorophenol	ND	0.25	1	11/17/2014 17:41
4-Chlorophenyl Phenyl Ether	ND	0.25	1	11/17/2014 17:41
Chrysene	ND	0.25	1	11/17/2014 17:41
Dibenzo (a,h) anthracene	ND	0.25	1	11/17/2014 17:41
Dibenzofuran	ND	0.25	1	11/17/2014 17:41
Di-n-butyl Phthalate	ND	0.25	1	11/17/2014 17:41
1,2-Dichlorobenzene	ND	0.25	1	11/17/2014 17:41
1,3-Dichlorobenzene	ND	0.25	1	11/17/2014 17:41
1,4-Dichlorobenzene	ND	0.25	1	11/17/2014 17:41
3,3-Dichlorobenzidine	ND	0.50	1	11/17/2014 17:41
2,4-Dichlorophenol	ND	0.25	1	11/17/2014 17:41
Diethyl Phthalate	ND	0.25	1	11/17/2014 17:41
2,4-Dimethylphenol	ND	0.25	1	11/17/2014 17:41
Dimethyl Phthalate	ND	0.25	1	11/17/2014 17:41
4,6-Dinitro-2-methylphenol	ND	1.3	1	11/17/2014 17:41
2,4-Dinitrophenol	ND	6.3	1	11/17/2014 17:41

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1(5.5-6') DUP	**1411538-015C**	**Soil**	**11/12/2014 07:43**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	11/17/2014 17:41
2,6-Dinitrotoluene	ND	0.25	1	11/17/2014 17:41
Di-n-octyl Phthalate	ND	0.50	1	11/17/2014 17:41
1,2-Diphenylhydrazine	ND	0.25	1	11/17/2014 17:41
Fluoranthene	ND	0.25	1	11/17/2014 17:41
Fluorene	ND	0.25	1	11/17/2014 17:41
Hexachlorobenzene	ND	0.25	1	11/17/2014 17:41
Hexachlorobutadiene	ND	0.25	1	11/17/2014 17:41
Hexachlorocyclopentadiene	ND	1.3	1	11/17/2014 17:41
Hexachloroethane	ND	0.25	1	11/17/2014 17:41
Indeno (1,2,3-cd) pyrene	ND	0.25	1	11/17/2014 17:41
Isophorone	ND	0.25	1	11/17/2014 17:41
2-Methylnaphthalene	ND	0.25	1	11/17/2014 17:41
2-Methylphenol (o-Cresol)	ND	0.25	1	11/17/2014 17:41
3 &/or 4-Methylphenol (m,p-Cresol)	ND	0.25	1	11/17/2014 17:41
Naphthalene	ND	0.25	1	11/17/2014 17:41
2-Nitroaniline	ND	1.3	1	11/17/2014 17:41
3-Nitroaniline	ND	1.3	1	11/17/2014 17:41
4-Nitroaniline	ND	1.3	1	11/17/2014 17:41
Nitrobenzene	ND	0.25	1	11/17/2014 17:41
2-Nitrophenol	ND	1.3	1	11/17/2014 17:41
4-Nitrophenol	ND	1.3	1	11/17/2014 17:41
N-Nitrosodiphenylamine	ND	0.25	1	11/17/2014 17:41
N-Nitrosodi-n-propylamine	ND	0.25	1	11/17/2014 17:41
Pentachlorophenol	ND	1.3	1	11/17/2014 17:41
Phenanthrene	ND	0.25	1	11/17/2014 17:41
Phenol	ND	0.25	1	11/17/2014 17:41
Pyrene	ND	0.25	1	11/17/2014 17:41
1,2,4-Trichlorobenzene	ND	0.25	1	11/17/2014 17:41
2,4,5-Trichlorophenol	ND	0.25	1	11/17/2014 17:41
2,4,6-Trichlorophenol	ND	0.25	1	11/17/2014 17:41

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1(5.5-6') DUP	**1411538-015C**	**Soil**	**11/12/2014 07:43**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	90	30-130		11/17/2014 17:41
Phenol-d5	83	30-130		11/17/2014 17:41
Nitrobenzene-d5	79	30-130		11/17/2014 17:41
2-Fluorobiphenyl	80	30-130		11/17/2014 17:41
2,4,6-Tribromophenol	60	16-130		11/17/2014 17:41
4-Terphenyl-d14	80	30-130		11/17/2014 17:41

Analyst(s): HK

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9')	**1411538-016A**	**Soil**	**11/12/2014 07:57**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	11/17/2014 18:36
Acenaphthylene	ND	0.25	1	11/17/2014 18:36
Acetochlor	ND	0.25	1	11/17/2014 18:36
Anthracene	ND	0.25	1	11/17/2014 18:36
Benzidine	ND	1.3	1	11/17/2014 18:36
Benzo (a) anthracene	ND	0.25	1	11/17/2014 18:36
Benzo (b) fluoranthene	ND	0.25	1	11/17/2014 18:36
Benzo (k) fluoranthene	ND	0.25	1	11/17/2014 18:36
Benzo (g,h,i) perylene	ND	0.25	1	11/17/2014 18:36
Benzo (a) pyrene	ND	0.25	1	11/17/2014 18:36
Benzyl Alcohol	ND	1.3	1	11/17/2014 18:36
1,1-Biphenyl	ND	0.25	1	11/17/2014 18:36
Bis (2-chloroethoxy) Methane	ND	0.25	1	11/17/2014 18:36
Bis (2-chloroethyl) Ether	ND	0.25	1	11/17/2014 18:36
Bis (2-chloroisopropyl) Ether	ND	0.25	1	11/17/2014 18:36
Bis (2-ethylhexyl) Adipate	ND	0.25	1	11/17/2014 18:36
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	11/17/2014 18:36
4-Bromophenyl Phenyl Ether	ND	0.25	1	11/17/2014 18:36
Butylbenzyl Phthalate	ND	0.25	1	11/17/2014 18:36
4-Chloroaniline	ND	0.25	1	11/17/2014 18:36
4-Chloro-3-methylphenol	ND	0.25	1	11/17/2014 18:36
2-Chloronaphthalene	ND	0.25	1	11/17/2014 18:36
2-Chlorophenol	ND	0.25	1	11/17/2014 18:36
4-Chlorophenyl Phenyl Ether	ND	0.25	1	11/17/2014 18:36
Chrysene	ND	0.25	1	11/17/2014 18:36
Dibenzo (a,h) anthracene	ND	0.25	1	11/17/2014 18:36
Dibenzofuran	ND	0.25	1	11/17/2014 18:36
Di-n-butyl Phthalate	ND	0.25	1	11/17/2014 18:36
1,2-Dichlorobenzene	ND	0.25	1	11/17/2014 18:36
1,3-Dichlorobenzene	ND	0.25	1	11/17/2014 18:36
1,4-Dichlorobenzene	ND	0.25	1	11/17/2014 18:36
3,3-Dichlorobenzidine	ND	0.50	1	11/17/2014 18:36
2,4-Dichlorophenol	ND	0.25	1	11/17/2014 18:36
Diethyl Phthalate	ND	0.25	1	11/17/2014 18:36
2,4-Dimethylphenol	ND	0.25	1	11/17/2014 18:36
Dimethyl Phthalate	ND	0.25	1	11/17/2014 18:36
4,6-Dinitro-2-methylphenol	ND	1.3	1	11/17/2014 18:36
2,4-Dinitrophenol	ND	6.3	1	11/17/2014 18:36

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9')	**1411538-016A**	**Soil**	**11/12/2014 07:57**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	11/17/2014 18:36
2,6-Dinitrotoluene	ND	0.25	1	11/17/2014 18:36
Di-n-octyl Phthalate	ND	0.50	1	11/17/2014 18:36
1,2-Diphenylhydrazine	ND	0.25	1	11/17/2014 18:36
Fluoranthene	ND	0.25	1	11/17/2014 18:36
Fluorene	ND	0.25	1	11/17/2014 18:36
Hexachlorobenzene	ND	0.25	1	11/17/2014 18:36
Hexachlorobutadiene	ND	0.25	1	11/17/2014 18:36
Hexachlorocyclopentadiene	ND	1.3	1	11/17/2014 18:36
Hexachloroethane	ND	0.25	1	11/17/2014 18:36
Indeno (1,2,3-cd) pyrene	ND	0.25	1	11/17/2014 18:36
Isophorone	ND	0.25	1	11/17/2014 18:36
2-Methylnaphthalene	ND	0.25	1	11/17/2014 18:36
2-Methylphenol (o-Cresol)	ND	0.25	1	11/17/2014 18:36
3 &/or 4-Methylphenol (m,p-Cresol)	ND	0.25	1	11/17/2014 18:36
Naphthalene	ND	0.25	1	11/17/2014 18:36
2-Nitroaniline	ND	1.3	1	11/17/2014 18:36
3-Nitroaniline	ND	1.3	1	11/17/2014 18:36
4-Nitroaniline	ND	1.3	1	11/17/2014 18:36
Nitrobenzene	ND	0.25	1	11/17/2014 18:36
2-Nitrophenol	ND	1.3	1	11/17/2014 18:36
4-Nitrophenol	ND	1.3	1	11/17/2014 18:36
N-Nitrosodiphenylamine	ND	0.25	1	11/17/2014 18:36
N-Nitrosodi-n-propylamine	ND	0.25	1	11/17/2014 18:36
Pentachlorophenol	ND	1.3	1	11/17/2014 18:36
Phenanthrene	ND	0.25	1	11/17/2014 18:36
Phenol	ND	0.25	1	11/17/2014 18:36
Pyrene	ND	0.25	1	11/17/2014 18:36
1,2,4-Trichlorobenzene	ND	0.25	1	11/17/2014 18:36
2,4,5-Trichlorophenol	ND	0.25	1	11/17/2014 18:36
2,4,6-Trichlorophenol	ND	0.25	1	11/17/2014 18:36

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9')	**1411538-016A**	**Soil**	**11/12/2014 07:57**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	87	30-130		11/17/2014 18:36
Phenol-d5	80	30-130		11/17/2014 18:36
Nitrobenzene-d5	79	30-130		11/17/2014 18:36
2-Fluorobiphenyl	85	30-130		11/17/2014 18:36
2,4,6-Tribromophenol	56	16-130		11/17/2014 18:36
4-Terphenyl-d14	81	30-130		11/17/2014 18:36

Analyst(s): HK

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (5.5-6')	**1411538-018A**	**Soil**	**11/12/2014 08:30**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	11/17/2014 19:04
Acenaphthylene	ND	0.25	1	11/17/2014 19:04
Acetochlor	ND	0.25	1	11/17/2014 19:04
Anthracene	ND	0.25	1	11/17/2014 19:04
Benzidine	ND	1.3	1	11/17/2014 19:04
Benzo (a) anthracene	ND	0.25	1	11/17/2014 19:04
Benzo (b) fluoranthene	ND	0.25	1	11/17/2014 19:04
Benzo (k) fluoranthene	ND	0.25	1	11/17/2014 19:04
Benzo (g,h,i) perylene	ND	0.25	1	11/17/2014 19:04
Benzo (a) pyrene	ND	0.25	1	11/17/2014 19:04
Benzyl Alcohol	ND	1.3	1	11/17/2014 19:04
1,1-Biphenyl	ND	0.25	1	11/17/2014 19:04
Bis (2-chloroethoxy) Methane	ND	0.25	1	11/17/2014 19:04
Bis (2-chloroethyl) Ether	ND	0.25	1	11/17/2014 19:04
Bis (2-chloroisopropyl) Ether	ND	0.25	1	11/17/2014 19:04
Bis (2-ethylhexyl) Adipate	ND	0.25	1	11/17/2014 19:04
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	11/17/2014 19:04
4-Bromophenyl Phenyl Ether	ND	0.25	1	11/17/2014 19:04
Butylbenzyl Phthalate	ND	0.25	1	11/17/2014 19:04
4-Chloroaniline	ND	0.25	1	11/17/2014 19:04
4-Chloro-3-methylphenol	ND	0.25	1	11/17/2014 19:04
2-Chloronaphthalene	ND	0.25	1	11/17/2014 19:04
2-Chlorophenol	ND	0.25	1	11/17/2014 19:04
4-Chlorophenyl Phenyl Ether	ND	0.25	1	11/17/2014 19:04
Chrysene	ND	0.25	1	11/17/2014 19:04
Dibenzo (a,h) anthracene	ND	0.25	1	11/17/2014 19:04
Dibenzofuran	ND	0.25	1	11/17/2014 19:04
Di-n-butyl Phthalate	ND	0.25	1	11/17/2014 19:04
1,2-Dichlorobenzene	ND	0.25	1	11/17/2014 19:04
1,3-Dichlorobenzene	ND	0.25	1	11/17/2014 19:04
1,4-Dichlorobenzene	ND	0.25	1	11/17/2014 19:04
3,3-Dichlorobenzidine	ND	0.50	1	11/17/2014 19:04
2,4-Dichlorophenol	ND	0.25	1	11/17/2014 19:04
Diethyl Phthalate	ND	0.25	1	11/17/2014 19:04
2,4-Dimethylphenol	ND	0.25	1	11/17/2014 19:04
Dimethyl Phthalate	ND	0.25	1	11/17/2014 19:04
4,6-Dinitro-2-methylphenol	ND	1.3	1	11/17/2014 19:04
2,4-Dinitrophenol	ND	6.3	1	11/17/2014 19:04

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (5.5-6')	**1411538-018A**	**Soil**	**11/12/2014 08:30**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	11/17/2014 19:04
2,6-Dinitrotoluene	ND	0.25	1	11/17/2014 19:04
Di-n-octyl Phthalate	ND	0.50	1	11/17/2014 19:04
1,2-Diphenylhydrazine	ND	0.25	1	11/17/2014 19:04
Fluoranthene	ND	0.25	1	11/17/2014 19:04
Fluorene	ND	0.25	1	11/17/2014 19:04
Hexachlorobenzene	ND	0.25	1	11/17/2014 19:04
Hexachlorobutadiene	ND	0.25	1	11/17/2014 19:04
Hexachlorocyclopentadiene	ND	1.3	1	11/17/2014 19:04
Hexachloroethane	ND	0.25	1	11/17/2014 19:04
Indeno (1,2,3-cd) pyrene	ND	0.25	1	11/17/2014 19:04
Isophorone	ND	0.25	1	11/17/2014 19:04
2-Methylnaphthalene	ND	0.25	1	11/17/2014 19:04
2-Methylphenol (o-Cresol)	ND	0.25	1	11/17/2014 19:04
3 &/or 4-Methylphenol (m,p-Cresol)	ND	0.25	1	11/17/2014 19:04
Naphthalene	ND	0.25	1	11/17/2014 19:04
2-Nitroaniline	ND	1.3	1	11/17/2014 19:04
3-Nitroaniline	ND	1.3	1	11/17/2014 19:04
4-Nitroaniline	ND	1.3	1	11/17/2014 19:04
Nitrobenzene	ND	0.25	1	11/17/2014 19:04
2-Nitrophenol	ND	1.3	1	11/17/2014 19:04
4-Nitrophenol	ND	1.3	1	11/17/2014 19:04
N-Nitrosodiphenylamine	ND	0.25	1	11/17/2014 19:04
N-Nitrosodi-n-propylamine	ND	0.25	1	11/17/2014 19:04
Pentachlorophenol	ND	1.3	1	11/17/2014 19:04
Phenanthrene	ND	0.25	1	11/17/2014 19:04
Phenol	ND	0.25	1	11/17/2014 19:04
Pyrene	ND	0.25	1	11/17/2014 19:04
1,2,4-Trichlorobenzene	ND	0.25	1	11/17/2014 19:04
2,4,5-Trichlorophenol	ND	0.25	1	11/17/2014 19:04
2,4,6-Trichlorophenol	ND	0.25	1	11/17/2014 19:04

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (5.5-6')	**1411538-018A**	**Soil**	**11/12/2014 08:30**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	87	30-130		11/17/2014 19:04
Phenol-d5	81	30-130		11/17/2014 19:04
Nitrobenzene-d5	79	30-130		11/17/2014 19:04
2-Fluorobiphenyl	80	30-130		11/17/2014 19:04
2,4,6-Tribromophenol	57	16-130		11/17/2014 19:04
4-Terphenyl-d14	79	30-130		11/17/2014 19:04

Analyst(s): HK

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (8.5-9')	**1411538-019A**	**Soil**	**11/12/2014 08:38**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	11/17/2014 17:13
Acenaphthylene	ND	0.25	1	11/17/2014 17:13
Acetochlor	ND	0.25	1	11/17/2014 17:13
Anthracene	ND	0.25	1	11/17/2014 17:13
Benzidine	ND	1.3	1	11/17/2014 17:13
Benzo (a) anthracene	ND	0.25	1	11/17/2014 17:13
Benzo (b) fluoranthene	ND	0.25	1	11/17/2014 17:13
Benzo (k) fluoranthene	ND	0.25	1	11/17/2014 17:13
Benzo (g,h,i) perylene	ND	0.25	1	11/17/2014 17:13
Benzo (a) pyrene	ND	0.25	1	11/17/2014 17:13
Benzyl Alcohol	ND	1.3	1	11/17/2014 17:13
1,1-Biphenyl	ND	0.25	1	11/17/2014 17:13
Bis (2-chloroethoxy) Methane	ND	0.25	1	11/17/2014 17:13
Bis (2-chloroethyl) Ether	ND	0.25	1	11/17/2014 17:13
Bis (2-chloroisopropyl) Ether	ND	0.25	1	11/17/2014 17:13
Bis (2-ethylhexyl) Adipate	ND	0.25	1	11/17/2014 17:13
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	11/17/2014 17:13
4-Bromophenyl Phenyl Ether	ND	0.25	1	11/17/2014 17:13
Butylbenzyl Phthalate	ND	0.25	1	11/17/2014 17:13
4-Chloroaniline	ND	0.25	1	11/17/2014 17:13
4-Chloro-3-methylphenol	ND	0.25	1	11/17/2014 17:13
2-Chloronaphthalene	ND	0.25	1	11/17/2014 17:13
2-Chlorophenol	ND	0.25	1	11/17/2014 17:13
4-Chlorophenyl Phenyl Ether	ND	0.25	1	11/17/2014 17:13
Chrysene	ND	0.25	1	11/17/2014 17:13
Dibenzo (a,h) anthracene	ND	0.25	1	11/17/2014 17:13
Dibenzofuran	ND	0.25	1	11/17/2014 17:13
Di-n-butyl Phthalate	ND	0.25	1	11/17/2014 17:13
1,2-Dichlorobenzene	ND	0.25	1	11/17/2014 17:13
1,3-Dichlorobenzene	ND	0.25	1	11/17/2014 17:13
1,4-Dichlorobenzene	ND	0.25	1	11/17/2014 17:13
3,3-Dichlorobenzidine	ND	0.50	1	11/17/2014 17:13
2,4-Dichlorophenol	ND	0.25	1	11/17/2014 17:13
Diethyl Phthalate	ND	0.25	1	11/17/2014 17:13
2,4-Dimethylphenol	ND	0.25	1	11/17/2014 17:13
Dimethyl Phthalate	ND	0.25	1	11/17/2014 17:13
4,6-Dinitro-2-methylphenol	ND	1.3	1	11/17/2014 17:13
2,4-Dinitrophenol	ND	6.3	1	11/17/2014 17:13

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (8.5-9')	**1411538-019A**	**Soil**	**11/12/2014 08:38**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	11/17/2014 17:13
2,6-Dinitrotoluene	ND	0.25	1	11/17/2014 17:13
Di-n-octyl Phthalate	ND	0.50	1	11/17/2014 17:13
1,2-Diphenylhydrazine	ND	0.25	1	11/17/2014 17:13
Fluoranthene	ND	0.25	1	11/17/2014 17:13
Fluorene	ND	0.25	1	11/17/2014 17:13
Hexachlorobenzene	ND	0.25	1	11/17/2014 17:13
Hexachlorobutadiene	ND	0.25	1	11/17/2014 17:13
Hexachlorocyclopentadiene	ND	1.3	1	11/17/2014 17:13
Hexachloroethane	ND	0.25	1	11/17/2014 17:13
Indeno (1,2,3-cd) pyrene	ND	0.25	1	11/17/2014 17:13
Isophorone	ND	0.25	1	11/17/2014 17:13
2-Methylnaphthalene	ND	0.25	1	11/17/2014 17:13
2-Methylphenol (o-Cresol)	ND	0.25	1	11/17/2014 17:13
3 &/or 4-Methylphenol (m,p-Cresol)	ND	0.25	1	11/17/2014 17:13
Naphthalene	ND	0.25	1	11/17/2014 17:13
2-Nitroaniline	ND	1.3	1	11/17/2014 17:13
3-Nitroaniline	ND	1.3	1	11/17/2014 17:13
4-Nitroaniline	ND	1.3	1	11/17/2014 17:13
Nitrobenzene	ND	0.25	1	11/17/2014 17:13
2-Nitrophenol	ND	1.3	1	11/17/2014 17:13
4-Nitrophenol	ND	1.3	1	11/17/2014 17:13
N-Nitrosodiphenylamine	ND	0.25	1	11/17/2014 17:13
N-Nitrosodi-n-propylamine	ND	0.25	1	11/17/2014 17:13
Pentachlorophenol	ND	1.3	1	11/17/2014 17:13
Phenanthrene	ND	0.25	1	11/17/2014 17:13
Phenol	ND	0.25	1	11/17/2014 17:13
Pyrene	ND	0.25	1	11/17/2014 17:13
1,2,4-Trichlorobenzene	ND	0.25	1	11/17/2014 17:13
2,4,5-Trichlorophenol	ND	0.25	1	11/17/2014 17:13
2,4,6-Trichlorophenol	ND	0.25	1	11/17/2014 17:13

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (8.5-9')	**1411538-019A**	**Soil**	**11/12/2014 08:38**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	86	30-130		11/17/2014 17:13
Phenol-d5	80	30-130		11/17/2014 17:13
Nitrobenzene-d5	77	30-130		11/17/2014 17:13
2-Fluorobiphenyl	79	30-130		11/17/2014 17:13
2,4,6-Tribromophenol	55	16-130		11/17/2014 17:13
4-Terphenyl-d14	74	30-130		11/17/2014 17:13

