Jones Development Company LLC

Commercial Property Development Consulting, Management & Investments

April 2, 2013 Alameda County Environmental Health Attention: Mark Detterman 131 Harbor Bay Parkway Alameda, California 94502-6577

LETTER OF TRANSMITTAL SOIL AND GROUNDWATER INVESTIGATION ACEH REQUEST FOR DATA GAP INFORMATION FORMER PRINTPACK FACILITY 2101 Williams Street San Leandro, California 94577 RWQCB SLIC Case RO0002468 Geotracker Global ID T06019771096 Anton Geological Project No. 012-003.01

Donald L. Jones Company Jones Partners LLC 640 Hegenberger-Heinz 2101 Williams Associates **American Metal Properties** American Standard Properties **ASP/RWM** Properties **ByPass 93 Properties Cottonmill Properties Dow-Pac Properties Durkee Properties Grand/Grove Partnership** Jones Group I **National Court Properties Papermill Properties** PlyProperties **Prudential Properties** Williams Properties

RECEIVED

By Alameda County Environmental Health at 10:20 am, Apr 11, 2013

Dear Mr. Detterman:

Please find attached a copy of the Soil and Groundwater Investigation report by Anton Geological dated April 2, 2013.

As an authorized representative of the existing ownership of the subject property (2101 Williams Associates LLC), I declare under penalty of perjury that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,

ner

Carey Andre 2101 Williams Associates LLC

Attachment

SOIL AND GROUNDWATER INVESTIGATION

ACEH REQUEST FOR DATA GAP INFORMATION FORMER PRINTPACK FACILITY 2101 Williams Street San Leandro, California 94577 RWQCB SLIC Case RO0002468 Geotracker Global ID T06019771096

Prepared For:

2101 Williams Associates, LLC c/o Jones Development Company, LLC Attention: Carey Andre 2228 Livingston Street Oakland, California 94606

Prepared By:

Anton Geological P. O. Box 370 Elk, California 95432-0370 (707) 877-3278

Project No. 012-003.01

April 2, 2013





April 2, 2013

2101 Williams Associates, LLCc/o Jones Development Company, LLCAttention: Carey Andre2228 Livingston StreetOakland, California 94606

SOIL AND GROUNDWATER INVESTIGATION

ACEH REQUEST FOR DATA GAP INFORMATION FORMER PRINTPACK FACILITY 2101 Williams Street San Leandro, California 94577 RWQCB SLIC Case RO0002468 Geotracker Global ID T06019771096 Anton Geological Project No. 012-003.01

INTRODUCTION

In accordance with your request and authorization, Anton Geological has completed limited soil and groundwater testing at the subject property. The purpose of this subsurface investigation has been to investigate soils and groundwater beneath the subject property to help determine whether past surface uses of the subject property may have impacted groundwater beneath the site with chlorinated hydrocarbons (HVOCs). Concurrent with this work, we have collected groundwater samples from existing on-site monitor wells (reported separately), and have discussed the purpose and methods of this soil and groundwater investigation with Alameda County Environmental Health.

A known groundwater contamination condition affecting at least two aquifer zones is located at an adjacent property to the east (2075 Williams Street), and groundwater contamination from this hydrogeologically upgradient facility is known to impact the southern margin of the subject property. It would appear that the primary issue facing regulators is whether the former on-site Printpack facility also contributed to soil and groundwater contamination beneath the subject property. In their letter of January 27, 2012, Alameda County Environmental Health (ACEH) requested a number of items related to the subject property including the following: the uploading of prior reports to the State of California GEOTRACKER database; the submittal of prior reports to ACEH (which ACEH may be missing); the sampling of the existing on-site groundwater monitor wells; and the preparation of a "data gap" work plan to help define the extent of soil and groundwater contamination at the subject property. This subsurface investigation effort has been intended to address the "data gap" portion of the ACEH request.

The general location of the subject property is shown on the attached Plate 1, *Site Vicinity Map*. Soil and groundwater sample locations are shown together with the general layout of the subject property on Plate 2, *Plot Plan*. Boring logs and cone penetration test data showing conditions encountered during the drilling work for soil and/or groundwater samples are presented in

Appendix A. Actual laboratory data and chain of custody documentation are presented in Appendix B. For a complete listing of Tables, Plates and Appendices, please refer to Page 13 of this report.

EXCEPTIONS AND LIMITATIONS

Our services are performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

Our conclusions are our opinions based upon the cited reference materials, our conversations, the laboratory data and our fieldwork. Our opinions and conclusions may be based in part or in whole upon data provided by others. No warranty regarding the accuracy of our opinions or conclusions is expressed or implied.

SITE OVERVIEW

<u>History</u>

The approximate 12.65-acre subject property consists of four contiguous parcels (APNs 77A-645-5-1, 5-2, 6-1 and 6-2) and is developed with three industrial office/warehouse buildings presently divided among ten tenants. The buildings are formally addressed as 2101 Williams Street (193,899 square feet), 2199 Williams Street (28,737 square feet), and 13197 Menlo Street (5,000 square feet). According to a Phase I Environmental Site Assessment prepared by EMG in 2011, the structures on the subject property were constructed in three phases during 1948, 1961 and 2000. However, according to our review of a sewer and drainage site plan prepared for Crown Zellerbach in 1986, most of the on-site buildings are indicated to have been constructed in 1953 and 1956.

According to the referenced Phase I environmental assessment, the subject property was used as a paper plant prior to its sale to the current owner and subsequent current multi-tenant use in 2000. The current owner is not aware of any existing or previous on-site use of tetrachloroethene (PCE) or other chlorinated solvents.

According to ACEH file information, the former paper facility originally had six underground storage tanks operating from the early 1950s until their removal in stages between about 1982 and 1989. The tanks had been used for the storage of ethyl alcohol, butyl and isopropyl acetate, ethyl alcohol, n-propyl alcohol, ethyl acetate, n-propyl acetate. These former tanks were indicated to have been located beneath asphalt pavements to the southeast of the larger subject building (2101 Williams Street), with a former piping system entering the southeastern corner of said structure. Acetone contamination in soils and groundwater related to this former tank system has been investigated and remediated, and the case has been closed.

Also in early 1989, excavation work commenced in the area of a former ink room outside the mid-southern margin of the larger subject building (2101 Williams Street). The purpose of the



excavation work was for the installation of new underground storage tanks¹, and for the installation of an approximate 20,000-gallon underground fire runoff containment tank. During the excavation work for the new equipment, stained soils were encountered at a depth of approximately three to five feet, and appeared to fill a three- to four-foot-wide east-west trending trench. The stained soils were excavated to their practical limits. It is understood that ACEH still has some concern regarding a soil sample collected from the floor of the resulting excavation that showed evidence of PCE contamination.

Additionally, some food-grade hydraulic fluid contamination in groundwater