Analyst(s): HK

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (5.5-6')	**1411538-021A**	**Soil**	**11/12/2014 09:04**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	11/17/2014 19:32
Acenaphthylene	ND	0.25	1	11/17/2014 19:32
Acetochlor	ND	0.25	1	11/17/2014 19:32
Anthracene	ND	0.25	1	11/17/2014 19:32
Benzidine	ND	1.3	1	11/17/2014 19:32
Benzo (a) anthracene	ND	0.25	1	11/17/2014 19:32
Benzo (b) fluoranthene	ND	0.25	1	11/17/2014 19:32
Benzo (k) fluoranthene	ND	0.25	1	11/17/2014 19:32
Benzo (g,h,i) perylene	ND	0.25	1	11/17/2014 19:32
Benzo (a) pyrene	ND	0.25	1	11/17/2014 19:32
Benzyl Alcohol	ND	1.3	1	11/17/2014 19:32
1,1-Biphenyl	ND	0.25	1	11/17/2014 19:32
Bis (2-chloroethoxy) Methane	ND	0.25	1	11/17/2014 19:32
Bis (2-chloroethyl) Ether	ND	0.25	1	11/17/2014 19:32
Bis (2-chloroisopropyl) Ether	ND	0.25	1	11/17/2014 19:32
Bis (2-ethylhexyl) Adipate	ND	0.25	1	11/17/2014 19:32
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	11/17/2014 19:32
4-Bromophenyl Phenyl Ether	ND	0.25	1	11/17/2014 19:32
Butylbenzyl Phthalate	ND	0.25	1	11/17/2014 19:32
4-Chloroaniline	ND	0.25	1	11/17/2014 19:32
4-Chloro-3-methylphenol	ND	0.25	1	11/17/2014 19:32
2-Chloronaphthalene	ND	0.25	1	11/17/2014 19:32
2-Chlorophenol	ND	0.25	1	11/17/2014 19:32
4-Chlorophenyl Phenyl Ether	ND	0.25	1	11/17/2014 19:32
Chrysene	ND	0.25	1	11/17/2014 19:32
Dibenzo (a,h) anthracene	ND	0.25	1	11/17/2014 19:32
Dibenzofuran	ND	0.25	1	11/17/2014 19:32
Di-n-butyl Phthalate	ND	0.25	1	11/17/2014 19:32
1,2-Dichlorobenzene	ND	0.25	1	11/17/2014 19:32
1,3-Dichlorobenzene	ND	0.25	1	11/17/2014 19:32
1,4-Dichlorobenzene	ND	0.25	1	11/17/2014 19:32
3,3-Dichlorobenzidine	ND	0.50	1	11/17/2014 19:32
2,4-Dichlorophenol	ND	0.25	1	11/17/2014 19:32
Diethyl Phthalate	ND	0.25	1	11/17/2014 19:32
2,4-Dimethylphenol	ND	0.25	1	11/17/2014 19:32
Dimethyl Phthalate	ND	0.25	1	11/17/2014 19:32
4,6-Dinitro-2-methylphenol	ND	1.3	1	11/17/2014 19:32
2,4-Dinitrophenol	ND	6.3	1	11/17/2014 19:32

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (5.5-6')	**1411538-021A**	**Soil**	**11/12/2014 09:04**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	11/17/2014 19:32
2,6-Dinitrotoluene	ND	0.25	1	11/17/2014 19:32
Di-n-octyl Phthalate	ND	0.50	1	11/17/2014 19:32
1,2-Diphenylhydrazine	ND	0.25	1	11/17/2014 19:32
Fluoranthene	ND	0.25	1	11/17/2014 19:32
Fluorene	ND	0.25	1	11/17/2014 19:32
Hexachlorobenzene	ND	0.25	1	11/17/2014 19:32
Hexachlorobutadiene	ND	0.25	1	11/17/2014 19:32
Hexachlorocyclopentadiene	ND	1.3	1	11/17/2014 19:32
Hexachloroethane	ND	0.25	1	11/17/2014 19:32
Indeno (1,2,3-cd) pyrene	ND	0.25	1	11/17/2014 19:32
Isophorone	ND	0.25	1	11/17/2014 19:32
2-Methylnaphthalene	ND	0.25	1	11/17/2014 19:32
2-Methylphenol (o-Cresol)	ND	0.25	1	11/17/2014 19:32
3 &/or 4-Methylphenol (m,p-Cresol)	ND	0.25	1	11/17/2014 19:32
Naphthalene	ND	0.25	1	11/17/2014 19:32
2-Nitroaniline	ND	1.3	1	11/17/2014 19:32
3-Nitroaniline	ND	1.3	1	11/17/2014 19:32
4-Nitroaniline	ND	1.3	1	11/17/2014 19:32
Nitrobenzene	ND	0.25	1	11/17/2014 19:32
2-Nitrophenol	ND	1.3	1	11/17/2014 19:32
4-Nitrophenol	ND	1.3	1	11/17/2014 19:32
N-Nitrosodiphenylamine	ND	0.25	1	11/17/2014 19:32
N-Nitrosodi-n-propylamine	ND	0.25	1	11/17/2014 19:32
Pentachlorophenol	ND	1.3	1	11/17/2014 19:32
Phenanthrene	ND	0.25	1	11/17/2014 19:32
Phenol	ND	0.25	1	11/17/2014 19:32
Pyrene	ND	0.25	1	11/17/2014 19:32
1,2,4-Trichlorobenzene	ND	0.25	1	11/17/2014 19:32
2,4,5-Trichlorophenol	ND	0.25	1	11/17/2014 19:32
2,4,6-Trichlorophenol	ND	0.25	1	11/17/2014 19:32

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (5.5-6')	**1411538-021A**	**Soil**	**11/12/2014 09:04**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	97	30-130		11/17/2014 19:32
Phenol-d5	89	30-130		11/17/2014 19:32
Nitrobenzene-d5	86	30-130		11/17/2014 19:32
2-Fluorobiphenyl	89	30-130		11/17/2014 19:32
2,4,6-Tribromophenol	60	16-130		11/17/2014 19:32
4-Terphenyl-d14	87	30-130		11/17/2014 19:32

Analyst(s): HK

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (8.5-9')	**1411538-022A**	**Soil**	**11/12/2014 09:17**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	11/17/2014 20:00
Acenaphthylene	ND	0.25	1	11/17/2014 20:00
Acetochlor	ND	0.25	1	11/17/2014 20:00
Anthracene	ND	0.25	1	11/17/2014 20:00
Benzidine	ND	1.3	1	11/17/2014 20:00
Benzo (a) anthracene	ND	0.25	1	11/17/2014 20:00
Benzo (b) fluoranthene	ND	0.25	1	11/17/2014 20:00
Benzo (k) fluoranthene	ND	0.25	1	11/17/2014 20:00
Benzo (g,h,i) perylene	ND	0.25	1	11/17/2014 20:00
Benzo (a) pyrene	ND	0.25	1	11/17/2014 20:00
Benzyl Alcohol	ND	1.3	1	11/17/2014 20:00
1,1-Biphenyl	ND	0.25	1	11/17/2014 20:00
Bis (2-chloroethoxy) Methane	ND	0.25	1	11/17/2014 20:00
Bis (2-chloroethyl) Ether	ND	0.25	1	11/17/2014 20:00
Bis (2-chloroisopropyl) Ether	ND	0.25	1	11/17/2014 20:00
Bis (2-ethylhexyl) Adipate	ND	0.25	1	11/17/2014 20:00
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	11/17/2014 20:00
4-Bromophenyl Phenyl Ether	ND	0.25	1	11/17/2014 20:00
Butylbenzyl Phthalate	ND	0.25	1	11/17/2014 20:00
4-Chloroaniline	ND	0.25	1	11/17/2014 20:00
4-Chloro-3-methylphenol	ND	0.25	1	11/17/2014 20:00
2-Chloronaphthalene	ND	0.25	1	11/17/2014 20:00
2-Chlorophenol	ND	0.25	1	11/17/2014 20:00
4-Chlorophenyl Phenyl Ether	ND	0.25	1	11/17/2014 20:00
Chrysene	ND	0.25	1	11/17/2014 20:00
Dibenzo (a,h) anthracene	ND	0.25	1	11/17/2014 20:00
Dibenzofuran	ND	0.25	1	11/17/2014 20:00
Di-n-butyl Phthalate	ND	0.25	1	11/17/2014 20:00
1,2-Dichlorobenzene	ND	0.25	1	11/17/2014 20:00
1,3-Dichlorobenzene	ND	0.25	1	11/17/2014 20:00
1,4-Dichlorobenzene	ND	0.25	1	11/17/2014 20:00
3,3-Dichlorobenzidine	ND	0.50	1	11/17/2014 20:00
2,4-Dichlorophenol	ND	0.25	1	11/17/2014 20:00
Diethyl Phthalate	ND	0.25	1	11/17/2014 20:00
2,4-Dimethylphenol	ND	0.25	1	11/17/2014 20:00
Dimethyl Phthalate	ND	0.25	1	11/17/2014 20:00
4,6-Dinitro-2-methylphenol	ND	1.3	1	11/17/2014 20:00
2,4-Dinitrophenol	ND	6.3	1	11/17/2014 20:00

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (8.5-9')	**1411538-022A**	**Soil**	**11/12/2014 09:17**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	11/17/2014 20:00
2,6-Dinitrotoluene	ND	0.25	1	11/17/2014 20:00
Di-n-octyl Phthalate	ND	0.50	1	11/17/2014 20:00
1,2-Diphenylhydrazine	ND	0.25	1	11/17/2014 20:00
Fluoranthene	ND	0.25	1	11/17/2014 20:00
Fluorene	ND	0.25	1	11/17/2014 20:00
Hexachlorobenzene	ND	0.25	1	11/17/2014 20:00
Hexachlorobutadiene	ND	0.25	1	11/17/2014 20:00
Hexachlorocyclopentadiene	ND	1.3	1	11/17/2014 20:00
Hexachloroethane	ND	0.25	1	11/17/2014 20:00
Indeno (1,2,3-cd) pyrene	ND	0.25	1	11/17/2014 20:00
Isophorone	ND	0.25	1	11/17/2014 20:00
2-Methylnaphthalene	ND	0.25	1	11/17/2014 20:00
2-Methylphenol (o-Cresol)	ND	0.25	1	11/17/2014 20:00
3 &/or 4-Methylphenol (m,p-Cresol)	ND	0.25	1	11/17/2014 20:00
Naphthalene	ND	0.25	1	11/17/2014 20:00
2-Nitroaniline	ND	1.3	1	11/17/2014 20:00
3-Nitroaniline	ND	1.3	1	11/17/2014 20:00
4-Nitroaniline	ND	1.3	1	11/17/2014 20:00
Nitrobenzene	ND	0.25	1	11/17/2014 20:00
2-Nitrophenol	ND	1.3	1	11/17/2014 20:00
4-Nitrophenol	ND	1.3	1	11/17/2014 20:00
N-Nitrosodiphenylamine	ND	0.25	1	11/17/2014 20:00
N-Nitrosodi-n-propylamine	ND	0.25	1	11/17/2014 20:00
Pentachlorophenol	ND	1.3	1	11/17/2014 20:00
Phenanthrene	ND	0.25	1	11/17/2014 20:00
Phenol	ND	0.25	1	11/17/2014 20:00
Pyrene	ND	0.25	1	11/17/2014 20:00
1,2,4-Trichlorobenzene	ND	0.25	1	11/17/2014 20:00
2,4,5-Trichlorophenol	ND	0.25	1	11/17/2014 20:00
2,4,6-Trichlorophenol	ND	0.25	1	11/17/2014 20:00

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8270C
Date Prepared:	11/17/14	**Unit:**	mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (8.5-9')	**1411538-022A**	**Soil**	**11/12/2014 09:17**	**GC17**	**97882**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	86	30-130		11/17/2014 20:00
Phenol-d5	80	30-130		11/17/2014 20:00
Nitrobenzene-d5	76	30-130		11/17/2014 20:00
2-Fluorobiphenyl	82	30-130		11/17/2014 20:00
2,4,6-Tribromophenol	57	16-130		11/17/2014 20:00
4-Terphenyl-d14	75	30-130		11/17/2014 20:00

Analyst(s): HK

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Arsenic

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
Ag-4 (surf) R	**1411538-001B**	**Soil/TOTAL**	**11/11/2014 11:04**	**ICP-MS2**	**97734**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.1**	0.50	1	11/17/2014 18:07

Surrogates	REC (%)	Limits	
Tb 350.917	121	70-130	11/17/2014 18:07

Analyst(s): DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
Ag-5 (surf) F	**1411538-001C**	**Soil/TOTAL**	**11/11/2014 10:47**	**ICP-MS2**	**97734**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.5**	0.50	1	11/17/2014 18:13

Surrogates	REC (%)	Limits	
Tb 350.917	129	70-130	11/17/2014 18:13

Analyst(s): DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
Ag-7 (surf) R	**1411538-001D**	**Soil/TOTAL**	**11/11/2014 10:43**	**ICP-MS1**	**97734**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.6**	0.50	1	11/18/2014 22:43

Surrogates	REC (%)	Qualifiers	Limits	
Tb 350.917	134	S	70-130	11/18/2014 22:43

Analyst(s): AG

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
Ag-2 (surf) R	**1411538-002C**	**Soil/TOTAL**	**11/11/2014 12:07**	**ICP-MS1**	**97734**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.5**	0.50	1	11/18/2014 22:49

Surrogates	REC (%)	Limits	
Tb 350.917	123	70-130	11/18/2014 22:49

Analyst(s): AG

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Arsenic

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
Ag-3 (surf) F	**1411538-002D**	**Soil/TOTAL**	**11/11/2014 12:05**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.0**	0.50	1	11/17/2014 18:29

Surrogates	REC (%)	Limits	
Tb 350.917	118	70-130	11/17/2014 18:29

Analyst(s): DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
Ag-8 (surf) F	**1411538-002E**	**Soil/TOTAL**	**11/11/2014 11:18**	**ICP-MS1**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.6**	0.50	1	11/18/2014 22:56

Surrogates	REC (%)	Limits	
Tb 350.917	128	70-130	11/18/2014 22:56

Analyst(s): AG

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
Ag-8 (surf) F DUP	**1411538-002F**	**Soil/TOTAL**	**11/11/2014 11:18**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.2**	0.50	1	11/17/2014 18:37

Surrogates	REC (%)	Limits	
Tb 350.917	114	70-130	11/17/2014 18:37

Analyst(s): DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-1 (surf)	**1411538-003B**	**Soil/TOTAL**	**11/11/2014 12:16**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.2**	0.50	1	11/17/2014 18:41

Surrogates	REC (%)	Limits	
Tb 350.917	124	70-130	11/17/2014 18:41

Analyst(s): DVH

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Arsenic

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-2 (surf)	**1411538-003C**	**Soil/TOTAL**	**11/11/2014 09:45**	**ICP-MS1**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.9**	0.50	1	11/18/2014 23:02

Surrogates	REC (%)	Limits	
Tb 350.917	129	70-130	11/18/2014 23:02

Analyst(s): AG

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-3 (surf)	**1411538-003D**	**Soil/TOTAL**	**11/11/2014 08:18**	**ICP-MS1**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**0.99**	0.50	1	11/18/2014 23:08

Surrogates	REC (%)	Limits	
Tb 350.917	99	70-130	11/18/2014 23:08

Analyst(s): AG

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
Ag-10 (surf) R	**1411538-004B**	**Soil/TOTAL**	**11/11/2014 09:31**	**ICP-MS2**	**97776**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.0**	0.50	1	11/17/2014 19:11

Surrogates	REC (%)	Limits	
Tb 350.917	120	70-130	11/17/2014 19:11

Analyst(s): DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
Ag-11 (surf) R	**1411538-004C**	**Soil/TOTAL**	**11/11/2014 08:40**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**0.98**	0.50	1	11/17/2014 19:15

Surrogates	REC (%)	Limits	
Tb 350.917	114	70-130	11/17/2014 19:15

Analyst(s): DVH

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Arsenic

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-4 (surf)	**1411538-005B**	**Soil/TOTAL**	**11/11/2014 11:41**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.0**	0.50	1	11/17/2014 19:18

Surrogates	REC (%)	Limits	
Tb 350.917	113	70-130	11/17/2014 19:18

Analyst(s): DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-5 (surf)	**1411538-005C**	**Soil/TOTAL**	**11/11/2014 11:46**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.1**	0.50	1	11/17/2014 19:22

Surrogates	REC (%)	Limits	
Tb 350.917	120	70-130	11/17/2014 19:22

Analyst(s): DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-6 (surf)	**1411538-005D**	**Soil/TOTAL**	**11/11/2014 11:50**	**ICP-MS1**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.3**	0.50	1	11/18/2014 23:14

Surrogates	REC (%)	Limits	
Tb 350.917	104	70-130	11/18/2014 23:14

Analyst(s): AG

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-4 (surf) DUP	**1411538-005E**	**Soil/TOTAL**	**11/11/2014 11:41**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.5**	0.50	1	11/17/2014 19:30

Surrogates	REC (%)	Limits	
Tb 350.917	110	70-130	11/17/2014 19:30

Analyst(s): DVH

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Arsenic

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-7 (surf)	**1411538-006B**	**Soil/TOTAL**	**11/11/2014 10:37**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**2.2**	0.50	1	11/17/2014 19:34

Surrogates	REC (%)	Limits	
Tb 350.917	119	70-130	11/17/2014 19:34

Analyst(s): DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-8 (surf)	**1411538-006C**	**Soil/TOTAL**	**11/11/2014 10:52**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.3**	0.50	1	11/17/2014 19:37

Surrogates	REC (%)	Limits	
Tb 350.917	114	70-130	11/17/2014 19:37

Analyst(s): DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-9 (surf)	**1411538-006D**	**Soil/TOTAL**	**11/11/2014 11:16**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.5**	0.50	1	11/17/2014 19:41

Surrogates	REC (%)	Limits	
Tb 350.917	120	70-130	11/17/2014 19:41

Analyst(s): DVH

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-10 (surf)	**1411538-007B**	**Soil/TOTAL**	**11/11/2014 08:55**	**ICP-MS1**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**0.85**	0.50	1	11/18/2014 23:21

Surrogates	REC (%)	Limits	
Tb 350.917	101	70-130	11/18/2014 23:21

Analyst(s): AG

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Arsenic

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-11 (surf)	**1411538-007C**	**Soil/TOTAL**	**11/11/2014 09:14**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.0**	0.50	1	11/17/2014 23:09

Surrogates	REC (%)	Limits	
Tb 350.917	116	70-130	11/17/2014 23:09

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-12 (surf)	**1411538-007D**	**Soil/TOTAL**	**11/11/2014 09:21**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.1**	0.50	1	11/17/2014 23:13

Surrogates	REC (%)	Limits	
Tb 350.917	122	70-130	11/17/2014 23:13

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-13 (surf)	**1411538-008B**	**Soil/TOTAL**	**11/11/2014 08:14**	**ICP-MS2**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.2**	0.50	1	11/17/2014 23:17

Surrogates	REC (%)	Limits	
Tb 350.917	117	70-130	11/17/2014 23:17

Analyst(s): DB

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-14 (surf)	**1411538-008C**	**Soil/TOTAL**	**11/11/2014 08:07**	**ICP-MS1**	**97775**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.2**	0.50	1	11/17/2014 11:07

Surrogates	REC (%)	Limits	
Tb 350.917	106	70-130	11/17/2014 11:07

Analyst(s): AG

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Arsenic

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
RW-15 (surf)	**1411538-008D**	**Soil/TOTAL**	**11/11/2014 08:00**	**ICP-MS2**	**97776**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	**1.0**	0.50	1	11/17/2014 23:21

Surrogates	REC (%)	Limits	
Tb 350.917	125	70-130	11/17/2014 23:21

Analyst(s): DB

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
DB-2 (surf)	**1411538-009B**	**Soil/TOTAL**	**11/11/2014 12:38**	**ICP-MS2**	**97776**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	11/17/2014 23:25
Arsenic	**1.0**	0.50	1	11/17/2014 23:25
Barium	**36**	5.0	1	11/17/2014 23:25
Beryllium	ND	0.50	1	11/17/2014 23:25
Cadmium	ND	0.25	1	11/17/2014 23:25
Chromium	**4.1**	0.50	1	11/17/2014 23:25
Cobalt	**0.90**	0.50	1	11/17/2014 23:25
Copper	**4.1**	0.50	1	11/17/2014 23:25
Lead	**3.2**	0.50	1	11/17/2014 23:25
Mercury	ND	0.050	1	11/17/2014 23:25
Molybdenum	ND	0.50	1	11/17/2014 23:25
Nickel	**3.2**	0.50	1	11/17/2014 23:25
Selenium	ND	0.50	1	11/17/2014 23:25
Silver	ND	0.50	1	11/17/2014 23:25
Thallium	ND	0.50	1	11/17/2014 23:25
Vanadium	**7.2**	0.50	1	11/17/2014 23:25
Zinc	**17**	5.0	1	11/17/2014 23:25

Surrogates	REC (%)	Limits	
Tb 350.917	103	70-130	11/17/2014 23:25

Analyst(s): DB

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CDPH ELAP 1644 ♦ NELAP 4033ORELAP

Angela Rydelius, Lab Manager

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (5.5-6')	**1411538-015A**	**Soil/TOTAL**	**11/12/2014 07:43**	**ICP-MS2**	**97776**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	11/17/2014 23:31
Arsenic	**1.3**	0.50	1	11/17/2014 23:31
Barium	**24**	5.0	1	11/17/2014 23:31
Beryllium	ND	0.50	1	11/17/2014 23:31
Cadmium	ND	0.25	1	11/17/2014 23:31
Chromium	**4.7**	0.50	1	11/17/2014 23:31
Cobalt	**1.2**	0.50	1	11/17/2014 23:31
Copper	**2.1**	0.50	1	11/17/2014 23:31
Lead	**1.8**	0.50	1	11/17/2014 23:31
Mercury	ND	0.050	1	11/17/2014 23:31
Molybdenum	ND	0.50	1	11/17/2014 23:31
Nickel	**3.6**	0.50	1	11/17/2014 23:31
Selenium	ND	0.50	1	11/17/2014 23:31
Silver	ND	0.50	1	11/17/2014 23:31
Thallium	ND	0.50	1	11/17/2014 23:31
Vanadium	**9.0**	0.50	1	11/17/2014 23:31
Zinc	**17**	5.0	1	11/17/2014 23:31

Surrogates	REC (%)	Limits	
Tb 350.917	113	70-130	11/17/2014 23:31

Analyst(s): DB

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1(5.5-6') DUP	**1411538-015C**	**Soil/TOTAL**	**11/12/2014 07:43**	**ICP-MS2**	**97776**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	11/17/2014 23:37
Arsenic	**1.3**	0.50	1	11/17/2014 23:37
Barium	**25**	5.0	1	11/17/2014 23:37
Beryllium	ND	0.50	1	11/17/2014 23:37
Cadmium	ND	0.25	1	11/17/2014 23:37
Chromium	**4.3**	0.50	1	11/17/2014 23:37
Cobalt	**1.0**	0.50	1	11/17/2014 23:37
Copper	**2.0**	0.50	1	11/17/2014 23:37
Lead	**1.8**	0.50	1	11/17/2014 23:37
Mercury	ND	0.050	1	11/17/2014 23:37
Molybdenum	ND	0.50	1	11/17/2014 23:37
Nickel	**3.2**	0.50	1	11/17/2014 23:37
Selenium	ND	0.50	1	11/17/2014 23:37
Silver	ND	0.50	1	11/17/2014 23:37
Thallium	ND	0.50	1	11/17/2014 23:37
Vanadium	**8.3**	0.50	1	11/17/2014 23:37
Zinc	**8.3**	5.0	1	11/17/2014 23:37

Surrogates	REC (%)	Limits	
Tb 350.917	106	70-130	11/17/2014 23:37

Analyst(s): DB

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9')	**1411538-016A**	**Soil/TOTAL**	**11/12/2014 07:57**	**ICP-MS2**	**97776**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	11/20/2014 16:59
Arsenic	**0.99**	0.50	1	11/20/2014 16:59
Barium	**19**	5.0	1	11/20/2014 16:59
Beryllium	ND	0.50	1	11/20/2014 16:59
Cadmium	ND	0.25	1	11/20/2014 16:59
Chromium	**3.3**	0.50	1	11/20/2014 16:59
Cobalt	**0.97**	0.50	1	11/20/2014 16:59
Copper	**1.8**	0.50	1	11/20/2014 16:59
Lead	**1.3**	0.50	1	11/20/2014 16:59
Mercury	ND	0.050	1	11/20/2014 16:59
Molybdenum	ND	0.50	1	11/20/2014 16:59
Nickel	**2.4**	0.50	1	11/20/2014 16:59
Selenium	ND	0.50	1	11/20/2014 16:59
Silver	ND	0.50	1	11/20/2014 16:59
Thallium	ND	0.50	1	11/20/2014 16:59
Vanadium	**5.8**	0.50	1	11/20/2014 16:59
Zinc	**5.2**	5.0	1	11/20/2014 16:59

Surrogates	REC (%)	Limits	
Tb 350.917	114	70-130	11/20/2014 16:59

Analyst(s): DVH

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (5.5-6')	**1411538-018A**	**Soil/TOTAL**	**11/12/2014 08:30**	**ICP-MS2**	**97776**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	11/18/2014 00:07
Arsenic	**1.2**	0.50	1	11/18/2014 00:07
Barium	**21**	5.0	1	11/18/2014 00:07
Beryllium	ND	0.50	1	11/18/2014 00:07
Cadmium	ND	0.25	1	11/18/2014 00:07
Chromium	**4.5**	0.50	1	11/18/2014 00:07
Cobalt	**1.1**	0.50	1	11/18/2014 00:07
Copper	**2.1**	0.50	1	11/18/2014 00:07
Lead	**1.7**	0.50	1	11/18/2014 00:07
Mercury	ND	0.050	1	11/18/2014 00:07
Molybdenum	ND	0.50	1	11/18/2014 00:07
Nickel	**3.2**	0.50	1	11/18/2014 00:07
Selenium	ND	0.50	1	11/18/2014 00:07
Silver	ND	0.50	1	11/18/2014 00:07
Thallium	ND	0.50	1	11/18/2014 00:07
Vanadium	**8.9**	0.50	1	11/18/2014 00:07
Zinc	**8.5**	5.0	1	11/18/2014 00:07

Surrogates	REC (%)	Limits	
Tb 350.917	108	70-130	11/18/2014 00:07

Analyst(s): DB

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (8.5-9')	**1411538-019A**	**Soil/TOTAL**	**11/12/2014 08:38**	**ICP-MS2**	**97776**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	11/18/2014 00:14
Arsenic	**0.94**	0.50	1	11/18/2014 00:14
Barium	**11**	5.0	1	11/18/2014 00:14
Beryllium	ND	0.50	1	11/18/2014 00:14
Cadmium	ND	0.25	1	11/18/2014 00:14
Chromium	**3.3**	0.50	1	11/18/2014 00:14
Cobalt	**0.55**	0.50	1	11/18/2014 00:14
Copper	**1.4**	0.50	1	11/18/2014 00:14
Lead	**1.2**	0.50	1	11/18/2014 00:14
Mercury	ND	0.050	1	11/18/2014 00:14
Molybdenum	ND	0.50	1	11/18/2014 00:14
Nickel	**1.8**	0.50	1	11/18/2014 00:14
Selenium	ND	0.50	1	11/18/2014 00:14
Silver	ND	0.50	1	11/18/2014 00:14
Thallium	ND	0.50	1	11/18/2014 00:14
Vanadium	**6.3**	0.50	1	11/18/2014 00:14
Zinc	**5.0**	5.0	1	11/18/2014 00:14

Surrogates	REC (%)	Limits	
Tb 350.917	108	70-130	11/18/2014 00:14

Analyst(s): DB

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (5.5-6')	**1411538-021A**	**Soil/TOTAL**	**11/12/2014 09:04**	**ICP-MS2**	**97776**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	11/18/2014 00:20
Arsenic	**1.2**	0.50	1	11/18/2014 00:20
Barium	**16**	5.0	1	11/18/2014 00:20
Beryllium	ND	0.50	1	11/18/2014 00:20
Cadmium	ND	0.25	1	11/18/2014 00:20
Chromium	**5.2**	0.50	1	11/18/2014 00:20
Cobalt	**1.3**	0.50	1	11/18/2014 00:20
Copper	**2.0**	0.50	1	11/18/2014 00:20
Lead	**1.8**	0.50	1	11/18/2014 00:20
Mercury	ND	0.050	1	11/18/2014 00:20
Molybdenum	ND	0.50	1	11/18/2014 00:20
Nickel	**3.3**	0.50	1	11/18/2014 00:20
Selenium	ND	0.50	1	11/18/2014 00:20
Silver	ND	0.50	1	11/18/2014 00:20
Thallium	ND	0.50	1	11/18/2014 00:20
Vanadium	**8.9**	0.50	1	11/18/2014 00:20
Zinc	**7.9**	5.0	1	11/18/2014 00:20

Surrogates	REC (%)	Limits	
Tb 350.917	112	70-130	11/18/2014 00:20

Analyst(s): DB

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3050B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW6020
Date Prepared:	11/13/14	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (8.5-9')	**1411538-022A**	**Soil/TOTAL**	**11/12/2014 09:17**	**ICP-MS1**	**97776**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	11/17/2014 10:32
Arsenic	**1.4**	0.50	1	11/17/2014 10:32
Barium	**20**	5.0	1	11/17/2014 10:32
Beryllium	ND	0.50	1	11/17/2014 10:32
Cadmium	ND	0.25	1	11/17/2014 10:32
Chromium	**4.0**	0.50	1	11/17/2014 10:32
Cobalt	**0.86**	0.50	1	11/17/2014 10:32
Copper	**2.2**	0.50	1	11/17/2014 10:32
Lead	**1.6**	0.50	1	11/17/2014 10:32
Mercury	ND	0.050	1	11/17/2014 10:32
Molybdenum	ND	0.50	1	11/17/2014 10:32
Nickel	ND	5.0	1	11/17/2014 10:32
Selenium	ND	0.50	1	11/17/2014 10:32
Silver	ND	0.50	1	11/17/2014 10:32
Thallium	ND	0.50	1	11/17/2014 10:32
Vanadium	**8.4**	0.50	1	11/17/2014 10:32
Zinc	**6.6**	5.0	1	11/17/2014 10:32

Surrogates	REC (%)	Limits	
Tb 350.917	115	70-130	11/17/2014 10:32

Analyst(s): DB

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	E200.8
Date Received:	11/13/14 20:00	**Analytical Method:**	E200.8
Date Prepared:	11/13/14	**Unit:**	µg/L

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
GW-1	**1411538-029D**	**Water/TOTAL**	**11/12/2014 11:20**	**ICP-MS1**	**97720**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	11/17/2014 14:33
Arsenic	**0.68**	0.50	1	11/17/2014 14:33
Barium	**15**	5.0	1	11/17/2014 14:33
Beryllium	ND	0.50	1	11/17/2014 14:33
Cadmium	ND	0.25	1	11/17/2014 14:33
Chromium	**0.92**	0.50	1	11/17/2014 14:33
Cobalt	ND	0.50	1	11/17/2014 14:33
Copper	ND	2.0	1	11/17/2014 14:33
Lead	ND	0.50	1	11/17/2014 14:33
Mercury	ND	0.025	1	11/17/2014 14:33
Molybdenum	**3.8**	0.50	1	11/17/2014 14:33
Nickel	ND	0.50	1	11/17/2014 14:33
Selenium	**2.6**	0.50	1	11/17/2014 14:33
Silver	ND	0.19	1	11/17/2014 14:33
Thallium	ND	0.50	1	11/17/2014 14:33
Vanadium	**2.9**	0.50	1	11/17/2014 14:33
Zinc	ND	15	1	11/17/2014 14:33

Surrogates	REC (%)	Limits	
Tb 350.917	95	70-130	11/17/2014 14:33

Analyst(s): AG

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5030B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	11/13/14-11/17/14	**Unit:**	mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (5.5-6')	**1411538-015A**	**Soil**	**11/12/2014 07:43**	**GC19**	**97875**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	11/17/2014 20:53
MTBE	---	0.050	1	11/17/2014 20:53
Benzene	---	0.0050	1	11/17/2014 20:53
Toluene	---	0.0050	1	11/17/2014 20:53
Ethylbenzene	---	0.0050	1	11/17/2014 20:53
Xylenes	---	0.0050	1	11/17/2014 20:53

Surrogates	REC (%)	Limits	
2-Fluorotoluene	111	70-130	11/17/2014 20:53

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9')	**1411538-016A**	**Soil**	**11/12/2014 07:57**	**GC19**	**97875**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	11/17/2014 21:23
MTBE	---	0.050	1	11/17/2014 21:23
Benzene	---	0.0050	1	11/17/2014 21:23
Toluene	---	0.0050	1	11/17/2014 21:23
Ethylbenzene	---	0.0050	1	11/17/2014 21:23
Xylenes	---	0.0050	1	11/17/2014 21:23

Surrogates	REC (%)	Limits	
2-Fluorotoluene	112	70-130	11/17/2014 21:23

Analyst(s): IA

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5030B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	11/13/14-11/17/14	**Unit:**	mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9') DUP	**1411538-016C**	**Soil**	**11/12/2014 07:57**	**GC7**	**97769**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	11/15/2014 07:57
MTBE	---	0.050	1	11/15/2014 07:57
Benzene	---	0.0050	1	11/15/2014 07:57
Toluene	---	0.0050	1	11/15/2014 07:57
Ethylbenzene	---	0.0050	1	11/15/2014 07:57
Xylenes	---	0.0050	1	11/15/2014 07:57

Surrogates	REC (%)	Limits	
2-Fluorotoluene	103	70-130	11/15/2014 07:57

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (5.5-6')	**1411538-018A**	**Soil**	**11/12/2014 08:30**	**GC7**	**97769**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	11/15/2014 16:53
MTBE	---	0.050	1	11/15/2014 16:53
Benzene	---	0.0050	1	11/15/2014 16:53
Toluene	---	0.0050	1	11/15/2014 16:53
Ethylbenzene	---	0.0050	1	11/15/2014 16:53
Xylenes	---	0.0050	1	11/15/2014 16:53

Surrogates	REC (%)	Limits	
2-Fluorotoluene	104	70-130	11/15/2014 16:53

Analyst(s): IA

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5030B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	11/13/14-11/17/14	**Unit:**	mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (8.5-9')	**1411538-019A**	**Soil**	**11/12/2014 08:38**	**GC7**	**97769**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	11/15/2014 16:23
MTBE	---	0.050	1	11/15/2014 16:23
Benzene	---	0.0050	1	11/15/2014 16:23
Toluene	---	0.0050	1	11/15/2014 16:23
Ethylbenzene	---	0.0050	1	11/15/2014 16:23
Xylenes	---	0.0050	1	11/15/2014 16:23

Surrogates	REC (%)	Limits	
2-Fluorotoluene	107	70-130	11/15/2014 16:23

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (5.5-6')	**1411538-021A**	**Soil**	**11/12/2014 09:04**	**GC19**	**97769**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	11/15/2014 07:30
MTBE	---	0.050	1	11/15/2014 07:30
Benzene	---	0.0050	1	11/15/2014 07:30
Toluene	---	0.0050	1	11/15/2014 07:30
Ethylbenzene	---	0.0050	1	11/15/2014 07:30
Xylenes	---	0.0050	1	11/15/2014 07:30

Surrogates	REC (%)	Limits	
2-Fluorotoluene	95	70-130	11/15/2014 07:30

Analyst(s): IA

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5030B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	11/13/14-11/17/14	**Unit:**	mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (8.5-9')	**1411538-022A**	**Soil**	**11/12/2014 09:17**	**GC7**	**97769**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	11/15/2014 17:23
MTBE	---	0.050	1	11/15/2014 17:23
Benzene	---	0.0050	1	11/15/2014 17:23
Toluene	---	0.0050	1	11/15/2014 17:23
Ethylbenzene	---	0.0050	1	11/15/2014 17:23
Xylenes	---	0.0050	1	11/15/2014 17:23

Surrogates	REC (%)	Limits	
2-Fluorotoluene	114	70-130	11/15/2014 17:23

Analyst(s): IA

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW5030B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	11/18/14	**Unit:**	µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
GW-1	**1411538-029A**	**Water**	**11/12/2014 11:20**	**GC3**	**97914**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	11/18/2014 04:28
MTBE	---	5.0	1	11/18/2014 04:28
Benzene	---	0.50	1	11/18/2014 04:28
Toluene	---	0.50	1	11/18/2014 04:28
Ethylbenzene	---	0.50	1	11/18/2014 04:28
Xylenes	---	0.50	1	11/18/2014 04:28
Surrogates	REC (%)	Limits		
aaa-TFT_2	108	70-130		11/18/2014 04:28

Analyst(s): IA

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	E200.8
Date Received:	11/13/14 20:00	**Analytical Method:**	E200.8
Date Prepared:	11/13/14	**Unit:**	µg/L

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
FB #1	**1411538-030A**	**Water/TOTAL**	**11/11/2014 15:00**	**ICP-MS1**	**97720**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	ND	0.50	1	11/17/2014 14:40
Lead	ND	0.50	1	11/17/2014 14:40

Surrogates	REC (%)	Limits	
Tb 350.917	100	70-130	11/17/2014 14:40

Analyst(s): AG

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EB #1	**1411538-031A**	**Water/TOTAL**	**11/11/2014 15:05**	**ICP-MS1**	**97720**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	ND	0.50	1	11/17/2014 14:44
Lead	ND	0.50	1	11/17/2014 14:44

Surrogates	REC (%)	Limits	
Tb 350.917	103	70-130	11/17/2014 14:44

Analyst(s): AG

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
FB #2	**1411538-032A**	**Water/TOTAL**	**11/12/2014 10:40**	**ICP-MS1**	**97720**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	ND	0.50	1	11/17/2014 15:06
Lead	ND	0.50	1	11/17/2014 15:06

Surrogates	REC (%)	Limits	
Tb 350.917	103	70-130	11/17/2014 15:06

Analyst(s): DVH

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	E200.8
Date Received:	11/13/14 20:00	**Analytical Method:**	E200.8
Date Prepared:	11/13/14	**Unit:**	µg/L

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EB #2	**1411538-033A**	**Water/TOTAL**	**11/12/2014 10:45**	**ICP-MS1**	**97720**

Analytes	Result	RL	DF	Date Analyzed
Arsenic	ND	0.50	1	11/17/2014 15:11
Lead	ND	0.50	1	11/17/2014 15:11

Surrogates	REC (%)	Limits	
Tb 350.917	103	70-130	11/17/2014 15:11

Analyst(s): DVH

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8015B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (5.5-6')	**1411538-015A**	**Soil**	**11/12/2014 07:43**	**GC6A**	**97770**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/15/2014 04:42
TPH-Motor Oil (C18-C36)	ND	5.0	1	11/15/2014 04:42

Surrogates	REC (%)	Limits	
C9	94	70-130	11/15/2014 04:42

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9')	**1411538-016A**	**Soil**	**11/12/2014 07:57**	**GC6A**	**97770**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/15/2014 10:37
TPH-Motor Oil (C18-C36)	ND	5.0	1	11/15/2014 10:37

Surrogates	REC (%)	Limits	
C9	99	70-130	11/15/2014 10:37

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-1 (8.5-9') DUP	**1411538-016C**	**Soil**	**11/12/2014 07:57**	**GC6A**	**97770**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/15/2014 13:00
TPH-Motor Oil (C18-C36)	ND	5.0	1	11/15/2014 13:00

Surrogates	REC (%)	Limits	
C9	99	70-130	11/15/2014 13:00

Analyst(s): TK

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8015B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (5.5-6')	**1411538-018A**	**Soil**	**11/12/2014 08:30**	**GC9a**	**97770**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/15/2014 23:48
TPH-Motor Oil (C18-C36)	ND	5.0	1	11/15/2014 23:48

Surrogates	REC (%)	Limits	
C9	120	70-130	11/15/2014 23:48

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-2 (8.5-9')	**1411538-019A**	**Soil**	**11/12/2014 08:38**	**GC9a**	**97770**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/15/2014 21:25
TPH-Motor Oil (C18-C36)	ND	5.0	1	11/15/2014 21:25

Surrogates	REC (%)	Limits	
C9	119	70-130	11/15/2014 21:25

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (5.5-6')	**1411538-021A**	**Soil**	**11/12/2014 09:04**	**GC6A**	**97770**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/15/2014 08:15
TPH-Motor Oil (C18-C36)	ND	5.0	1	11/15/2014 08:15

Surrogates	REC (%)	Limits	
C9	96	70-130	11/15/2014 08:15

Analyst(s): TK

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3550B
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8015B
Date Prepared:	11/13/14	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SM-3 (8.5-9')	**1411538-022A**	**Soil**	**11/12/2014 09:17**	**GC6A**	**97770**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/17/2014 19:36
TPH-Motor Oil (C18-C36)	ND	5.0	1	11/17/2014 19:36

Surrogates	REC (%)	Limits	
C9	93	70-130	11/17/2014 19:36

Analyst(s): TK

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Analytical Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Project:	#1401-0542; Santa Maria JUHSD	**Extraction Method:**	SW3510C
Date Received:	11/13/14 20:00	**Analytical Method:**	SW8015B
Date Prepared:	11/13/14	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
GW-1	**1411538-029A**	**Water**	**11/12/2014 11:20**	**GC6B**	**97738**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	11/14/2014 14:08
TPH-Motor Oil (C18-C36)	ND	250	1	11/14/2014 14:08

Surrogates	REC (%)	Limits	
C9	111	70-130	11/14/2014 14:08

Analyst(s): TK

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/14/14	**BatchID:**	97804
Date Analyzed:	11/14/14	**Extraction Method:**	E300.1
Instrument:	IC3	**Analytical Method:**	E300.1
Matrix:	Water	**Unit:**	mg/L
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97804 1411538-029EMS/MSD

QC Summary Report for E300.1

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Nitrate as N	ND	0.974	0.10	1	-	97	85-115
Nitrate as $NO3^{-}$	ND	4.31	0.45	4.4	-	98	85-115
Nitrite as N	ND	0.986	0.10	1	-	99	85-115
Nitrite as $NO2^{-}$	ND	3.25	0.33	3.3	-	99	85-115
Surrogate Recovery							
Formate	0.0990	0.0985		0.10	99	98	90-115

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Nitrate as N	NR	NR	1	10	NR	NR	85-115	NR	15
Nitrate as $NO3^{-}$	NR	NR	4.4	46	NR	NR	85-115	NR	15
Nitrite as N	1.06	1.04	1	ND	106	104	85-115	1.68	15
Nitrite as $NO2^{-}$	3.50	3.44	3.3	ND	106	104	85-115	1.68	15
Surrogate Recovery									
Formate	0.0985	0.0981	0.10		99	98	90-115	0.409	10

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97771
Date Analyzed:	11/14/14	**Extraction Method:**	SW3550B
Instrument:	GC22	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97771 1411534-002AMS/MSD

QC Summary Report for SW8081A

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	-	0.00027	0.0010	-	-	-	-
a-BHC	ND	-	0.00010	0.0010	-	-	-	-
b-BHC	ND	-	0.00025	0.0010	-	-	-	-
d-BHC	ND	-	0.00037	0.0010	-	-	-	-
g-BHC	ND	-	0.000097	0.0010	-	-	-	-
Chlordane (Technical)	ND	-	0.016	0.025	-	-	-	-
a-Chlordane	ND	-	0.00047	0.0010	-	-	-	-
g-Chlordane	ND	-	0.00021	0.0010	-	-	-	-
p,p-DDD	ND	-	0.00014	0.0010	-	-	-	-
p,p-DDE	ND	-	0.00032	0.0010	-	-	-	-
p,p-DDT	ND	0.0554	0.00043	0.0010	0.050	-	111	70-130
Dieldrin	ND	-	0.00033	0.0010	-	-	-	-
Endosulfan I	ND	-	0.00065	0.0010	-	-	-	-
Endosulfan II	ND	-	0.00020	0.0010	-	-	-	-
Endosulfan sulfate	ND	-	0.00063	0.0010	-	-	-	-
Endrin	ND	0.0636	0.00042	0.0010	0.050	-	127	70-130
Endrin aldehyde	ND	-	0.00020	0.0010	-	-	-	-
Endrin ketone	ND	-	0.00013	0.0010	-	-	-	-
Heptachlor	ND	0.0545	0.00021	0.0010	0.050	-	109	70-130
Heptachlor epoxide	ND	-	0.00020	0.0010	-	-	-	-
Hexachlorobenzene	ND	-	0.00027	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.00040	0.020	-	-	-	-
Methoxychlor	ND	-	0.00089	0.0010	-	-	-	-
Toxaphene	ND	-	0.035	0.050	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	0.0536	0.0526			0.050	107	105	70-130

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97771
Date Analyzed:	11/14/14	**Extraction Method:**	SW3550B
Instrument:	GC22	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97771 1411534-002AMS/MSD

QC Summary Report for SW8081A

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aldrin	NR	NR		ND<0.005	NR	NR	-	NR	
g-BHC	NR	NR		ND<0.005	NR	NR	-	NR	
p,p-DDT	NR	NR		ND<0.005	NR	NR	-	NR	
Dieldrin	NR	NR		ND<0.005	NR	NR	-	NR	
Endrin	NR	NR		ND<0.005	NR	NR	-	NR	
Heptachlor	NR	NR		ND<0.005	NR	NR	-	NR	
Surrogate Recovery									
Decachlorobiphenyl	NR	NR			NR	NR	-	NR	

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97779
Date Analyzed:	11/14/14	**Extraction Method:**	SW3510C
Instrument:	GC20	**Analytical Method:**	SW8081A
Matrix:	Water	**Unit:**	µg/L
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97779

QC Summary Report for SW8081A

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	1.08	0.0010	0.0050	1.25	-	86	70-130
a-BHC	ND	-	0.0017	0.010	-	-	-	-
b-BHC	ND	-	0.0023	0.0050	-	-	-	-
d-BHC	ND	-	0.0013	0.0050	-	-	-	-
g-BHC	ND	1.24	0.0018	0.020	1.25	-	100	70-130
Chlordane (Technical)	ND	-	0.050	0.10	-	-	-	-
a-Chlordane	ND	-	0.0018	0.050	-	-	-	-
g-Chlordane	ND	-	0.0033	0.050	-	-	-	-
p,p-DDD	ND	-	0.0027	0.010	-	-	-	-
p,p-DDE	ND	-	0.0040	0.010	-	-	-	-
p,p-DDT	ND	1.38	0.0017	0.010	1.25	-	111	70-130
Dieldrin	ND	1.38	0.0027	0.010	1.25	-	111	70-130
Endosulfan I	ND	-	0.0016	0.020	-	-	-	-
Endosulfan II	ND	-	0.0011	0.020	-	-	-	-
Endosulfan sulfate	ND	-	0.0017	0.050	-	-	-	-
Endrin	ND	1.20	0.0010	0.010	1.25	-	96	70-130
Endrin aldehyde	ND	-	0.0029	0.050	-	-	-	-
Endrin ketone	ND	-	0.0012	0.050	-	-	-	-
Heptachlor	ND	1.26	0.0019	0.010	1.25	-	101	70-130
Heptachlor epoxide	ND	-	0.0015	0.010	-	-	-	-
Hexachlorobenzene	ND	-	0.0016	0.50	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.0018	1.0	-	-	-	-
Methoxychlor	ND	-	0.0029	0.10	-	-	-	-
Toxaphene	ND	-	0.23	0.50	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	1.22	1.29			1.25	98	103	70-130

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97777
Date Analyzed:	11/15/14	**Extraction Method:**	SW3550B
Instrument:	GC23	**Analytical Method:**	SW8082
Matrix:	Soil	**Unit:**	mg/kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97777 1411538-015AMS/MSD

QC Summary Report for SW8082

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aroclor1016	ND	-	0.050	-	-	-	-
Aroclor1221	ND	-	0.050	-	-	-	-
Aroclor1232	ND	-	0.050	-	-	-	-
Aroclor1242	ND	-	0.050	-	-	-	-
Aroclor1248	ND	-	0.050	-	-	-	-
Aroclor1254	ND	-	0.050	-	-	-	-
Aroclor1260	ND	0.169	0.050	0.15	-	113	70-130
PCBs, total	ND	-	0.050	-	-	-	-
Surrogate Recovery							
Decachlorobiphenyl	0.0361	0.0355		0.050	72	71	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aroclor1260	0.188	0.178	0.15	ND	125	119	70-130	5.57	30
Surrogate Recovery									
Decachlorobiphenyl	0.0401	0.0405	0.050		80	81	70-130	1.14	30

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97778
Date Analyzed:	11/14/14	**Extraction Method:**	SW5035
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97778

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.20	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0865	0.010	0.10	-	86	70-130
Benzene	ND	0.0953	0.010	0.10	-	95	70-130
Bromobenzene	ND	-	0.010	-	-	-	-
Bromochloromethane	ND	-	0.010	-	-	-	-
Bromodichloromethane	ND	-	0.010	-	-	-	-
Bromoform	ND	-	0.010	-	-	-	-
Bromomethane	ND	-	0.010	-	-	-	-
2-Butanone (MEK)	ND	-	0.040	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.357	0.10	0.40	-	89	70-130
n-Butyl benzene	ND	-	0.010	-	-	-	-
sec-Butyl benzene	ND	-	0.010	-	-	-	-
tert-Butyl benzene	ND	-	0.010	-	-	-	-
Carbon Disulfide	ND	-	0.010	-	-	-	-
Carbon Tetrachloride	ND	-	0.010	-	-	-	-
Chlorobenzene	ND	0.0944	0.010	0.10	-	94	70-130
Chloroethane	ND	-	0.010	-	-	-	-
Chloroform	ND	-	0.010	-	-	-	-
Chloromethane	ND	-	0.010	-	-	-	-
2-Chlorotoluene	ND	-	0.010	-	-	-	-
4-Chlorotoluene	ND	-	0.010	-	-	-	-
Dibromochloromethane	ND	-	0.010	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0080	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0897	0.0080	0.10	-	90	70-130
Dibromomethane	ND	-	0.010	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.010	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.010	-	-	-	-
Dichlorodifluoromethane	ND	-	0.010	-	-	-	-
1,1-Dichloroethane	ND	-	0.010	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0928	0.010	0.10	-	93	70-130
1,1-Dichloroethene	ND	0.0888	0.010	0.10	-	89	70-130
cis-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.010	-	-	-	-
1,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,3-Dichloropropane	ND	-	0.010	-	-	-	-
2,2-Dichloropropane	ND	-	0.010	-	-	-	-
1,1-Dichloropropene	ND	-	0.010	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.010	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.010	-	-	-	-

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97778
Date Analyzed:	11/14/14	**Extraction Method:**	SW5035
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97778

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0928	0.010	0.10	-	93	70-130
Ethylbenzene	ND	-	0.010	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0910	0.010	0.10	-	91	70-130
Freon 113	ND	-	0.10	-	-	-	-
Hexachlorobutadiene	ND	-	0.010	-	-	-	-
Hexachloroethane	ND	-	0.010	-	-	-	-
2-Hexanone	ND	-	0.010	-	-	-	-
Isopropylbenzene	ND	-	0.010	-	-	-	-
4-Isopropyl toluene	ND	-	0.010	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0878	0.010	0.10	-	88	70-130
Methylene chloride	ND	-	0.010	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.010	-	-	-	-
Naphthalene	ND	-	0.010	-	-	-	-
n-Propyl benzene	ND	-	0.010	-	-	-	-
Styrene	ND	-	0.010	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.010	-	-	-	-
Tetrachloroethene	ND	-	0.010	-	-	-	-
Toluene	ND	0.100	0.010	0.10	-	100	70-130
1,2,3-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.010	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.010	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.010	-	-	-	-
Trichloroethene	ND	0.0929	0.010	0.10	-	93	70-130
Trichlorofluoromethane	ND	-	0.010	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.010	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.010	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.010	-	-	-	-
Vinyl Chloride	ND	-	0.010	-	-	-	-
Xylenes, Total	ND	-	0.010	-	-	-	-
Surrogate Recovery							
Dibromofluoromethane	0.220	0.236		0.25	88	94	70-130
Toluene-d8	0.261	0.254		0.25	104	101	70-130
4-BFB	0.0252	0.0258		0.025	101	103	70-130

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/17/14	**BatchID:**	97913
Date Analyzed:	11/17/14	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97913 1411538-029CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	9.70	0.50	10	-	97	54-140
Benzene	ND	9.86	0.50	10	-	99	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	35.1	2.0	40	-	88	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	9.89	0.50	10	-	99	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	9.44	0.50	10	-	94	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	8.74	0.50	10	-	87	66-125
1,1-Dichloroethene	ND	9.87	0.50	10	-	99	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/17/14	**BatchID:**	97913
Date Analyzed:	11/17/14	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97913 1411538-029CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	8.88	0.50	10	-	89	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	9.37	0.50	10	-	94	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	9.47	0.50	10	-	95	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	9.80	0.50	10	-	98	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	10.3	0.50	10	-	103	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-
Surrogate Recovery							
Dibromofluoromethane	25.2	25.2		25	101	101	65-135
Toluene-d8	24.1	24.3		25	96	97	64-127
4-BFB	2.44	2.52		2.5	98	101	59-139

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/17/14	**BatchID:**	97913
Date Analyzed:	11/17/14	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97913 1411538-029CMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	10.0	10.2	10	ND	100	102	70-130	1.58	20
Benzene	10.1	10.2	10	ND	101	102	70-130	0.677	20
t-Butyl alcohol (TBA)	36.9	37.8	40	ND	88	90	70-130	2.35	20
Chlorobenzene	10.1	10.0	10	ND	101	100	70-130	0.892	20
1,2-Dibromoethane (EDB)	9.70	9.82	10	ND	97	98	70-130	1.24	20
1,2-Dichloroethane (1,2-DCA)	9.16	9.14	10	ND	92	91	70-130	0.234	20
1,1-Dichloroethene	10.3	9.84	10	ND	103	98	70-130	4.41	20
Diisopropyl ether (DIPE)	9.15	9.32	10	ND	91	93	70-130	1.82	20
Ethyl tert-butyl ether (ETBE)	9.76	9.82	10	ND	98	98	70-130	0	20
Methyl-t-butyl ether (MTBE)	9.94	9.89	10	ND	99	99	70-130	0	20
Toluene	9.84	9.93	10	ND	98	99	70-130	0.883	20
Trichloroethene	10.4	10.4	10	ND	105	104	70-130	0.276	20
Surrogate Recovery									
Dibromofluoromethane	25.4	25.2	25		102	101	73-131	0.769	20
Toluene-d8	24.2	23.9	25		97	96	72-117	1.05	20
4-BFB	2.48	2.45	2.5		99	98	74-116	1.56	20

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/17/14	**BatchID:**	97882
Date Analyzed:	11/17/14	**Extraction Method:**	SW3550B
Instrument:	GC17	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97882 1411595-001AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	3.95	0.25	5	-	79	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.25	-	-	-	-
4-Chloro-3-methylphenol	ND	4.29	0.25	5	-	86	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	4.16	0.25	5	-	83	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	3.59	0.25	5	-	72	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	4.23	0.25	5	-	85	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/17/14	**BatchID:**	97882
Date Analyzed:	11/17/14	**Extraction Method:**	SW3550B
Instrument:	GC17	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97882 1411595-001AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 &/or 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	3.76	1.3	5	-	75	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	3.23	0.25	5	-	65	30-130
Pentachlorophenol	ND	2.91	1.3	5	-	58	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	4.03	0.25	5	-	81	30-130
Pyrene	ND	3.90	0.25	5	-	78	30-130
1,2,4-Trichlorobenzene	ND	4.31	0.25	5	-	86	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-
Surrogate Recovery							
2-Fluorophenol	4.08	4.05		5	82	81	30-130
Phenol-d5	3.88	3.74		5	78	75	30-130
Nitrobenzene-d5	3.79	3.89		5	76	78	30-130
2-Fluorobiphenyl	3.79	3.91		5	76	78	30-130
2,4,6-Tribromophenol	2.60	2.90		5	52	58	16-130
4-Terphenyl-d14	3.96	4.02		5	79	80	30-130

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/17/14	**BatchID:**	97882
Date Analyzed:	11/17/14	**Extraction Method:**	SW3550B
Instrument:	GC17	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97882 1411595-001AMS/MSD

QC Summary Report for SW8270C

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	NR	NR		ND<2	NR	NR	-	NR	
4-Chloro-3-methylphenol	NR	NR		ND<2	NR	NR	-	NR	
2-Chlorophenol	NR	NR		ND<2	NR	NR	-	NR	
1,4-Dichlorobenzene	NR	NR		ND<2	NR	NR	-	NR	
2,4-Dinitrotoluene	NR	NR		ND<2	NR	NR	-	NR	
4-Nitrophenol	NR	NR		ND<10	NR	NR	-	NR	
N-Nitrosodi-n-propylamine	NR	NR		ND<2	NR	NR	-	NR	
Pentachlorophenol	NR	NR		ND<10	NR	NR	-	NR	
Phenol	NR	NR		ND<2	NR	NR	-	NR	
Pyrene	NR	NR		ND<2	NR	NR	-	NR	
1,2,4-Trichlorobenzene	NR	NR		ND<2	NR	NR	-	NR	
Surrogate Recovery									
2-Fluorophenol	NR	NR			NR	NR	-	NR	
Phenol-d5	NR	NR			NR	NR	-	NR	
Nitrobenzene-d5	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	
2,4,6-Tribromophenol	NR	NR			NR	NR	-	NR	
4-Terphenyl-d14	NR	NR			NR	NR	-	NR	

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97734
Date Analyzed:	11/14/14	**Extraction Method:**	SW3050B
Instrument:	ICP-MS2	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97734 1411495-007AMS/MSD

QC Summary Report for SW6020

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Arsenic	ND	54.4	0.50	50	-	109	75-125
Surrogate Recovery							
Tb 350.917	632	488		500	126	98	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Arsenic	67.2	65.6	50	5.764	123	120	75-125	2.40	20
Surrogate Recovery									
Tb 350.917	570	565	500		114	113	70-130	0.881	20

(Cont.)

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97775
Date Analyzed:	11/17/14	**Extraction Method:**	SW3050B
Instrument:	ICP-MS1	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97775 1411538-008CMS/MSD

QC Summary Report for SW6020

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Arsenic	ND	51.0	0.50	50	-	102	75-125
Surrogate Recovery							
Tb 350.917	547	537		500	109	107	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Arsenic	51.9	51.8	50	1.158	102	101	75-125	0.212	20
Surrogate Recovery									
Tb 350.917	560	558	500		112	112	70-130	0	20

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97776
Date Analyzed:	11/17/14	**Extraction Method:**	SW3050B
Instrument:	ICP-MS1	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97776 1411538-022AMS/MSD

QC Summary Report for SW6020

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	57.1	0.50	50	-	114	75-125
Arsenic	ND	54.6	0.50	50	-	109	75-125
Barium	ND	552	5.0	500	-	110	75-125
Beryllium	ND	55.1	0.50	50	-	110	75-125
Cadmium	ND	58.6	0.25	50	-	117	75-125
Chromium	ND	58.8	0.50	50	-	118	75-125
Cobalt	ND	53.5	0.50	50	-	107	75-125
Copper	ND	57.0	0.50	50	-	114	75-125
Lead	ND	58.8	0.50	50	-	117	75-125
Mercury	ND	1.29	0.050	1.25	-	103	75-125
Molybdenum	ND	53.0	0.50	50	-	106	75-125
Nickel	ND	56.8	0.50	50	-	113	75-125
Selenium	ND	55.3	0.50	50	-	111	75-125
Silver	ND	46.9	0.50	50	-	94	75-125
Thallium	ND	57.5	0.50	50	-	115	75-125
Vanadium	ND	57.3	0.50	50	-	115	75-125
Zinc	ND	575	5.0	500	-	115	75-125
Surrogate Recovery							
Tb 350.917	535	563		500	107	113	70-130

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97776
Date Analyzed:	11/17/14	**Extraction Method:**	SW3050B
Instrument:	ICP-MS1	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97776 1411538-022AMS/MSD

QC Summary Report for SW6020

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	57.0	69.9	50	ND	114	139,F1	75-125	20.3,F1	20
Arsenic	53.2	62.4	50	1.395	104	122	75-125	15.8	20
Barium	562	687	500	19.84	108	133,F1	75-125	20.0	20
Beryllium	51.8	64.1	50	ND	103	128,F1	75-125	21.3,F1	20
Cadmium	56.9	68.6	50	ND	114	137,F1	75-125	18.6	20
Chromium	59.1	69.5	50	3.998	110	131,F1	75-125	16.1	20
Cobalt	52.8	63.6	50	0.8650	104	126,F1	75-125	18.6	20
Copper	55.5	65.2	50	2.151	107	126,F1	75-125	16.1	20
Lead	58.2	69.9	50	1.650	113	136,F1	75-125	18.3	20
Mercury	1.29	1.49	1.25	ND	102	117	75-125	14.0	20
Molybdenum	52.4	64.7	50	ND	104	129,F1	75-125	21,F1	20
Nickel	56.6	66.6	50	ND	108	128,F1	75-125	16.2	20
Selenium	54.2	57.6	50	ND	108	115	75-125	6.08	20
Silver	45.6	54.7	50	ND	91	109	75-125	18.1	20
Thallium	55.6	66.7	50	ND	111	133,F1	75-125	18.2	20
Vanadium	61.0	73.4	50	8.354	105	130,F1	75-125	18.5	20
Zinc	557	656	500	6.567	110	130,F1	75-125	16.3	20
Surrogate Recovery									
Tb 350.917	560	617	500		112	123	70-130	9.74	20

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/12/14	**BatchID:**	97720
Date Analyzed:	11/13/14	**Extraction Method:**	E200.8
Instrument:	ICP-MS2	**Analytical Method:**	E200.8
Matrix:	Water	**Unit:**	µg/L
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97720 1411488-001AMS/MSD

QC Summary Report for E200.8

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	53.5	0.50	50	-	107	85-115
Arsenic	ND	52.1	0.50	50	-	104	85-115
Barium	ND	530	5.0	500	-	106	85-115
Beryllium	ND	54.5	0.50	50	-	109	85-115
Cadmium	ND	52.2	0.25	50	-	104	85-115
Chromium	ND	53.2	0.50	50	-	106	85-115
Cobalt	ND	49.4	0.50	50	-	99	85-115
Copper	ND	52.9	2.0	50	-	106	85-115
Lead	ND	52.9	0.50	50	-	106	85-115
Mercury	ND	1.19	0.025	1.25	-	95	85-115
Molybdenum	ND	50.4	0.50	50	-	101	85-115
Nickel	ND	52.3	0.50	50	-	105	85-115
Selenium	ND	52.2	0.50	50	-	104	85-115
Silver	ND	51.2	0.19	50	-	102	85-115
Thallium	ND	48.0	0.50	50	-	96	85-115
Vanadium	ND	53.2	0.50	50	-	106	85-115
Zinc	ND	536	15	500	-	106	85-115
Surrogate Recovery							
Tb 350.917	704	710		750	94	95	70-130

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/12/14	**BatchID:**	97720
Date Analyzed:	11/13/14	**Extraction Method:**	E200.8
Instrument:	ICP-MS2	**Analytical Method:**	E200.8
Matrix:	Water	**Unit:**	µg/L
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97720 1411488-001AMS/MSD

QC Summary Report for E200.8

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	53.1	52.7	50	ND	106	105	70-130	0.699	20
Arsenic	54.0	54.6	50	1.5	105	106	70-130	1.05	20
Barium	802	806	500	260	108	109	70-130	0.472	20
Beryllium	47.6	47.6	50	ND	95	95	70-130	0	20
Cadmium	49.9	49.7	50	ND	100	99	70-130	0.402	20
Chromium	52.9	54.0	50	3.8	98	100	70-130	2.06	20
Cobalt	44.2	43.7	50	ND	88	87	70-130	0.933	20
Copper	NR	NR	50	600	NR	NR	70-130	NR	20
Lead	51.4	51.0	50	0.77	101	100	70-130	0.878	20
Mercury	1.26	1.31	1.25	ND	99	103	70-130	4.20	20
Molybdenum	53.6	53.6	50	2.2	103	103	70-130	0	20
Nickel	123	124	50	76	95	96	70-130	0.404	20
Selenium	56.0	56.7	50	2.4	107	109	70-130	1.31	20
Silver	48.4	48.0	50	0.66	95	95	70-130	0	20
Thallium	46.1	45.6	50	ND	92	91	70-130	1.05	20
Vanadium	53.9	54.6	50	3.0	102	103	70-130	1.42	20
Zinc	536	555	500	29	101	105	70-130	3.63	20
Surrogate Recovery									
Tb 350.917	699	703	750		93	94	70-130	0.599	20

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97769
Date Analyzed:	11/14/14	**Extraction Method:**	SW5030B
Instrument:	GC19	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97769 1411534-002AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.606	0.40	0.60	-	101	70-130
MTBE	ND	0.0857	0.050	0.10	-	86	70-130
Benzene	ND	0.110	0.0050	0.10	-	110	70-130
Toluene	ND	0.110	0.0050	0.10	-	111	70-130
Ethylbenzene	ND	0.114	0.0050	0.10	-	114	70-130
Xylenes	ND	0.370	0.0050	0.30	-	123	70-130
Surrogate Recovery							
2-Fluorotoluene	0.118	0.114		0.10	118	114	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.592	0.540	0.60	ND	99	90	70-130	9.11	20
MTBE	0.0800	0.0843	0.10	ND	80	84	70-130	5.22	20
Benzene	0.108	0.104	0.10	ND	108	104	70-130	4.01	20
Toluene	0.112	0.107	0.10	ND	108	104	70-130	4.08	20
Ethylbenzene	0.114	0.110	0.10	ND	114	110	70-130	3.54	20
Xylenes	0.368	0.351	0.30	ND	123	117	70-130	4.59	20
Surrogate Recovery									
2-Fluorotoluene	0.109	0.105	0.10		109	105	70-130	3.14	20

(Cont.)

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/17/14	**BatchID:**	97875
Date Analyzed:	11/18/14	**Extraction Method:**	SW5030B
Instrument:	GC19	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97875 1411299-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.598	0.40	0.60	-	100	70-130
MTBE	ND	0.0822	0.050	0.10	-	82	70-130
Benzene	ND	0.106	0.0050	0.10	-	106	70-130
Toluene	ND	0.107	0.0050	0.10	-	107	70-130
Ethylbenzene	ND	0.111	0.0050	0.10	-	111	70-130
Xylenes	ND	0.356	0.0050	0.30	-	119	70-130
Surrogate Recovery							
2-Fluorotoluene	0.114	0.112		0.10	114	113	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.578	0.571	0.60	ND	96	95	70-130	1.30	20
MTBE	0.0803	0.0852	0.10	ND	80	85	70-130	5.93	20
Benzene	0.0986	0.106	0.10	ND	99	106	70-130	6.85	20
Toluene	0.100	0.107	0.10	ND	101	107	70-130	6.48	20
Ethylbenzene	0.105	0.112	0.10	ND	105	112	70-130	6.56	20
Xylenes	0.340	0.359	0.30	ND	113	120	70-130	5.50	20
Surrogate Recovery									
2-Fluorotoluene	0.102	0.110	0.10		102	110	70-130	7.23	20

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/17/14	**BatchID:**	97914
Date Analyzed:	11/17/14	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97914 1411556-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	61.6	40	60	-	103	70-130
MTBE	ND	9.91	5.0	10	-	99	70-130
Benzene	ND	10.6	0.50	10	-	106	70-130
Toluene	ND	10.6	0.50	10	-	106	70-130
Ethylbenzene	ND	10.8	0.50	10	-	108	70-130
Xylenes	ND	32.5	0.50	30	-	108	70-130
Surrogate Recovery							
aaa-TFT_2	10.4	10.1		10	104	101	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	65.4	71.3	60	ND	109	119	70-130	8.56	20
MTBE	9.61	10.4	10	ND	96	104	70-130	8.02	20
Benzene	10.9	10.7	10	ND	109	107	70-130	1.99	20
Toluene	11.2	10.9	10	ND	112	109	70-130	2.52	20
Ethylbenzene	11.2	11.1	10	ND	112	111	70-130	0.925	20
Xylenes	33.5	33.3	30	ND	112	111	70-130	0.625	20
Surrogate Recovery									
aaa-TFT_2	11.0	10.4	10		109	104	70-130	5.38	20

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97770
Date Analyzed:	11/14/14	**Extraction Method:**	SW3550B
Instrument:	GC6A, GC9a	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97770 1411534-002AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	43.4	1.0	40	-	105	70-130
Surrogate Recovery							
C9	22.3	27.3		25	89	109	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	44.3	46.3	40	2.361	105	110	70-130	4.39	30
Surrogate Recovery									
C9	27.6	27.4	25		110	110	70-130	0	30

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Quality Control Report

Client:	Padre Associates. Inc.	**WorkOrder:**	1411538
Date Prepared:	11/13/14	**BatchID:**	97738
Date Analyzed:	11/13/14	**Extraction Method:**	SW3510C
Instrument:	GC6A, GC9a	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	#1401-0542; Santa Maria JUHSD	**Sample ID:**	MB/LCS-97738

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1150	50	1000	-	115	61-157
Surrogate Recovery							
C9	588	682		625	94	109	70-134

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1411538 **ClientCode: PAIS**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☑ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Alan J. Klein
Padre Associates. Inc.
555 University Ave., Suite 110
Sacramento, CA 95825
(916) 333-5920 FAX: (916) 333-5921

Email: aklein@padreinc.com
cc/3rd Party:
PO:
ProjectNo: #1401-0542; Santa Maria JUHSD

Bill to:
Accounts Payable
Padre Associates. Inc.
555 University Ave., Suite 110
Sacramento, CA 95825

Requested TAT: 5 days

Date Received: **11/13/2014**
Date Printed: **11/21/2014**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1411538-001	Ag-4 (surf) R	Soil	11/11/2014 11:04	☐									B			
1411538-001	Ag-5 (surf) F	Soil	11/11/2014 10:47	☐									C			
1411538-001	Ag-7 (surf) R	Soil	11/11/2014 10:43	☐									D			
1411538-001	CS-1	Soil	11/11/2014 10:43	☐		A										
1411538-002	Ag-2 (surf) R	Soil	11/11/2014 12:07	☐									C			
1411538-002	Ag-3 (surf) F	Soil	11/11/2014 12:05	☐									D			
1411538-002	Ag-8 (surf) F	Soil	11/11/2014 11:18	☐									E			
1411538-002	Ag-8 (surf) F DUP	Soil	11/11/2014 11:18	☐									F			
1411538-002	CS-2	Soil	11/11/2014 11:18	☐		A										
1411538-002	CS-2 DUP	Soil	11/11/2014 11:18	☐		B										
1411538-003	CS-4	Soil	11/11/2014 8:18	☐		A										
1411538-003	RW-1 (surf)	Soil	11/11/2014 12:16	☐									B			
1411538-003	RW-2 (surf)	Soil	11/11/2014 9:45	☐									C			
1411538-003	RW-3 (surf)	Soil	11/11/2014 8:18	☐									D			
1411538-004	Ag-10 (surf) R	Soil	11/11/2014 9:31	☐									B			
1411538-004	Ag-11 (surf) R	Soil	11/11/2014 8:40	☐									C			

Test Legend:

1	300_1_W	2	8081_ESL_S	3	8081_FLORISIL_S	4	8081_W	5	8082A_PCB_S
6	8260B_E	7	8260B_W	8	8270D_S	9	ASMS_S	10	CAM17(T)MS_W
11	CAM17MS_S	12	METALSMS_W						

The following SampIDs: 015A, 016A, 016C, 018A, 019A, 021A, 022A, 029A contain testgroup.

Prepared by: Jena Alfaro

Comments: Give to Blake for review. Florisil Cleanup added to 008 11/17/14

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McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1411538 **ClientCode: PAIS**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☑ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Alan J. Klein
Padre Associates. Inc.
555 University Ave., Suite 110
Sacramento, CA 95825
(916) 333-5920 FAX: (916) 333-5921

Email: aklein@padreinc.com
cc/3rd Party:
PO:
ProjectNo: #1401-0542; Santa Maria JUHSD

Bill to:
Accounts Payable
Padre Associates. Inc.
555 University Ave., Suite 110
Sacramento, CA 95825

Requested TAT: 5 days

Date Received: **11/13/2014**
Date Printed: **11/21/2014**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1411538-004	CS-3	Soil	11/11/2014 8:33	☐		A										
1411538-005	CS-5	Soil	11/11/2014 11:41	☐		A										
1411538-005	RW-4 (surf)	Soil	11/11/2014 11:41	☐									B			
1411538-005	RW-4 (surf) DUP	Soil	11/11/2014 11:41	☐									E			
1411538-005	RW-5 (surf)	Soil	11/11/2014 11:46	☐									C			
1411538-005	RW-6 (surf)	Soil	11/11/2014 11:50	☐									D			
1411538-006	CS-6	Soil	11/11/2014 10:37	☐		A										
1411538-006	RW-7 (surf)	Soil	11/11/2014 10:37	☐									B			
1411538-006	RW-8 (surf)	Soil	11/11/2014 10:52	☐									C			
1411538-006	RW-9 (surf)	Soil	11/11/2014 11:16	☐									D			
1411538-007	CS-7	Soil	11/11/2014 8:55	☐		A										
1411538-007	RW-10 (surf)	Soil	11/11/2014 8:55	☐									B			
1411538-007	RW-11 (surf)	Soil	11/11/2014 9:14	☐									C			
1411538-007	RW-12 (surf)	Soil	11/11/2014 9:21	☐									D			
1411538-008	CS-8	Soil	11/11/2014 8:00	☐			A									
1411538-008	RW-13 (surf)	Soil	11/11/2014 8:14	☐									B			

Test Legend:

1	300_1_W	2	8081_ESL_S	3	8081_FLORISIL_S	4	8081_W	5	8082A_PCB_S
6	8260B_E	7	8260B_W	8	8270D_S	9	ASMS_S	10	CAM17(T)MS_W
11	CAM17MS_S	12	METALSMS_W						

The following SampIDs: 015A, 016A, 016C, 018A, 019A, 021A, 022A, 029A contain testgroup.

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1411538 **ClientCode: PAIS**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

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Requested TAT: 5 days

Date Received: **11/13/2014**
Date Printed: **11/21/2014**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1411538-008	RW-14 (surf)	Soil	11/11/2014 8:07	☐									C			
1411538-008	RW-15 (surf)	Soil	11/11/2014 8:00	☐									D			
1411538-009	CS-9	Soil	11/11/2014 12:31	☐		A										
1411538-009	DB-2 (surf)	Soil	11/11/2014 12:38	☐											B	
1411538-015	SM-1 (5.5-6')	Soil	11/12/2014 7:43	☐					A	B		A			A	
1411538-015	SM-1(5.5-6') DUP	Soil	11/12/2014 7:43	☐					C			C			C	
1411538-016	SM-1 (8.5-9')	Soil	11/12/2014 7:57	☐					A	B		A			A	
1411538-016	SM-1 (8.5-9') DUP	Soil	11/12/2014 7:57	☐												
1411538-018	SM-2 (5.5-6')	Soil	11/12/2014 8:30	☐					A	B		A			A	
1411538-019	SM-2 (8.5-9')	Soil	11/12/2014 8:38	☐					A	B		A			A	
1411538-021	SM-3 (5.5-6')	Soil	11/12/2014 9:04	☐					A	B		A			A	
1411538-022	SM-3 (8.5-9')	Soil	11/12/2014 9:17	☐					A	B		A			A	
1411538-029	GW-1	Water	11/12/2014 11:20	☐	E			B			C			D		
1411538-030	FB #1	Water	11/11/2014 15:00	☐												A
1411538-031	EB #1	Water	11/11/2014 15:05	☐												A
1411538-032	FB #2	Water	11/12/2014 10:40	☐												A

Test Legend:

1	300_1_W	2	8081_ESL_S	3	8081_FLORISIL_S	4	8081_W	5	8082A_PCB_S
6	8260B_E	7	8260B_W	8	8270D_S	9	ASMS_S	10	CAM17(T)MS_W
11	CAM17MS_S	12	METALSMS_W						

The following SampIDs: 015A, 016A, 016C, 018A, 019A, 021A, 022A, 029A contain testgroup.

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1411538 **ClientCode: PAIS**

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Requested TAT: 5 days

Date Received: **11/13/2014**
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Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1411538-033	EB #2	Water	11/12/2014 10:45	☐												A

Test Legend:

1	300_1_W	2	8081_ESL_S	3	8081_FLORISIL_S	4	8081_W	5	8082A_PCB_S
6	8260B_E	7	8260B_W	8	8270D_S	9	ASMS_S	10	CAM17(T)MS_W
11	CAM17MS_S	12	METALSMS_W						

The following SampIDs: 015A, 016A, 016C, 018A, 019A, 021A, 022A, 029A contain testgroup.

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Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					13	14	15	16	17	18	19	20	21	22	23	24
1411538-001	Ag-4 (surf) R	Soil	11/11/2014 11:04	☐												
1411538-001	Ag-5 (surf) F	Soil	11/11/2014 10:47	☐												
1411538-001	Ag-7 (surf) R	Soil	11/11/2014 10:43	☐												
1411538-001	CS-1	Soil	11/11/2014 10:43	☐	A											
1411538-002	Ag-2 (surf) R	Soil	11/11/2014 12:07	☐												
1411538-002	Ag-3 (surf) F	Soil	11/11/2014 12:05	☐												
1411538-002	Ag-8 (surf) F	Soil	11/11/2014 11:18	☐												
1411538-002	Ag-8 (surf) F DUP	Soil	11/11/2014 11:18	☐												
1411538-002	CS-2	Soil	11/11/2014 11:18	☐												
1411538-002	CS-2 DUP	Soil	11/11/2014 11:18	☐												
1411538-003	CS-4	Soil	11/11/2014 8:18	☐												
1411538-003	RW-1 (surf)	Soil	11/11/2014 12:16	☐												
1411538-003	RW-2 (surf)	Soil	11/11/2014 9:45	☐												
1411538-003	RW-3 (surf)	Soil	11/11/2014 8:18	☐												
1411538-004	Ag-10 (surf) R	Soil	11/11/2014 9:31	☐												
1411538-004	Ag-11 (surf) R	Soil	11/11/2014 8:40	☐												

Test Legend:

13	PREDF REPORT	14	PRFLORISIL	15	TPH(DMO)_S	16	TPH(DMO)_W	17			
18		19		20		21		22			
23		24									

The following SampIDs: 015A, 016A, 016C, 018A, 019A, 021A, 022A, 029A contain testgroup.

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(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1411538 **ClientCode: PAIS**

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Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					13	14	15	16	17	18	19	20	21	22	23	24
1411538-004	CS-3	Soil	11/11/2014 8:33	☐												
1411538-005	CS-5	Soil	11/11/2014 11:41	☐												
1411538-005	RW-4 (surf)	Soil	11/11/2014 11:41	☐												
1411538-005	RW-4 (surf) DUP	Soil	11/11/2014 11:41	☐												
1411538-005	RW-5 (surf)	Soil	11/11/2014 11:46	☐												
1411538-005	RW-6 (surf)	Soil	11/11/2014 11:50	☐												
1411538-006	CS-6	Soil	11/11/2014 10:37	☐												
1411538-006	RW-7 (surf)	Soil	11/11/2014 10:37	☐												
1411538-006	RW-8 (surf)	Soil	11/11/2014 10:52	☐												
1411538-006	RW-9 (surf)	Soil	11/11/2014 11:16	☐												
1411538-007	CS-7	Soil	11/11/2014 8:55	☐												
1411538-007	RW-10 (surf)	Soil	11/11/2014 8:55	☐												
1411538-007	RW-11 (surf)	Soil	11/11/2014 9:14	☐												
1411538-007	RW-12 (surf)	Soil	11/11/2014 9:21	☐												
1411538-008	CS-8	Soil	11/11/2014 8:00	☐		A										
1411538-008	RW-13 (surf)	Soil	11/11/2014 8:14	☐												

Test Legend:

13	PREDF REPORT	14	PRFLORISIL	15	TPH(DMO)_S	16	TPH(DMO)_W	17			
18		19		20		21		22			
23		24									

The following SampIDs: 015A, 016A, 016C, 018A, 019A, 021A, 022A, 029A contain testgroup.

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1411538 **ClientCode: PAIS**

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Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					13	14	15	16	17	18	19	20	21	22	23	24
1411538-008	RW-14 (surf)	Soil	11/11/2014 8:07	☐												
1411538-008	RW-15 (surf)	Soil	11/11/2014 8:00	☐												
1411538-009	CS-9	Soil	11/11/2014 12:31	☐												
1411538-009	DB-2 (surf)	Soil	11/11/2014 12:38	☐												
1411538-015	SM-1 (5.5-6')	Soil	11/12/2014 7:43	☐			A									
1411538-015	SM-1(5.5-6') DUP	Soil	11/12/2014 7:43	☐												
1411538-016	SM-1 (8.5-9')	Soil	11/12/2014 7:57	☐			A									
1411538-016	SM-1 (8.5-9') DUP	Soil	11/12/2014 7:57	☐			C									
1411538-018	SM-2 (5.5-6')	Soil	11/12/2014 8:30	☐			A									
1411538-019	SM-2 (8.5-9')	Soil	11/12/2014 8:38	☐			A									
1411538-021	SM-3 (5.5-6')	Soil	11/12/2014 9:04	☐			A									
1411538-022	SM-3 (8.5-9')	Soil	11/12/2014 9:17	☐			A									
1411538-029	GW-1	Water	11/12/2014 11:20	☐				A								
1411538-030	FB #1	Water	11/11/2014 15:00	☐												
1411538-031	EB #1	Water	11/11/2014 15:05	☐												
1411538-032	FB #2	Water	11/12/2014 10:40	☐												

Test Legend:

13	PREDF REPORT	14	PRFLORISIL	15	TPH(DMO)_S	16	TPH(DMO)_W	17			
18		19		20		21		22			
23		24									

The following SampIDs: 015A, 016A, 016C, 018A, 019A, 021A, 022A, 029A contain testgroup.

Prepared by: Jena Alfaro

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1411538 **ClientCode: PAIS**

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Requested TAT: 5 days

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Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					13	14	15	16	17	18	19	20	21	22	23	24
1411538-033	EB #2	Water	11/12/2014 10:45	☐												

Test Legend:

13	PREDF REPORT	14	PRFLORISIL	15	TPH(DMO)_S	16	TPH(DMO)_W	17	
18		19		20		21		22	
23		24							

The following SampIDs: 015A, 016A, 016C, 018A, 019A, 021A, 022A, 029A contain testgroup.

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"When Quality Counts"

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: PADRE ASSOCIATES. INC. **QC Level:** LEVEL 2 **Work Order:** 1411538

Project: #1401-0542; Santa Maria JUHSD **Client Contact:** Alan J. Klein **Date Received:** 11/13/2014

Comments: Give to Blake for review. Florisil Cleanup added to 008 11/17/14 **Contact's Email:** aklein@padreinc.com

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1411538-001A	CS-1	Soil	SW8081A (OC Pesticides)	4	Stainless Steel tube 2"x6"	☐	11/11/2014 10:43	5 days		☐	
1411538-001B	Ag-4 (surf) R	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 11:04	5 days		☐	
1411538-001C	Ag-5 (surf) F	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 10:47	5 days		☐	
1411538-001D	Ag-7 (surf) R	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 10:43	5 days		☐	
1411538-002A	CS-2	Soil	SW8081A (OC Pesticides)	4	Stainless Steel tube 2"x6"	☐	11/11/2014 11:18	5 days		☐	
1411538-002B	CS-2 DUP	Soil	SW8081A (OC Pesticides)	4	Stainless Steel tube 2"x6"	☐	11/11/2014 11:18	5 days		☐	
1411538-002C	Ag-2 (surf) R	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 12:07	5 days		☐	
1411538-002D	Ag-3 (surf) F	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 12:05	5 days		☐	
1411538-002E	Ag-8 (surf) F	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 11:18	5 days		☐	
1411538-002F	Ag-8 (surf) F DUP	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 11:18	5 days		☐	
1411538-003A	CS-4	Soil	SW8081A (OC Pesticides)	3	Stainless Steel tube 2"x6"	☐	11/11/2014 8:18	5 days		☐	
1411538-003B	RW-1 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 12:16	5 days		☐	
1411538-003C	RW-2 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 9:45	5 days		☐	
1411538-003D	RW-3 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 8:18	5 days		☐	
1411538-004A	CS-3	Soil	SW8081A (OC Pesticides)	4	Stainless Steel tube 2"x6"	☐	11/11/2014 8:33	5 days		☐	
1411538-004B	Ag-10 (surf) R	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 9:31	5 days		☐	
1411538-004C	Ag-11 (surf) R	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 8:40	5 days		☐	

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WORK ORDER SUMMARY

Client Name: PADRE ASSOCIATES. INC. **QC Level:** LEVEL 2 **Work Order:** 1411538

Project: #1401-0542; Santa Maria JUHSD **Client Contact:** Alan J. Klein **Date Received:** 11/13/2014

Comments: Give to Blake for review. Florisil Cleanup added to 008 11/17/14 **Contact's Email:** aklein@padreinc.com

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1411538-005A	CS-5	Soil	SW8081A (OC Pesticides)	3	Stainless Steel tube 2"x6"	☐	11/11/2014 11:41	5 days		☐	
1411538-005B	RW-4 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 11:41	5 days		☐	
1411538-005C	RW-5 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 11:46	5 days		☐	
1411538-005D	RW-6 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 11:50	5 days		☐	
1411538-005E	RW-4 (surf) DUP	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 11:41	5 days		☐	
1411538-006A	CS-6	Soil	SW8081A (OC Pesticides)	3	Stainless Steel tube 2"x6"	☐	11/11/2014 10:37	5 days		☐	
1411538-006B	RW-7 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 10:37	5 days		☐	
1411538-006C	RW-8 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 10:52	5 days		☐	
1411538-006D	RW-9 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 11:16	5 days		☐	
1411538-007A	CS-7	Soil	SW8081A (OC Pesticides)	3	Stainless Steel tube 2"x6"	☐	11/11/2014 8:55	5 days		☐	
1411538-007B	RW-10 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 8:55	5 days		☐	
1411538-007C	RW-11 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 9:14	5 days		☐	
1411538-007D	RW-12 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 9:21	5 days		☐	
1411538-008A	CS-8	Soil	SW8081A (OC Pesticides w/ Florisil Clean-Up)	3	Stainless Steel tube 2"x6"	☐	11/11/2014 8:00	5 days		☐	
1411538-008B	RW-13 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 8:14	5 days		☐	
1411538-008C	RW-14 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 8:07	5 days		☐	

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WORK ORDER SUMMARY

Client Name: PADRE ASSOCIATES. INC. **QC Level:** LEVEL 2 **Work Order:** 1411538

Project: #1401-0542; Santa Maria JUHSD **Client Contact:** Alan J. Klein **Date Received:** 11/13/2014

Comments: Give to Blake for review. Florisil Cleanup added to 008 11/17/14 **Contact's Email:** aklein@padreinc.com

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1411538-008D	RW-15 (surf)	Soil	SW6020 (Arsenic)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 8:00	5 days		☐	
1411538-009A	CS-9	Soil	SW8081A (OC Pesticides)	4	Stainless Steel tube 2"x6"	☐	11/11/2014 12:31	5 days		☐	
1411538-009B	DB-2 (surf)	Soil	SW6020 (CAM 17)	1	Stainless Steel tube 2"x6"	☐	11/11/2014 12:38	5 days		☐	
1411538-010A	DB-1 (2-2.5)	Soil		1	Stainless Steel tube 2"x6"	☐	11/11/2014			☑	
1411538-011A	DB-2 (2-2.5')	Soil		1	Stainless Steel tube 2"x6"	☐	11/11/2014 13:00			☑	
1411538-012A	DB-3 (2-2.5')	Soil		1	Stainless Steel tube 2"x6"	☐	11/11/2014 13:05			☑	
1411538-013A	DB-4 (2-2.5')	Soil		1	Stainless Steel tube 2"x6"	☐	11/11/2014 13:11			☑	
1411538-014A	SM-1 (2.5-3')	Soil		1	Stainless Steel tube 2"x6"	☐	11/12/2014 7:31			☑	
1411538-015A	SM-1 (5.5-6')	Soil	Multi-Range TPH(g,d,mo)	1	Stainless Steel tube 2"x6"	☐	11/12/2014 7:43	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (SVOCs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1411538-015B	SM-1 (5.5-6')	Soil	SW8260B (VOCs) (Encore)	1	25g Encore Sampler	☐	11/12/2014 7:43	5 days		☐	
1411538-015C	SM-1(5.5-6') DUP	Soil	SW6020 (CAM 17)	1	Stainless Steel tube 2"x6"	☐	11/12/2014 7:43	5 days		☐	
			SW8270C (SVOCs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1411538-016A	SM-1 (8.5-9')	Soil	Multi-Range TPH(g,d,mo)	1	Stainless Steel tube 2"x6"	☐	11/12/2014 7:57	5 days		☐	

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WORK ORDER SUMMARY

Client Name: PADRE ASSOCIATES. INC. **QC Level:** LEVEL 2 **Work Order:** 1411538
Project: #1401-0542; Santa Maria JUHSD **Client Contact:** Alan J. Klein **Date Received:** 11/13/2014
Comments: Give to Blake for review. Florisil Cleanup added to 008 11/17/14 **Contact's Email:** aklein@padreinc.com

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1411538-016A	SM-1 (8.5-9')	Soil	SW6020 (CAM 17)	1	Stainless Steel tube 2"x6"	☐	11/12/2014 7:57	5 days		☐	
			SW8270C (SVOCs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1411538-016B	SM-1 (8.5-9')	Soil	SW8260B (VOCs) (Encore)	1	25g Encore Sampler	☐	11/12/2014 7:57	5 days		☐	
1411538-016C	SM-1 (8.5-9') DUP	Soil	Multi-Range TPH(g,d,mo)	1	Stainless Steel tube 2"x6"	☐	11/12/2014 7:57	5 days		☐	
1411538-016D	SM-1 (8.5-9') DUP	Soil		0	<NOT RECEIVED>	☐	11/12/2014 7:57			☑	
1411538-017A	SM-2 (2.5-3')	Soil		1	Stainless Steel tube 2"x6"	☐	11/12/2014 8:15			☑	
1411538-018A	SM-2 (5.5-6')	Soil	Multi-Range TPH(g,d,mo)	1	Stainless Steel tube 2"x6"	☐	11/12/2014 8:30	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (SVOCs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1411538-018B	SM-2 (5.5-6')	Soil	SW8260B (VOCs) (Encore)	1	25g Encore Sampler	☐	11/12/2014 8:30	5 days		☐	
1411538-019A	SM-2 (8.5-9')	Soil	Multi-Range TPH(g,d,mo)	1	Stainless Steel tube 2"x6"	☐	11/12/2014 8:38	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (SVOCs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1411538-019B	SM-2 (8.5-9')	Soil	SW8260B (VOCs) (Encore)	1	25g Encore Sampler	☐	11/12/2014 8:38	5 days		☐	

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WORK ORDER SUMMARY

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Comments: Give to Blake for review. Florisil Cleanup added to 008 11/17/14 **Contact's Email:** aklein@padreinc.com

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1411538-020A	SM-3 (2.5-3')	Soil		1	Stainless Steel tube 2"x6"	☐	11/12/2014 8:55			☑	
1411538-021A	SM-3 (5.5-6')	Soil	Multi-Range TPH(g,d,mo)	1	Stainless Steel tube 2"x6"	☐	11/12/2014 9:04	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (SVOCs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1411538-021B	SM-3 (5.5-6')	Soil	SW8260B (VOCs) (Encore)	1	25g Encore Sampler	☐	11/12/2014 9:04	5 days		☐	
1411538-022A	SM-3 (8.5-9')	Soil	Multi-Range TPH(g,d,mo)	1	Stainless Steel tube 2"x6"	☐	11/12/2014 9:17	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (SVOCs)			☐		5 days		☐	
			SW8082 (PCBs Only)			☐		5 days		☐	
1411538-022B	SM-3 (8.5-9')	Soil	SW8260B (VOCs) (Encore)	1	25g Encore Sampler	☐	11/12/2014 9:17	5 days		☐	
1411538-023A	SM-4 (2.5-3')	Soil		1	Stainless Steel tube 2"x6"	☐	11/12/2014 9:34			☑	
1411538-024A	SM-4 (5.5-6')	Soil		1	Stainless Steel tube 2"x6"	☐	11/12/2014 9:42			☑	
1411538-025A	SM-4 (8.5-9')	Soil		1	Stainless Steel tube 2"x6"	☐	11/12/2014 9:50			☑	
1411538-026A	SM-5 (2.5-3')	Soil		1	Stainless Steel tube 2"x6"	☐	11/12/2014 10:04			☑	
1411538-027A	SM-5 (5.5-6')	Soil		1	Stainless Steel tube 2"x6"	☐	11/12/2014 10:15			☑	
1411538-028A	SM-5 (8.5-9')	Soil		1	Stainless Steel tube 2"x6"	☐	11/12/2014 10:27			☑	

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1411538-029A	GW-1	Water	Multi-Range TPH(g,d,mo)	3	VOA w/ HCl & 1-1LA	☐	11/12/2014 11:20	5 days		☐	
1411538-029B	GW-1	Water	SW8081A (OC Pesticides)	1	1LA	☐	11/12/2014 11:20	5 days		☐	
1411538-029C	GW-1	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	11/12/2014 11:20	5 days		☐	
1411538-029D	GW-1	Water	E200.8 (CAM 17)	1	250mL HDPE w/ HNO3	☐	11/12/2014 11:20	5 days		☐	
1411538-029E	GW-1	Water	E300.1 (Inorganic Anions) <Nitrate & Nitrite as N, Nitrate as N, Nitrate as $NO3^{-}$, Nitrite as N, Nitrite as $NO2^{-}$>	2	125mL HDPE, unprsv.	☐	11/12/2014 11:20	5 days		☐	
1411538-030A	FB #1	Water	E200.8 (Metals) <Arsenic, Lead>	1	250mL HDPE w/ HNO3	☐	11/11/2014 15:00	5 days		☐	
1411538-031A	EB #1	Water	E200.8 (Metals) <Arsenic, Lead>	1	250mL HDPE w/ HNO3	☐	11/11/2014 15:05	5 days		☐	
1411538-032A	FB #2	Water	E200.8 (Metals) <Arsenic, Lead>	1	250mL HDPE w/ HNO3	☐	11/12/2014 10:40	5 days		☐	
1411538-033A	EB #2	Water	E200.8 (Metals) <Arsenic, Lead>	1	250mL HDPE w/ HNO3	☐	11/12/2014 10:45	5 days		☐	

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1411538

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 1 DAY ☐ 2 DAY ☐ 3 DAY ☐ 5 DAY ☒

GeoTracker EDF ☒ PDF ☒ EDD ☐ Write On (DW) ☐ EQuIS ☐ 10 DAY ☐

Effluent Sample Requiring "J" flag ☐ **UST Clean Up Fund Project** ☐ ; **Claim #**_____

Report To: ALAN KLEIN **Bill To:**

Company: PADRE ASSOC. INC
555 UNIVERSITY AVE., SUITE 110
SACRAMENTO, CA 95825 **E-Mail:** aklein@padreinc.com

Tele: (916) 333-5920, EXT. 24 **Fax:** ( )

Project #: 1401-0542 **Project Name:** Santa Maria JUHSD

Project Location: Santa Maria, CA **Purchase Order#**

Sampler Signature:

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other
Ag-1(Surf)F		11-11-14	12:14	1					X						X
Ag-4(surf)R			11:04	1					X						X
Ag-5(Surf)F			10:47	1					X						X
Ag-7(Surf)R			10:43	1					X						X
Ag-2(Surf)R			12:07	1					X						X
Ag-3(Surf)F			12:05	1					X						X
Ag-6(Surf)R			11:23	1					X						X
Ag-8(Surf)F			11:18	1					X						X
RW-1(Surf)			12:16	1					X						X
RW-2(Surf)			07:45	1					X						X
RW-3(Surf			08:18	1					X						X

Analysis Request

BTEX/ MTBE & TPH as Gas (8021/ 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	BTEX/ MTBE & TPH as Gas (8260)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020) Arsenic	Filter sample for DISSOLVED metals analysis				
				X	X	CS-1 comp(4:1)								X					
				X	X									X					
				X	X									X					
				X	X									X					
				X	X									X					
				X	X	CS-2 comp(4:1)								X		DUPE CS-2 FOR OCPs			
				X	X									X					
				X	X									X		DUPE AG-8 FOR As			
				X	X									X					
				X	X	CS-4 comp(3:1)								X					
				X	X									X					

****MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.**

Relinquished By:	Date:	Time:	Received By:
	11-13-14	142	MV
MV	11/13	1807	

ICE/t° 4.0
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

COMMENTS: 1 of 6

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION_____ pH<2_____

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CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 1 DAY ☐ 2 DAY ☐ 3 DAY ☐ 5 DAY ☒

GeoTracker EDF ☒ PDF ☒ EDD ☐ Write On (DW) ☐ EQuIS ☐ 10 DAY ☐

Effluent Sample Requiring "J" flag ☐ **UST Clean Up Fund Project** ☐ ; **Claim #**_____

Report To: ALAN KLEIN **Bill To:**

Company: PADRE ASSOC. INC
555 UNIVERSITY AVE., SUITE 110
SACRAMENTO, CA 95825 **E-Mail:** aklein@padreinc.com

Tele: (916) 333-5920, EXT. 24 **Fax:** ( )

Project #: 1401-0542 **Project Name:** Santa Maria JUHSD

Project Location: Santa Maria, CA **Purchase Order#**

Sampler Signature:

Analysis Request

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other	BTEX/ MTBE & TPH as Gas (8021/ 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	BTEX/ MTBE & TPH as Gas (8260)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020) Arsenic	Filter sample for DISSOLVED metals analysis					
Ag-9 (Surf) F		11-11-14	09:37	1					X						X					X															
Ag-10 (Surf) R			09:31	1					X						X					X									X						
Ag-11 (Surf) R			08:40	1					X						X					X									X						
Ag-12 (Surf) F			08:33	1					X						X					X															
RW-4 (Surf)			11:41	1					X						X					X									X				DUPE RW-4*		
RW-5 (Surf)			11:46	1					X						X					X									X				FOR AS		
RW-6 (Surf)			11:50	1					X						X					X									X						
RW-7 (Surf)			10:37	1					X						X					X									X						
RW-8 (Surf)			10:52	1					X						X					X									X						
RW-9 (Surf)			11:16	1					X						X					X									X						

(5-3 comp (4:1)) (5-5 comp (3:1)) (5-6 comp (3:1))

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Relinquished By:	Date:	Time:	Received By:
	11-13-14	1420	MV
MV	11/13	1803	

ICE/t°_____ COMMENTS: 2 of 6
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION_____ pH<2_____

McCampbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701
www.mccampbell.com / main@mccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 1 DAY ☐ 2 DAY ☐ 3 DAY ☐ 5 DAY ☒

GeoTracker EDF ☒ PDF ☒ EDD ☐ Write On (DW) ☐ EQuIS ☐ 10 DAY ☐

Effluent Sample Requiring "J" flag ☐ UST Clean Up Fund Project ☐ ; Claim #_____

Report To: ALAN KLEIN **Bill To:**

Company: PADRE ASSOC. INC
555 UNIVERSITY AVE., SUITE 110
SACRAMENTO, CA 95825 **E-Mail:** aklein@padreinc.com

Tele: (916) 333-5920, EXT. 24 **Fax:** ( )

Project #: 1401-0542 **Project Name:** Santa Maria JUHSD

Project Location: Santa Maria, CA **Purchase Order#**

Sampler Signature:

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other
RW-10 (Surf)		11-11-14	08:55	1					X						X
RW-11 (Surf)			09:14	1					X						X
RW-12 (Surf)			09:21	1					X						X
RW-13 (Surf)			08:44	1					X						X
RW-14 (Surf)			08:07	1					X						X
RW-15 (Surf)			08:00	1					X						X
DB-1 (Surf)			12:41	1					X						X
DB-2 (Surf)			12:39	1					X						X
DB-3 (Surf)			12:36	1					X						X
DB-4 (Surf)			12:31	1					X						X
DB-1 (2-2.5')		↓		1					X						X

Analysis Request

BTEX/ MTBE & TPH as Gas (8021/ 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	BTEX/ MTBE & TPH as Gas (8260)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020) Arsenic	Filter sample for DISSOLVED metals analysis	Florisil 11/17/14 added	4020		
				X	X	(5-7 COMP (3:1)						X		X		X			
				X										X					
				X		(5-8 COMP (3:1)								X					
				X										X					
				X		(5-9 COMP (3:1)						X					X		

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Relinquished By:	Date:	Time:	Received By:
	11-13-14	1420	
Relinquished By:	Date:	Time:	Received By:
	11/13	1803	
Relinquished By:	Date:	Time:	Received By:

ICE/t°_____
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION_____ pH<2_____

COMMENTS: 3 of 6

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CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 1 DAY ☐ 2 DAY ☐ 3 DAY ☐ 5 DAY ☒

GeoTracker EDF ☒ PDF ☒ EDD ☐ Write On (DW) ☐ EQuIS ☐ 10 DAY ☐

Effluent Sample Requiring "J" flag ☐ UST Clean Up Fund Project ☐ ; Claim #

Report To: ALAN KLEIN	**Bill To:**
Company: PADRE ASSOC. INC	
555 UNIVERSITY AVE., SUITE 110	
SACRAMENTO, CA 95825	**E-Mail:** aklein@padreinc.com
Tele: (916) 333-5920, EXT. 24	**Fax:** ( )
Project #: 1401-0542	**Project Name:** Santa Maria JUHSD
Project Location: Santa Maria, CA	**Purchase Order#**
Sampler Signature:	

Analysis Request

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other	BTEX/ MTBE & TPH as Gas (8021/ 8015)	TPH as Diesel (8015) Gas, Motor Oil	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	BTEX/ MTBE & TPH as Gas (8260)	EPA 524.2 / 624 (8260 (VOCs) Encore	EPA 525.2 / 625 (8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis	Purge TPH-d, mo, VOCs	Purge SVOCs, PCB, CAM metals	HOLD
DB-2(2-2.5')		11-11-14	13:00	1					X						X					X														X
DB-3(2-2.5')		"	13:05	1					X						X					X														X
DB-4(2-2.5')		"	13:11	1					X						X					X														X
SM-1(2.5-3')		11-12-14	0731	1					X						X																			X
SM-1(5.5-6')			0740	1					X						X		X				X				X	X		X				X		
SM-1(8.5-9')			0757	1					X						X		X				X				X	X		X			X			
SM-2(2.5-3')			0815	1					X						X																			X
SM-2(5.5-6')			0830	1					X						X		X				X				X	X		X						
SM-2(8.5-9')			0838	1					X						X		X				X				X	X		X						
SM-3(3.5-3')			0855	1					X						X																			X
SM-3(5.5-6')			0904	1					X						X		X				X				X	X		X						

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Relinquished By:	Date:	Time:	Received By:
	11-13-14	1420	
Relinquished By:	Date:	Time:	Received By:
MV	11/13	1803	
Relinquished By:	Date:	Time:	Received By:

ICE/t°_____
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

COMMENTS: 4 of 6

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION_____ pH<2_____

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CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 1 DAY ☐ 2 DAY ☐ 3 DAY ☐ 5 DAY ☒

GeoTracker EDF ☒ PDF ☒ EDD ☐ Write On (DW) ☐ EQuIS ☐ 10 DAY ☐

Effluent Sample Requiring "J" flag ☐ **UST Clean Up Fund Project** ☐ ; **Claim #**_____

Report To: ALAN KLEIN	**Bill To:**
Company: PADRE ASSOC. INC	
555 UNIVERSITY AVE., SUITE 110	
SACRAMENTO, CA 95825	**E-Mail:** aklein@padreinc.com
Tele: (916) 333-5920, EXT. 24	**Fax:** ( )
Project #: 1401-0542	**Project Name:** Santa Maria JUHSD
Project Location: Santa Maria, CA	**Purchase Order#**
Sampler Signature:	

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other
SM-3(8.5-9')		11-12-14	0917	1					X						X
SM-4(2.5-3')			0934	1					X						X
SM-4(5.5-6')			0942	1					X						X
SM-4(8.5-9')			0950	1					X						X
SM-5(2.5-3')			1004	1					X						X
SM-5(5.5-6')			1015	1					X						X
SM-5(8.5-9')			1027	1					X						X
				1					X						X

Analysis Request

BTEX/ MTBE & TPH as Gas (8021/ 8015)	TPH as Diesel (8015) Gas, Motor Oil	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 (8082 PCB's; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	BTEX/ MTBE & TPH as Gas (8260)	EPA 524.2 / 624 / 8260 (VOCs) Encore	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis		#0442		
	X				X				X	X	X								
																		X	
																		X	
																		X	
																		X	
																		X	
																		X	
																		X	

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Relinquished By:	Date:	Time:	Received By:
	11-13-14	1420	
Relinquished By:	Date:	Time:	Received By:
	11/13	1803	
Relinquished By:	Date:	Time:	Received By:

ICE/t°_____
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

COMMENTS: 5 of 6

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION_____ pH<2_____

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GeoTracker EDF ☒ PDF ☒ EDD ☐ Write On (DW) ☐ EQuIS ☐ 10 DAY ☐

Effluent Sample Requiring "J" flag ☐ **UST Clean Up Fund Project** ☐ ; **Claim #**_____

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Company: PADRE ASSOC. INC	
555 UNIVERSITY AVE., SUITE 110	
SACRAMENTO, CA 95825	**E-Mail:** aklein@padreinc.com
Tele: (916) 333-5920, EXT. 24	**Fax:** ( )
Project #: 1401-0542	**Project Name:** Santa Maria JUHSD
Project Location: Santa Maria, CA	**Purchase Order#**
Sampler Signature:	

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	~~Drinking~~ Water	Sea Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other
GW-1		11-12-14	1120	8	X								X	X	X
FB #1		11-11-14	1500	1			X							X	X
EB #1		11-11-14	1505	1			X							X	X
FB #2		11-12-14	1040	1			X							X	X
EB #2		11-12-14	1045	1			X							X	X

Analysis Request

BTEX/ MTBE & TPH as Gas (8021/ 8015)	TPH as Diesel (8015) , gas, motor oil	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	BTEX/ MTBE & TPH as Gas (8260)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020) As, Pb	Filter sample for DISSOLVED metals analysis	Nitrogen, Nitrates + Nitrites (Soil)
	X			X					X			X				X
														X		
														X		
														X		
														X		

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Relinquished By:	Date:	Time:	Received By:
	11-13-14	1420	
Relinquished By:	Date:	Time:	Received By:
	11/14	1820	
Relinquished By:	Date:	Time:	Received By:

ICE/t°_____
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

COMMENTS: 6 of 6

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION_____ pH<2_____

McCampbell Analytical, Inc.
"When Quality Counts"

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **Padre Associates. Inc.** Date and Time Received: **11/13/2014 8:00:21 PM**

Project Name: **#1401-0542; Santa Maria JUHSD** LogIn Reviewed by: Jena Alfaro

WorkOrder №: **1411538** Matrix: Soil/Water Carrier: Courier

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Sample/Temp Blank temperature	Temp: 4°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	NA ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☑	No ☐	NA ☐
Samples Received on Ice?	Yes ☑	No ☐	
	(Ice Type: WET ICE)		

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes ☐	No ☐	NA ☑

** NOTE: If the "No" box is checked, see comments below.*

Comments:

Mobile Geochemistry Inc.

01 December 2014

Mr. Alan Klein
Padre Associates, Inc. - Sacramento
555 University Drive, #110
Sacramento, CA 95825

H&P Project: PAD111214-12
Client Project: Santa Maria JUHSD

Dear Mr. Alan Klein:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 11-Nov-14 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody

Unless otherwise noted, all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Lisa D Ems for

Janis Villarreal
Laboratory Director

H&P Mobile Geochemistry, Inc. operates under CA Environmental Lab Accreditation Program Numbers 2579, 2740, 2741, 2742, 2743, 2745 and 2754. National Environmental Laboratory Accreditation Conference (NELAC) Standards Lab #11845

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Padre Associates, Inc. - Sacramento	Project: PAD111214-12	
555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV3-15	E411064-01	Vapor	11-Nov-14	11-Nov-14
SV3-5	E411064-02	Vapor	11-Nov-14	11-Nov-14
SV4-15	E411064-03	Vapor	11-Nov-14	11-Nov-14
SV4-5	E411064-04	Vapor	11-Nov-14	11-Nov-14
SV2-15	E411064-05	Vapor	11-Nov-14	11-Nov-14
SV2-15 rep	E411064-06	Vapor	11-Nov-14	11-Nov-14
SV2-5	E411064-07	Vapor	11-Nov-14	11-Nov-14
SV1-15	E411064-08	Vapor	11-Nov-14	11-Nov-14
SV1-5	E411064-09	Vapor	11-Nov-14	11-Nov-14

H&P Mobile
Geochemistry Inc.

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760-804-9678 Phone
760-804-9159 Fax

Padre Associates, Inc. - Sacramento	Project: PAD111214-12	
555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

DETECTIONS SUMMARY

Sample ID: **SV3-15** Laboratory ID: **E411064-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
Carbon dioxide	**0.56**	0.20	%	ASTM 1945-96	
Oxygen	**21**	0.20	%	ASTM 1945-96	
Nitrogen	**81**	0.20	%	ASTM 1945-96	
Acetone	**45**	24	ug/m3	EPA TO-15	
Chloroform	**5.4**	4.9	ug/m3	EPA TO-15	
Benzene	**6.5**	3.2	ug/m3	EPA TO-15	
Toluene	**14**	3.8	ug/m3	EPA TO-15	
TPHv (C5 - C12)	**290**	100	ug/m3	EPA TO-15	GC-03

Sample ID: **SV3-5** Laboratory ID: **E411064-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
Carbon dioxide	**0.40**	0.20	%	ASTM 1945-96	
Oxygen	**21**	0.20	%	ASTM 1945-96	
Nitrogen	**80**	0.20	%	ASTM 1945-96	
1,1-Difluoroethane (LCC)	**9.1**	5.5	ug/m3	EPA TO-15	
Acetone	**61**	24	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**3.7**	3.5	ug/m3	EPA TO-15	
Benzene	**4.1**	3.2	ug/m3	EPA TO-15	
Toluene	**23**	3.8	ug/m3	EPA TO-15	
m,p-Xylene	**11**	8.8	ug/m3	EPA TO-15	
TPHv (C5 - C12)	**280**	100	ug/m3	EPA TO-15	GC-03

Sample ID: **SV4-15** Laboratory ID: **E411064-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
Carbon dioxide	**2.4**	0.20	%	ASTM 1945-96	
Oxygen	**18**	0.20	%	ASTM 1945-96	
Nitrogen	**80**	0.20	%	ASTM 1945-96	
Acetone	**55**	24	ug/m3	EPA TO-15	
Methylene chloride (Dichloromethane)	**4.4**	3.5	ug/m3	EPA TO-15	
Carbon disulfide	**9.0**	6.3	ug/m3	EPA TO-15	
Benzene	**11**	3.2	ug/m3	EPA TO-15	
Toluene	**14**	3.8	ug/m3	EPA TO-15	
Ethylbenzene	**18**	4.4	ug/m3	EPA TO-15	
TPHv (C5 - C12)	**250**	100	ug/m3	EPA TO-15	GC-03

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Padre Associates, Inc. - Sacramento	Project: PAD111214-12	
555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Sample ID: **SV4-5** Laboratory ID: **E411064-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
Carbon dioxide	**1.6**	0.20	%	ASTM 1945-96	
Oxygen	**20**	0.20	%	ASTM 1945-96	
Nitrogen	**82**	0.20	%	ASTM 1945-96	
1,1-Difluoroethane (LCC)	**7.7**	5.5	ug/m3	EPA TO-15	
Acetone	**69**	24	ug/m3	EPA TO-15	
Chloroform	**7.8**	4.9	ug/m3	EPA TO-15	
Benzene	**3.5**	3.2	ug/m3	EPA TO-15	
Toluene	**20**	3.8	ug/m3	EPA TO-15	
TPHv (C5 - C12)	**120**	100	ug/m3	EPA TO-15	GC-03

Sample ID: **SV2-15** Laboratory ID: **E411064-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Carbon dioxide	**1.4**	0.20	%	ASTM 1945-96	
Oxygen	**19**	0.20	%	ASTM 1945-96	
Nitrogen	**78**	0.20	%	ASTM 1945-96	
Acetone	**43**	24	ug/m3	EPA TO-15	
TPHv (C5 - C12)	**410**	100	ug/m3	EPA TO-15	GC-03

Sample ID: **SV2-15 rep** Laboratory ID: **E411064-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
Carbon dioxide	**1.4**	0.20	%	ASTM 1945-96	
Oxygen	**20**	0.20	%	ASTM 1945-96	
Nitrogen	**80**	0.20	%	ASTM 1945-96	
1,1-Difluoroethane (LCC)	**5.6**	5.5	ug/m3	EPA TO-15	
Acetone	**56**	24	ug/m3	EPA TO-15	
TPHv (C5 - C12)	**360**	100	ug/m3	EPA TO-15	GC-03

Sample ID: **SV2-5** Laboratory ID: **E411064-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
Carbon dioxide	**1.1**	0.20	%	ASTM 1945-96	
Oxygen	**20**	0.20	%	ASTM 1945-96	
Nitrogen	**80**	0.20	%	ASTM 1945-96	
TPHv (C5 - C12)	**270**	100	ug/m3	EPA TO-15	GC-03

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Sample ID: **SV1-15** Laboratory ID: **E411064-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
Carbon dioxide	**1.5**	0.20	%	ASTM 1945-96	
Oxygen	**20**	0.20	%	ASTM 1945-96	
Nitrogen	**81**	0.20	%	ASTM 1945-96	
Acetone	**33**	24	ug/m3	EPA TO-15	
TPHv (C5 - C12)	**410**	100	ug/m3	EPA TO-15	GC-03

Sample ID: **SV1-5** Laboratory ID: **E411064-09**

Analyte	Result	Reporting Limit	Units	Method	Notes
Carbon dioxide	**1.2**	0.20	%	ASTM 1945-96	
Oxygen	**20**	0.20	%	ASTM 1945-96	
Nitrogen	**80**	0.20	%	ASTM 1945-96	
1,1-Difluoroethane (LCC)	**6.1**	5.5	ug/m3	EPA TO-15	
Acetone	**94**	24	ug/m3	EPA TO-15	
TPHv (C5 - C12)	**510**	100	ug/m3	EPA TO-15	GC-03

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Soil Gas and Vapor Analysis

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV3-15 (E411064-01) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Carbon dioxide	**0.56**	0.20	%	1	EK41707	17-Nov-14	17-Nov-14	ASTM 1945-96	
Oxygen	**21**	0.20	"	"	"	"	"	"	
Nitrogen	**81**	0.20	"	"	"	"	"	"	
Methane	ND	10	ppmv	"	EK41705	17-Nov-14	17-Nov-14	EPA 8015M	
SV3-5 (E411064-02) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Carbon dioxide	**0.40**	0.20	%	1	EK41707	17-Nov-14	17-Nov-14	ASTM 1945-96	
Oxygen	**21**	0.20	"	"	"	"	"	"	
Nitrogen	**80**	0.20	"	"	"	"	"	"	
Methane	ND	10	ppmv	"	EK41705	17-Nov-14	17-Nov-14	EPA 8015M	
SV4-15 (E411064-03) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Carbon dioxide	**2.4**	0.20	%	1	EK41707	17-Nov-14	17-Nov-14	ASTM 1945-96	
Oxygen	**18**	0.20	"	"	"	"	"	"	
Nitrogen	**80**	0.20	"	"	"	"	"	"	
Methane	ND	10	ppmv	"	EK41705	17-Nov-14	17-Nov-14	EPA 8015M	
SV4-5 (E411064-04) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Carbon dioxide	**1.6**	0.20	%	1	EK41707	17-Nov-14	17-Nov-14	ASTM 1945-96	
Oxygen	**20**	0.20	"	"	"	"	"	"	
Nitrogen	**82**	0.20	"	"	"	"	"	"	
Methane	ND	10	ppmv	"	EK41705	17-Nov-14	17-Nov-14	EPA 8015M	
SV2-15 (E411064-05) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Carbon dioxide	**1.4**	0.20	%	1	EK41707	17-Nov-14	17-Nov-14	ASTM 1945-96	
Oxygen	**19**	0.20	"	"	"	"	"	"	
Nitrogen	**78**	0.20	"	"	"	"	"	"	
Methane	ND	10	ppmv	"	EK41705	17-Nov-14	17-Nov-14	EPA 8015M	

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Soil Gas and Vapor Analysis

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV2-15 rep (E411064-06) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Carbon dioxide	**1.4**	0.20	%	1	EK41707	17-Nov-14	17-Nov-14	ASTM 1945-96	
Oxygen	**20**	0.20	"	"	"	"	"	"	
Nitrogen	**80**	0.20	"	"	"	"	"	"	
Methane	ND	10	ppmv	"	EK41705	17-Nov-14	17-Nov-14	EPA 8015M	
SV2-5 (E411064-07) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Carbon dioxide	**1.1**	0.20	%	1	EK41707	17-Nov-14	17-Nov-14	ASTM 1945-96	
Oxygen	**20**	0.20	"	"	"	"	"	"	
Nitrogen	**80**	0.20	"	"	"	"	"	"	
Methane	ND	10	ppmv	"	EK41705	17-Nov-14	17-Nov-14	EPA 8015M	
SV1-15 (E411064-08) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Carbon dioxide	**1.5**	0.20	%	1	EK41707	17-Nov-14	17-Nov-14	ASTM 1945-96	
Oxygen	**20**	0.20	"	"	"	"	"	"	
Nitrogen	**81**	0.20	"	"	"	"	"	"	
Methane	ND	10	ppmv	"	EK41705	17-Nov-14	17-Nov-14	EPA 8015M	
SV1-5 (E411064-09) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Carbon dioxide	**1.2**	0.20	%	1	EK41707	17-Nov-14	17-Nov-14	ASTM 1945-96	
Oxygen	**20**	0.20	"	"	"	"	"	"	
Nitrogen	**80**	0.20	"	"	"	"	"	"	
Methane	ND	10	ppmv	"	EK41705	17-Nov-14	17-Nov-14	EPA 8015M	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV3-15 (E411064-01) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**45**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	3.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**5.4**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**6.5**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**14**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV3-15 (E411064-01) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
m,p-Xylene	ND	8.8	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.2 %*		*77-127*	"	"	"	"	
SV3-5 (E411064-02) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
1,1-Difluoroethane (LCC)	**9.1**	5.5	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**61**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**3.7**	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	3.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV3-5 (E411064-02) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Chloroform	ND	4.9	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**4.1**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**23**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**11**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.8 %*		*77-127*	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV4-15 (E411064-03) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**55**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**4.4**	3.5	"	"	"	"	"	"	
Carbon disulfide	**9.0**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	3.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**11**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**14**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**18**	4.4	"	"	"	"	"	"	

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV4-15 (E411064-03) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
m,p-Xylene	ND	8.8	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.7 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*110 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.1 %*		*77-127*	"	"	"	"	
SV4-5 (E411064-04) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
1,1-Difluoroethane (LCC)	**7.7**	5.5	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**69**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	3.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	

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Padre Associates, Inc. - Sacramento	Project: PAD111214-12	
555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV4-5 (E411064-04) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Chloroform	**7.8**	4.9	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**3.5**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**20**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.7 %*		*77-127*	"	"	"	"	

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Padre Associates, Inc. - Sacramento	Project: PAD111214-12	
555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV2-15 (E411064-05) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**43**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	3.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	

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555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV2-15 (E411064-05) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
m,p-Xylene	ND	8.8	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.0 %*		*77-127*	"	"	"	"	
SV2-15 rep (E411064-06) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
1,1-Difluoroethane (LCC)	**5.6**	5.5	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**56**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	3.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	

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Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV2-15 rep (E411064-06) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Chloroform	ND	4.9	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*104 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.6 %*		*77-127*	"	"	"	"	

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555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV2-5 (E411064-07) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	ND	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	3.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV2-5 (E411064-07) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
m,p-Xylene	ND	8.8	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.0 %*		*77-127*	"	"	"	"	
SV1-15 (E411064-08) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**33**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	3.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	

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Padre Associates, Inc. - Sacramento	Project: PAD111214-12	
555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV1-15 (E411064-08) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
Chloroform	ND	4.9	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.4 %*		*77-127*	"	"	"	"	

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555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV1-5 (E411064-09) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
1,1-Difluoroethane (LCC)	**6.1**	5.5	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Dichlorodifluoromethane (F12)	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**94**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	3.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	

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555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV1-5 (E411064-09) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
m,p-Xylene	ND	8.8	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
Naphthalene	ND	5.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*99.7 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*107 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*77-127*		"	"	"	"	

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Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

TPHv / APH on Vapors by EPA Method TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV3-15 (E411064-01) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
TPHv (C5 - C12)	**290**	100	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	GC-03
SV3-5 (E411064-02) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
TPHv (C5 - C12)	**280**	100	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	GC-03
SV4-15 (E411064-03) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
TPHv (C5 - C12)	**250**	100	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	GC-03
SV4-5 (E411064-04) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
TPHv (C5 - C12)	**120**	100	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	GC-03
SV2-15 (E411064-05) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
TPHv (C5 - C12)	**410**	100	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	GC-03
SV2-15 rep (E411064-06) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
TPHv (C5 - C12)	**360**	100	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	GC-03
SV2-5 (E411064-07) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
TPHv (C5 - C12)	**270**	100	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	GC-03
SV1-15 (E411064-08) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
TPHv (C5 - C12)	**410**	100	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	GC-03
SV1-5 (E411064-09) Vapor Sampled: 11-Nov-14 Received: 11-Nov-14									
TPHv (C5 - C12)	**510**	100	ug/m3	1	EK42008	20-Nov-14	20-Nov-14	EPA TO-15	GC-03

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Padre Associates, Inc. - Sacramento	Project: PAD111214-12	
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Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Soil Gas and Vapor Analysis - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK41705 - GC										
Blank (EK41705-BLK1)				Prepared & Analyzed: 17-Nov-14						
Methane	ND	10	ppmv							
Batch EK41707 - GC										
Blank (EK41707-BLK1)				Prepared & Analyzed: 17-Nov-14						
Carbon dioxide	ND	0.20	%							

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Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK42008 - TO-15										
Blank (EK42008-BLK1)				Prepared & Analyzed: 20-Nov-14						
1,1-Difluoroethane (LCC)	ND	5.5	ug/m3							
Dichlorodifluoromethane (F12)	ND	5.0	"							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
Acetone	ND	24	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
Methyl tertiary-butyl ether (MTBE)	ND	3.6	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							

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Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK42008 - TO-15										
Blank (EK42008-BLK1)				Prepared & Analyzed: 20-Nov-14						
1,2-Dibromoethane (EDB)	ND	7.8	ug/m3							
1,1,1,2-Tetrachloroethane	ND	7.0	"							
Chlorobenzene	ND	4.7	"							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
Naphthalene	ND	5.3	"							
1,2,4-Trichlorobenzene	ND	38	"							
Hexachlorobutadiene	ND	54	"							
Surrogate: 1,2-Dichloroethane-d4	*218*		*"*	*214*		*102*	*76-134*			
Surrogate: Toluene-d8	*205*		*"*	*207*		*98.9*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*349*		*"*	*364*		*95.8*	*77-127*			
LCS (EK42008-BS1)				Prepared & Analyzed: 20-Nov-14						
Dichlorodifluoromethane (F12)	85	5.0	ug/m3	101		84.1	70-130			
Vinyl chloride	40	2.6	"	52.0		76.9	70-130			
Chloroethane	43	8.0	"	53.6		79.4	70-130			
Trichlorofluoromethane (F11)	99	5.6	"	113		87.8	70-130			
1,1-Dichloroethene	68	4.0	"	80.8		83.8	70-130			
1,1,2-Trichlorotrifluoroethane (F113)	150	7.7	"	155		95.3	70-130			
Methylene chloride (Dichloromethane)	54	3.5	"	70.8		76.1	70-130			
trans-1,2-Dichloroethene	61	8.0	"	80.8		75.6	70-130			
1,1-Dichloroethane	62	4.1	"	82.4		75.0	70-130			
cis-1,2-Dichloroethene	73	4.0	"	80.0		91.0	70-130			

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Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK42008 - TO-15										
LCS (EK42008-BS1)				Prepared & Analyzed: 20-Nov-14						
Chloroform	92	4.9	ug/m3	99.2		93.1	70-130			
1,1,1-Trichloroethane	100	5.5	"	111		90.8	70-130			
1,2-Dichloroethane (EDC)	72	4.1	"	82.4		87.9	70-130			
Benzene	56	3.2	"	64.8		85.9	70-130			
Carbon tetrachloride	120	6.4	"	128		90.9	70-130			
Trichloroethene	110	5.5	"	110		101	70-130			
Toluene	71	3.8	"	76.8		92.9	70-130			
1,1,2-Trichloroethane	100	5.5	"	111		92.4	70-130			
Tetrachloroethene	120	6.9	"	138		90.0	70-130			
1,1,1,2-Tetrachloroethane	140	7.0	"	140		103	70-130			
Ethylbenzene	94	4.4	"	88.4		106	70-130			
m,p-Xylene	220	8.8	"	177		122	70-130			
o-Xylene	100	4.4	"	88.4		114	70-130			
1,1,2,2-Tetrachloroethane	150	7.0	"	140		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	*200*		*"*	*214*		*93.3*	*76-134*			
Surrogate: Toluene-d8	*200*		*"*	*207*		*96.7*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*371*		*"*	*364*		*102*	*77-127*			

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Padre Associates, Inc. - Sacramento	Project: PAD111214-12	
555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

TPHv / APH on Vapors by EPA Method TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK42008 - TO-15										
Blank (EK42008-BLK1)				Prepared & Analyzed: 20-Nov-14						
TPHv (C5 - C12)	ND	100	ug/m3							

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Carlsbad, CA 92010
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Padre Associates, Inc. - Sacramento	Project:	PAD111214-12	
555 University Drive, #110	Project Number:	Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager:	Mr. Alan Klein	01-Dec-14 12:13

Notes and Definitions

GC-03	The result for this hydrocarbon is elevated due to the presence of a single peak analyte(s) in the quantitation range.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Padre Associates, Inc. - Sacramento	Project: PAD111214-12	
555 University Drive, #110	Project Number: Santa Maria JUHSD	Reported:
Sacramento, CA 95825	Project Manager: Mr. Alan Klein	01-Dec-14 12:13

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory (Certification # L11-175) in accordance with the DoD-ELAP program. H&P is approved by the State of Arizona under Certification Numbers AZM758 and AZ0779. H&P is approved as an Environmental Laboratory in conformance with the Environmental Laboratory Accreditation Program (CA) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste for the following methods:

Certificate# 2741, 2743, 2579, 2754 & 2740 approved for EPA 8260 and LUFT GC/MS
Certificate# 2742, 2745, & 2741 approved for LUFT
Certificate# 2745 & 2742 approved for EPA 418.1

H&P Mobile Geochemistry, Inc. is approved as an Environmental Laboratory in conformance with the National Environmental Accreditation Conference Standards for the category Environmental Analysis Air and Emissions for the following analytes and methods:

Hexachlorobutadiene by EPA TO-15 & TO-14A
1,2,4-Trichlorobenzene by EPA TO-15 & TO-14A
1,2-Dichlorobenzene by EPA TO-15 & TO-14A
Dichlorotetrafluoroethane by EPA TO-14A
1,4-Dichlorobenzene by EPA TO-15 & TO-14A
Benzene by EPA TO-15 & TO-14A
Chlorobenzene by EPA TO-15 & TO-14A
Ethyl benzene by EPA TO-15 & TO-14A
Styrene by EPA TO-15 & TO-14A
Toluene by EPA TO-15 & TO-14A
Total Xylenes by EPA TO-15
1,1,1-Trichloroethane by EPA TO-15 & TO-14A
1,1,2,2-Tetrachloroethane by EPA TO-15 & TO-14A
1,1,2-Trichloroethane by EPA TO-15 & TO-14A
1,1-Dichloroethane by EPA TO-15 & TO-14A
1,1-Dichloroethene by EPA TO-15 & TO-14A
1,2-Dichloroethane by EPA TO-15 & TO-14A
1,2-Dichloropropane by EPA TO-15 & TO-14A
Benzyl Chloride by EPA TO-15 & TO-14A
Bromoform by EPA TO-15
Bromomethane by EPA TO-15 & TO-14A
Carbon tetrachloride by EPA TO-15 & TO-14A
Chloroethane by EPA TO-15 & TO-14A
Chloroform by EPA TO-15 & TO-14A
Chloromethane by EPA TO-15 & TO-14A
cis-1,2-Dichloroethene by EPA TO-15 & TO-14A
cis-1,3-Dichloropropene by EPA TO-15 & TO-14A
Methylene chloride by EPA TO -15 & TO-14A
Tetrachloroethane by EPA TO-15 & TO-14A
trans-1,2-Dichloroethene by EPA TO-15
trans-1,3-Dichloropropene by EPA TO-15 & TO-14A
Trichloroethene by EPA TO-15 & TO-14A
Vinyl chloride by EPA TO -15
2-Butanone by EPA TO-15
4-Methyl-2-Pentanone by EPA TO-15
Hexane by EPA TO-15
Methyl tert-butyl ether by EPA TO-15
Vinyl acetate by EPA TO-15

1,3-Dichlorobenzene by EPA TO-15 & TO-14A
Trichlorofluoromethane by EPA TO-14A
Naphthalene by H&P SOP TO-15/GC-MS
1,2-Dibromoethane (EDB) by EPA TO-15 & TO-14A
1,2-Dibromo-3-chloropropane by EPA TO-15
1,3-Butadiene by EPA TO-15
1,1,2-Trichlorotrifluoroethane by EPA TO-14A
Carbon disulfide by EPA TO-15
1,4-Dioxane by EPA TO-15

This certification applies to samples analyzed in summa canisters.

H&P Mobile Geochemistry, Inc.
2470 Impala Drive, Carlsbad, CA 92010
& Field Office - Signal Hill, CA
W handpmg.com E info@handpmg.com
P 760.804.9678 F 760.804.9159

VAPOR / AIR Chain of Custody

DATE: 11-11-14
Page 1 of 1

Lab Client and Project Information

Lab Client/Consultant: PADRE ASSOC. INC.	Project Name / #: SANTA MARIA JUHSD - PEA
Lab Client Project Manager: ALAN KLEIN	Project Location: SANTA MARIA, CA
Lab Client Address: 555 UNIVERSITY DR. #110	Report E-Mail(s): aklein@padreinc.com
Lab Client City, State, Zip: SACRAMENTO, CA 95825	
Phone Number: 916-333-5920 ext. 24	

Sample Receipt (Lab Use Only)

Date Rec'd: 11/12/14	Control #: 140881.02
H&P Project # PAD111214-12	
Lab Work Order # E411064	
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 11167	Temp: 22°C
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: MA	

Reporting Requirements	Turnaround Time	Sampler Information
☒ Standard Report ☐ Level III ☐ Level IV	☒ 5-7 day Stnd ☐ 24-Hr Rush	Sampler(s): M Scherer
☒ Excel EDD ☐ Other EDD:	☐ 3-day Rush ☐ Mobile Lab	Signature:
☐ CA Geotracker Global ID:	☐ 48-Hr Rush ☐ Other:	Date: 11-11-14

Additional Instructions to Laboratory:

☐ Check if Project Analyte List is Attached

Preferred VOC units (please choose one):

☐ µg/L ☒ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa or Tedlar or Tube	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☒ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene + MTBE ☐ 8260SV ☒ TO-15 ☐ TO-17m	TPHv as Gas ☐ 8260SVm ☒ TO-15m	TPHv as Diesel (sorbent tube) ☐ TO-17m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☒ DFA ☐ IPA ☐ He	Methane by EPA 8015m X	Fixed Gases by ASTM D1945 ☒ CO2 ☒ O2 ☒ N2			
SV3-15		11/11/14	1206	SV	400ml	382	-1.14	X			X	X			X	X	X			
SV3-5		11-11-14	1212	SV	400ml	313	-1.34	X			X	X			X	X	X			
SV4-15		11-11-14	1224	SV	400ml	091	-2.09	X			X	X			X	X	X			
SV4-5		11-11-14	1230	SV	400ml	018	-1.35	X			X	X			X	X	X			
SV2-15		11-11-14	1248	SV	400ml	320	-1.77	X			X	X			X	X	X			
SV2-15 rep		11-11-14	1251	SV	400ml	270	-1.43	X			X	X			X	X	X			
SV2-5		11-11-14	1258	SV	400ml	085	-2.14	X			X	X			X	X	X			
SV1-15		11-11-14	1329	SV	400ml	110	-2.75	X			X	X			X	X	X			
SV1-5		11-11-14	1334	SV	400ml	052	-.39	X			X	X			X	X	X			

Approved/Relinquished by: (ALAN CHURCHILL)	Company: PADRE	Date: 11-11-14	Time: 1400	Received by:	Company: H&P	Date: 11-11-14	Time: 1400
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

Vapor Sampling into Summa

Mobile Geochemistry Inc.

Site Address: 1280 Founder Ave — Date: 11-11-14

Company: Padre — H&P Project #: PAD111114-SP6 — Arrival Time: 0730

Field Rep(s): ~~Matt~~ Alan — H&P Rep(s): M Scherer — Departure Time: 1400

	Point ID	Date	Summa Info: Summa #	Start Time	Initial (" Hg)	End / Sample Time	End (" Hg)	Probe Specs: Probe Depth (ft)	Tubing Length (ft)	Tubing Dia (in.)	Sand Pack Dia (in.)	Sand Pack Ht (in.)	Sample Information: Purge Vol (mL)	Flow Rate (mL/min)	Pump Run Time	Shut-in Test (✓if pass)	Probe Pressure (" Hg)	Field Notes
1	SV3 - 15	11-11	382	1204	-30+	1206	-1	15	17	1/8	1.5	6	517	<200	—	✓	0	
2	5	11-11	313	1209	-27	1212	-1	5	7	1/8	1.5	6	489	<200	—	✓	0	
3	SV4 15	11-11	091	1221	-30	1224	-1	15	17	1/8	1.5	6	517	<200	—	✓	0	
4	5	11-11	018	1227	-26	1230	-1	5	7	1/8	1.5	6	489	<200	—	✓	0	
5	SV2 15	11-11	326	1245	-28	1246	-1	15	17	1/8	.75	6	165	<200	—	✓	0	
6	rep 15	11-11	220	1248	-27	1251	-1	15	17	1/8	.75	6	565	<200	—	✓	0	
7	5	11-11	055	1255	-30+	1258	-1	5	7	1/8	.75	6	135	<200	—	✓	0	
8	SV1 - 15	11-11	110	1326	-30+	1329	-1	15	17	1/8	.75	6	165	<200	—	✓	0	
9	5	11-11	052	1331	-27	1334	-1	5	7	1/8	.75	6	135	<200	—	✓	0	
10																		
11																		
12																		
13																		
14																		
15																		

Purge Volume Amount Selected: 3PV — Selected by: Padre

Overtime (hrs): _____

Client Signature: _____

Leak Check Information

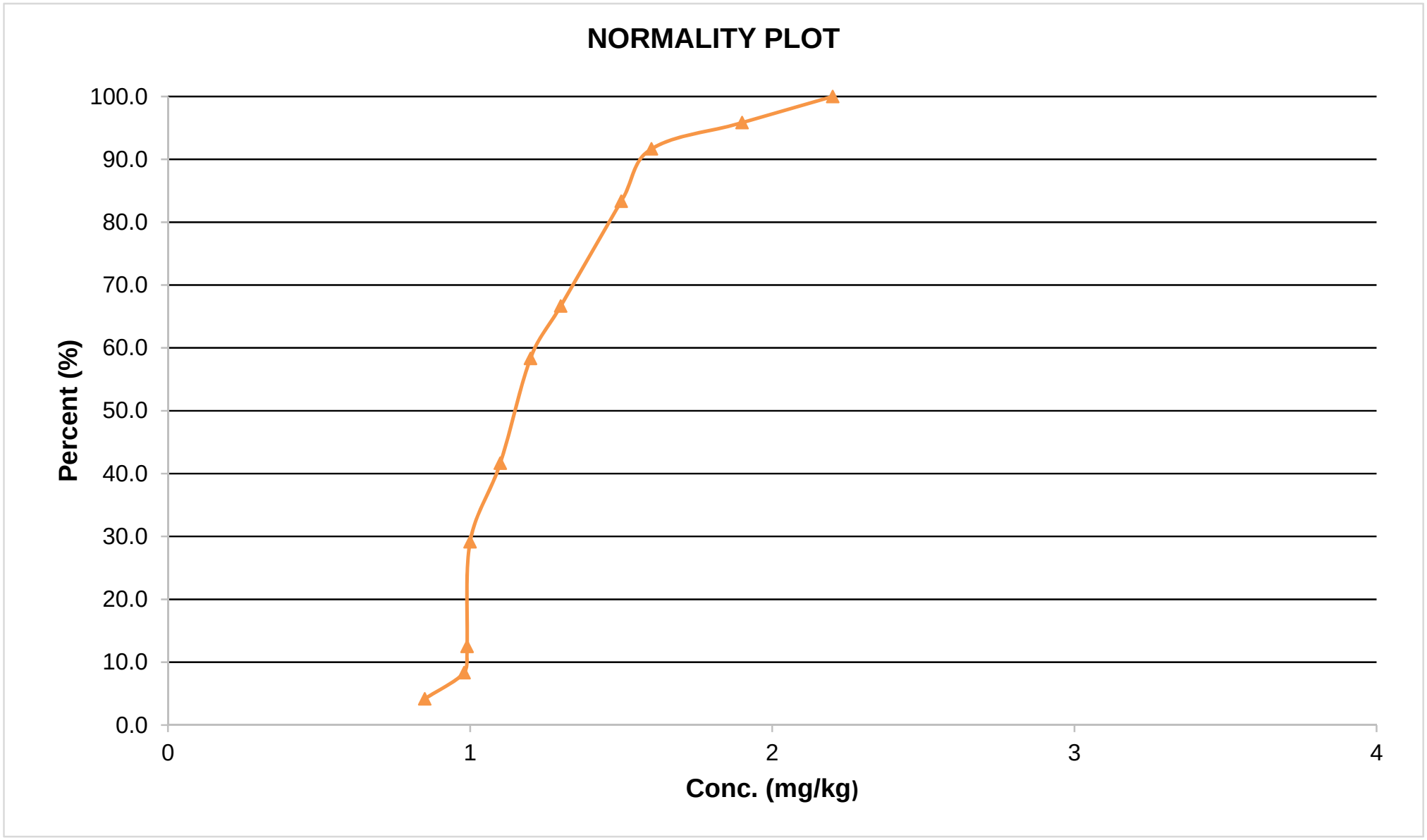
Leak Check Compound: IPA

Procedure:

APPENDIX F
ARSENIC EVALUATION

	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Uncensored Full Data Sets											
2												
3	User Selected Options											
4	Date/Time of Computation			12/31/2014 11:34:15 AM								
5	From File			arsenic normality plot_a.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10												
11	arsenic											
12												
13	General Statistics											
14	Total Number of Observations					25		Number of Distinct Observations				11
15								Number of Missing Observations				0
16	Minimum					0.85		Mean				1.273
17	Maximum					2.2		Median				1.2
18	SD					0.323		Std. Error of Mean				0.0646
19	Coefficient of Variation					0.254		Skewness				1.236
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic					0.88		Shapiro Wilk GOF Test				
23	5% Shapiro Wilk Critical Value					0.918		Data Not Normal at 5% Significance Level				
24	Lilliefors Test Statistic					0.189		Lilliefors GOF Test				
25	5% Lilliefors Critical Value					0.177		Data Not Normal at 5% Significance Level				
26	Data Not Normal at 5% Significance Level											
27												
28	Assuming Normal Distribution											
29	95% Normal UCL							95% UCLs (Adjusted for Skewness)				
30	95% Student's-t UCL					1.383		95% Adjusted-CLT UCL (Chen-1995)				1.396
31								95% Modified-t UCL (Johnson-1978)				1.386
32												
33	Gamma GOF Test											
34	A-D Test Statistic					0.801		Anderson-Darling Gamma GOF Test				
35	5% A-D Critical Value					0.743		Data Not Gamma Distributed at 5% Significance Level				
36	K-S Test Statistic					0.168		Kolmogrov-Smirnoff Gamma GOF Test				
37	5% K-S Critical Value					0.174		Detected data appear Gamma Distributed at 5% Significance Level				
38	Detected data follow Appr. Gamma Distribution at 5% Significance Level											
39												
40	Gamma Statistics											
41	k hat (MLE)					18.25		k star (bias corrected MLE)				16.09
42	Theta hat (MLE)					0.0697		Theta star (bias corrected MLE)				0.0791
43	nu hat (MLE)					912.6		nu star (bias corrected)				804.4
44	MLE Mean (bias corrected)					1.273		MLE Sd (bias corrected)				0.317
45								Approximate Chi Square Value (0.05)				739.6
46	Adjusted Level of Significance					0.0395		Adjusted Chi Square Value				735.4
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL (use when n>=50)					1.384		95% Adjusted Gamma UCL (use when n<50)				1.392
50												
51	Lognormal GOF Test											
52	Shapiro Wilk Test Statistic					0.931		Shapiro Wilk Lognormal GOF Test				
53	5% Shapiro Wilk Critical Value					0.918		Data appear Lognormal at 5% Significance Level				

54					Lilliefors Test Statistic	0.153	Lilliefors Lognormal GOF Test					
55					5% Lilliefors Critical Value	0.177	Data appear Lognormal at 5% Significance Level					
56	Data appear Lognormal at 5% Significance Level											
57												
58	Lognormal Statistics											
59					Minimum of Logged Data	-0.163				Mean of logged Data	0.214	
60					Maximum of Logged Data	0.788				SD of logged Data	0.234	
61												
62	Assuming Lognormal Distribution											
63					95% H-UCL	1.385				90% Chebyshev (MVUE) UCL	1.452	
64					95% Chebyshev (MVUE) UCL	1.533				97.5% Chebyshev (MVUE) UCL	1.647	
65					99% Chebyshev (MVUE) UCL	1.869						
66												
67	Nonparametric Distribution Free UCL Statistics											
68	Data appear to follow a Discernible Distribution at 5% Significance Level											
69												
70	Nonparametric Distribution Free UCLs											
71					95% CLT UCL	1.379				95% Jackknife UCL	1.383	
72					95% Standard Bootstrap UCL	1.377				95% Bootstrap-t UCL	1.411	
73					95% Hall's Bootstrap UCL	1.418				95% Percentile Bootstrap UCL	1.383	
74					95% BCA Bootstrap UCL	1.392						
75					90% Chebyshev(Mean, Sd) UCL	1.467				95% Chebyshev(Mean, Sd) UCL	1.554	
76					97.5% Chebyshev(Mean, Sd) UCL	1.676				99% Chebyshev(Mean, Sd) UCL	1.915	
77												
78	Suggested UCL to Use											
79					95% Adjusted Gamma UCL	1.392						
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)											
83	and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.											
84	For additional insight the user may want to consult a statistician.											
85												


NORMALITY PLOT
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Percent (%)
0
1
2
3
4
Conc. (mg/kg)

APPENDIX G
SOIL GAS SCREENING LEVEL SPREADSHEETS

USEPA SG-SCREEN
Version 2.0, 04/2003

DTSC Modification
March 2014

Department of Toxic Substances Control
Vapor Intrusion Screening Model - Soil Gas

Scenario: Residential
Chemical: Acetone

DATA ENTRY SHEET

Reset to Defaults

Results Summary				
Soil Gas Conc. ($\mu g/m^3$)	Attenuation Factor (unitless)	Indoor Air Conc. ($\mu g/m^3$)	Cancer Risk	Noncancer Hazard
9.40E+01	1.5E-03	1.4E-01	NA	4.3E-06

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67641	9.40E+01			Acetone

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24	S		

MORE ↓

Lookup Soil Parameters

ENTER Vandose zone SCS soil type	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
S	1.66	0.375	0.054	5

MORE ↓

Lookup Receptor Parameters

	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (hrs/day)	ENTER Air Exchange Rate ACH $(hour)^{-1}$
NEW=> Residential	70	30	30	350	24	0.5
					(NEW)	(NEW)

END

Acetone

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Unit risk factor, URF ($\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)
1.06E-01	1.15E-05	3.50E-05	25	6,955	329.20	508.10	0.0E+00	3.1E+01	58.08

END

Scenario: **Residential**

Chemical: **Acetone**

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm^3/cm^3)	Vadose zone effective total fluid saturation, S_{te} (cm^3/cm^3)	Vadose zone soil intrinsic permeability, k_i (cm^2)	Vadose zone soil relative air permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
137.4	0.321	0.003	1.02E-07	0.998	1.01E-07	4,000	9.40E+01	3.39E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D^{eff}_V (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	7,384	3.36E-05	1.38E-03	1.80E-04	1.71E-02	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)
15	9.40E+01	1.25	8.33E+01	1.71E-02	5.00E+03	1.68E+04	**1.47E-03**	1.39E-01

Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
NA	3.1E+01

END

Scenario: **Residential**
Chemical: **Acetone**

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	**4.3E-06**

MESSAGE SUMMARY BELOW:

END

USEPA SG-SCREEN
Version 2.0, 04/2003

DTSC Modification
March 2014

Department of Toxic Substances Control
Vapor Intrusion Screening Model - Soil Gas

Scenario: Residential
Chemical: Benzene

DATA ENTRY SHEET

Reset to Defaults

Results Summary				
Soil Gas Conc. ($\mu g/m^3$)	Attenuation Factor (unitless)	Indoor Air Conc. ($\mu g/m^3$)	Cancer Risk	Noncancer Hazard
4.10E+00	1.4E-03	5.6E-03	6.7E-08	1.8E-03

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	4.10E+00			Benzene

MESSAGE: See VLOOKUP table comments on chemical properties and/or toxicity criteria for this chemical.

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24	S		

MORE ↓

Lookup Soil Parameters

ENTER Vandose zone SCS soil type	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
S	1.66	0.375	0.054	5

MORE ↓

Lookup Receptor Parameters

	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (hrs/day)	ENTER Air Exchange Rate ACH $(hour)^{-1}$
NEW=> Residential	70	30	30	350	24	0.5
					(NEW)	(NEW)

END

CHEMICAL PROPERTIES SHEET

Benzene

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Unit risk factor, URF ($\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)
8.95E-02	1.03E-05	5.55E-03	25	7,342	353.24	562.16	2.9E-05	3.0E-03	78.11

END

Scenario: **Residential**

Chemical: **Benzene**

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm^3/cm^3)	Vadose zone effective total fluid saturation, S_{te} (cm^3/cm^3)	Vadose zone soil intrinsic permeability, k_i (cm^2)	Vadose zone soil relative air permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
137.4	0.321	0.003	1.02E-07	0.998	1.01E-07	4,000	4.10E+00	3.39E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D^{eff}_V (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	7,977	5.30E-03	2.18E-01	1.80E-04	1.45E-02	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)
15	4.10E+00	1.25	8.33E+01	1.45E-02	5.00E+03	1.00E+05	**1.37E-03**	5.63E-03

Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
2.9E-05	3.0E-03

END

Scenario: **Residential**
Chemical: **Benzene**

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
6.7E-08	**1.8E-03**

MESSAGE SUMMARY BELOW:

END

USEPA SG-SCREEN
Version 2.0, 04/2003

DTSC Modification
March 2014

Department of Toxic Substances Control
Vapor Intrusion Screening Model - Soil Gas

Scenario: Residential
Chemical: Benzene

DATA ENTRY SHEET

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	1.10E+01			Benzene

MESSAGE: See VLOOKUP table comments on chemical properties and/or toxicity criteria for this chemical.

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457.2	24	S		

MORE ↓

Lookup Soil Parameters

ENTER Vandose zone SCS soil type	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
S	1.66	0.375	0.054	5

MORE ↓

Lookup Receptor Parameters

	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (hrs/day)	ENTER Air Exchange Rate ACH $(hour)^{-1}$
NEW=> Residential	70	30	30	350	24	0.5
					(NEW)	(NEW)

END

Results Summary

Soil Gas Conc. ($\mu g/m^3$)	Attenuation Factor (unitless)	Indoor Air Conc. ($\mu g/m^3$)	Cancer Risk	Noncancer Hazard
1.10E+01	6.9E-04	7.6E-03	9.1E-08	2.4E-03

CHEMICAL PROPERTIES SHEET

Benzene

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Unit risk factor, URF ($\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)
8.95E-02	1.03E-05	5.55E-03	25	7,342	353.24	562.16	2.9E-05	3.0E-03	78.11

END

Scenario: **Residential**

Chemical: **Benzene**

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm^3/cm^3)	Vadose zone effective total fluid saturation, S_{te} (cm^3/cm^3)	Vadose zone soil intrinsic permeability, k_i (cm^2)	Vadose zone soil relative air permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
442.2	0.321	0.003	1.02E-07	0.998	1.01E-07	4,000	1.10E+01	3.39E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D^{eff}_V (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	7,977	5.30E-03	2.18E-01	1.80E-04	1.45E-02	442.2

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)
15	1.10E+01	1.25	8.33E+01	1.45E-02	5.00E+03	1.00E+05	**6.93E-04**	7.63E-03

Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
2.9E-05	3.0E-03

END

Scenario: **Residential**
Chemical: **Benzene**

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
9.1E-08	**2.4E-03**

MESSAGE SUMMARY BELOW:

END

USEPA SG-SCREEN
Version 2.0, 04/2003

DTSC Modification
March 2014

Department of Toxic Substances Control
Vapor Intrusion Screening Model - Soil Gas

Scenario: Residential
Chemical: Carbon disulfide

DATA ENTRY SHEET

Reset to Defaults

Results Summary				
Soil Gas Conc. ($\mu g/m^3$)	Attenuation Factor (unitless)	Indoor Air Conc. ($\mu g/m^3$)	Cancer Risk	Noncancer Hazard
9.00E+00	1.5E-03	1.3E-02	NA	1.8E-05

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75150	9.00E+00			Carbon disulfide

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24	S		

MORE ↓

Lookup Soil Parameters

ENTER Vandose zone SCS soil type	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
S	1.66	0.375	0.054	5

MORE ↓

Lookup Receptor Parameters

	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (hrs/day)	ENTER Air Exchange Rate ACH $(hour)^{-1}$
NEW=> Residential	70	30	30	350	24	0.5
					(NEW)	(NEW)

END

Carbon disulfide

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Unit risk factor, URF ($\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)
1.06E-01	1.30E-05	1.44E-02	25	6,391	319.00	552.00	0.0E+00	7.0E-01	76.13

END

Scenario: **Residential**

Chemical: **Carbon disulfide**

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm^3/cm^3)	Vadose zone effective total fluid saturation, S_{te} (cm^3/cm^3)	Vadose zone soil intrinsic permeability, k_i (cm^2)	Vadose zone soil relative air permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
137.4	0.321	0.003	1.02E-07	0.998	1.01E-07	4,000	9.00E+00	3.39E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D^{eff}_V (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	6,572	1.39E-02	5.69E-01	1.80E-04	1.72E-02	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)
15	9.00E+00	1.25	8.33E+01	1.72E-02	5.00E+03	1.61E+04	**1.48E-03**	1.33E-02

Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
NA	7.0E-01

END

Scenario: **Residential**
Chemical: **Carbon disulfide**

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	**1.8E-05**

MESSAGE SUMMARY BELOW:

END

USEPA SG-SCREEN
Version 2.0, 04/2003

DTSC Modification
March 2014

Department of Toxic Substances Control
Vapor Intrusion Screening Model - Soil Gas

DATA ENTRY SHEET

Scenario: Residential
Chemical: Chloroform

Reset to Defaults

Results Summary				
Soil Gas Conc. ($\mu g/m^3$)	Attenuation Factor (unitless)	Indoor Air Conc. ($\mu g/m^3$)	Cancer Risk	Noncancer Hazard
7.80E+00	1.3E-03	1.0E-02	9.4E-08	9.8E-05

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	7.80E+00			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24	S		

MORE ↓

Lookup Soil Parameters

ENTER Vandose zone SCS soil type	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
S	1.66	0.375	0.054	5

MORE ↓

Lookup Receptor Parameters

	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (hrs/day)	ENTER Air Exchange Rate ACH $(hour)^{-1}$
NEW=> Residential	70	30	30	350	24	0.5
					(NEW)	(NEW)

END

Chloroform

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H ($atm\text{-}m^3/mol$)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)
7.69E-02	1.09E-05	3.67E-03	25	6,988	334.32	536.40	2.3E-05	9.8E-02	119.38

END

Scenario: **Residential**

Chemical: **Chloroform**

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm^3/cm^3)	Vadose zone effective total fluid saturation, S_{te} (cm^3/cm^3)	Vadose zone soil intrinsic permeability, k_i (cm^2)	Vadose zone soil relative air permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
137.4	0.321	0.003	1.02E-07	0.998	1.01E-07	4,000	7.80E+00	3.39E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D^{eff}_V (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	7,407	3.52E-03	1.44E-01	1.80E-04	1.24E-02	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)
15	7.80E+00	1.25	8.33E+01	1.24E-02	5.00E+03	6.62E+05	**1.28E-03**	9.99E-03

Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
2.3E-05	9.8E-02

END

Scenario: **Residential**
Chemical: **Chloroform**

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
9.4E-08	**9.8E-05**

MESSAGE SUMMARY BELOW:

END

USEPA SG-SCREEN
Version 2.0, 04/2003

DTSC Modification
March 2014

Department of Toxic Substances Control
Vapor Intrusion Screening Model - Soil Gas

DATA ENTRY SHEET

Scenario: Residential
Chemical: Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	1.80E+01			Ethylbenzene

Results Summary

Soil Gas Conc. ($\mu g/m^3$)	Attenuation Factor (unitless)	Indoor Air Conc. ($\mu g/m^3$)	Cancer Risk	Noncancer Hazard
1.80E+01	5.7E-04	1.0E-02	1.1E-08	9.8E-06

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457.2	24	S		

MORE ↓

Lookup Soil Parameters

ENTER Vandose zone SCS soil type	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
S	1.66	0.375	0.054	5

MORE ↓

Lookup Receptor Parameters

	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (hrs/day)	ENTER Air Exchange Rate ACH $(hour)^{-1}$
NEW=> Residential	70	30	30	350	24	0.5
					(NEW)	(NEW)

END

Ethylbenzene

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Unit risk factor, URF ($\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)
6.85E-02	8.46E-06	7.88E-03	25	8,501	409.34	617.20	2.5E-06	1.0E+00	106.17

END

Scenario: **Residential**

Chemical: **Ethylbenzene**

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm^3/cm^3)	Vadose zone effective total fluid saturation, S_{te} (cm^3/cm^3)	Vadose zone soil intrinsic permeability, k_i (cm^2)	Vadose zone soil relative air permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
442.2	0.321	0.003	1.02E-07	0.998	1.01E-07	4,000	1.80E+01	3.39E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D^{eff}_V (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,994	7.45E-03	3.05E-01	1.80E-04	1.11E-02	442.2

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)
15	1.80E+01	1.25	8.33E+01	1.11E-02	5.00E+03	3.47E+06	**5.68E-04**	1.02E-02

Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
2.5E-06	1.0E+00

END

Scenario: **Residential**
Chemical: **Ethylbenzene**

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.1E-08	**9.8E-06**

MESSAGE SUMMARY BELOW:

END

USEPA SG-SCREEN
Version 2.0, 04/2003

DTSC Modification
March 2014

Department of Toxic Substances Control
Vapor Intrusion Screening Model - Soil Gas

DATA ENTRY SHEET

Scenario: Residential
Chemical: m-Xylene

Reset to Defaults

Results Summary				
Soil Gas Conc. ($\mu g/m^3$)	Attenuation Factor (unitless)	Indoor Air Conc. ($\mu g/m^3$)	Cancer Risk	Noncancer Hazard
1.10E+01	1.2E-03	1.3E-02	NA	1.3E-04

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	1.10E+01			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24	S		

MORE ↓

Lookup Soil Parameters

ENTER Vandose zone SCS soil type	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
S	1.66	0.375	0.054	5

MORE ↓

Lookup Receptor Parameters

	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (hrs/day)	ENTER Air Exchange Rate ACH $(hour)^{-1}$
NEW=> Residential	70	30	30	350	24	0.5
					(NEW)	(NEW)

END

m-Xylene

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)
6.84E-02	8.44E-06	7.18E-03	25	8,523	412.27	617.05	0.0E+00	1.0E-01	106.17

END

Scenario: **Residential**

Chemical: **m-Xylene**

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm^3/cm^3)	Vadose zone effective total fluid saturation, S_{te} (cm^3/cm^3)	Vadose zone soil intrinsic permeability, k_i (cm^2)	Vadose zone soil relative air permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
137.4	0.321	0.003	1.02E-07	0.998	1.01E-07	4,000	1.10E+01	3.39E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D^{eff}_V (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	10,090	6.78E-03	2.78E-01	1.80E-04	1.11E-02	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)
15	1.10E+01	1.25	8.33E+01	1.11E-02	5.00E+03	3.54E+06	**1.21E-03**	1.33E-02

Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
NA	1.0E-01

END

Scenario: **Residential**
Chemical: **m-Xylene**

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	**1.3E-04**

MESSAGE SUMMARY BELOW:

END

USEPA SG-SCREEN
Version 2.0, 04/2003

DTSC Modification
March 2014

Department of Toxic Substances Control
Vapor Intrusion Screening Model - Soil Gas

DATA ENTRY SHEET

Scenario: Residential
Chemical: Methylene chloride (dichloromethane)

Results Summary				
Soil Gas Conc. ($\mu g/m^3$)	Attenuation Factor (unitless)	Indoor Air Conc. ($\mu g/m^3$)	Cancer Risk	Noncancer Hazard
3.70E+00	1.4E-03	5.3E-03	2.2E-09	1.3E-05

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75092	3.70E+00			Methylene chloride (dichloromethane)

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24	S		

MORE ↓

Lookup Soil Parameters

ENTER Vandose zone SCS soil type	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
S	1.66	0.375	0.054	5

MORE ↓

Lookup Receptor Parameters

	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (hrs/day)	ENTER Air Exchange Rate ACH $(hour)^{-1}$
NEW=> Residential	70	30	30	350	24	0.5
					(NEW)	(NEW)

END

Methylene chloride (dichloromethane)

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Unit risk factor, URF ($\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)
9.99E-02	1.25E-05	3.25E-03	25	6,706	313.00	510.00	1.0E-06	4.0E-01	84.93

END

Scenario: **Residential**

Chemical: **Methylene chloride (dichloromethane)**

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm^3/cm^3)	Vadose zone effective total fluid saturation, S_{te} (cm^3/cm^3)	Vadose zone soil intrinsic permeability, k_i (cm^2)	Vadose zone soil relative air permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
137.4	0.321	0.003	1.02E-07	0.998	1.01E-07	4,000	3.70E+00	3.39E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D^{eff}_V (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	6,884	3.13E-03	1.28E-01	1.80E-04	1.62E-02	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)
15	3.70E+00	1.25	8.33E+01	1.62E-02	5.00E+03	3.02E+04	**1.44E-03**	5.32E-03

Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
1.0E-06	4.0E-01

END

Scenario: **Residential**
Chemical: **Methylene chloride (dichloromethane)**

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.2E-09	**1.3E-05**

MESSAGE SUMMARY BELOW:

END

USEPA SG-SCREEN
Version 2.0, 04/2003

DTSC Modification
March 2014

Department of Toxic Substances Control
Vapor Intrusion Screening Model - Soil Gas

Scenario: Residential
Chemical: p-Xylene

DATA ENTRY SHEET

Reset to Defaults

Results Summary				
Soil Gas Conc. ($\mu g/m^3$)	Attenuation Factor (unitless)	Indoor Air Conc. ($\mu g/m^3$)	Cancer Risk	Noncancer Hazard
1.10E+01	1.2E-03	1.3E-02	NA	1.3E-04

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	1.10E+01			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24	S		

MORE ↓

Lookup Soil Parameters

ENTER Vandose zone SCS soil type	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
S	1.66	0.375	0.054	5

MORE ↓

Lookup Receptor Parameters

	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (hrs/day)	ENTER Air Exchange Rate ACH $(hour)^{-1}$
NEW=> Residential	70	30	30	350	24	0.5
					(NEW)	(NEW)

END

p-Xylene

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)
6.82E-02	8.42E-06	6.90E-03	25	8,525	411.52	616.20	0.0E+00	1.0E-01	106.17

END

Scenario: **Residential**

Chemical: **p-Xylene**

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm^3/cm^3)	Vadose zone effective total fluid saturation, S_{te} (cm^3/cm^3)	Vadose zone soil intrinsic permeability, k_i (cm^2)	Vadose zone soil relative air permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
137.4	0.321	0.003	1.02E-07	0.998	1.01E-07	4,000	1.10E+01	3.39E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D^{eff}_V (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	10,083	6.52E-03	2.67E-01	1.80E-04	1.10E-02	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)
15	1.10E+01	1.25	8.33E+01	1.10E-02	5.00E+03	3.63E+06	**1.21E-03**	1.33E-02

Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
NA	1.0E-01

END

Scenario: **Residential**
Chemical: **p-Xylene**

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	**1.3E-04**

MESSAGE SUMMARY BELOW:

END

USEPA SG-SCREEN
Version 2.0, 04/2003

DTSC Modification
March 2014

Department of Toxic Substances Control
Vapor Intrusion Screening Model - Soil Gas

Scenario: Residential
Chemical: Toluene

DATA ENTRY SHEET

Reset to Defaults

Results Summary				
Soil Gas Conc. ($\mu g/m^3$)	Attenuation Factor (unitless)	Indoor Air Conc. ($\mu g/m^3$)	Cancer Risk	Noncancer Hazard
2.30E+01	1.3E-03	3.0E-02	NA	9.5E-05

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	2.30E+01			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24	S		

MORE ↓

Lookup Soil Parameters

ENTER Vandose zone SCS soil type	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
S	1.66	0.375	0.054	5

MORE ↓

Lookup Receptor Parameters

	ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Exposure Time ET (hrs/day)	ENTER Air Exchange Rate ACH $(hour)^{-1}$
NEW=> Residential	70	30	30	350	24	0.5
					(NEW)	(NEW)

END

Toluene

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H ($atm\text{-}m^3/mol$)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)
7.78E-02	9.20E-06	6.64E-03	25	7,930	383.78	591.79	0.0E+00	3.0E-01	92.14

END

Scenario: **Residential**

Chemical: **Toluene**

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm^3/cm^3)	Vadose zone effective total fluid saturation, S_{te} (cm^3/cm^3)	Vadose zone soil intrinsic permeability, k_i (cm^2)	Vadose zone soil relative air permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Floor-wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu g/m^3$)	Bldg. ventilation rate, $Q_{building}$ (cm^3/s)
137.4	0.321	0.003	1.02E-07	0.998	1.01E-07	4,000	2.30E+01	3.39E+04

Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D^{eff}_V (cm^2/s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,001	6.31E-03	2.59E-01	1.80E-04	1.26E-02	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)
15	2.30E+01	1.25	8.33E+01	1.26E-02	5.00E+03	5.69E+05	**1.29E-03**	2.96E-02

Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
NA	3.0E-01

END

Scenario: **Residential**
Chemical: **Toluene**

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	**9.5E-05**

MESSAGE SUMMARY BELOW:

END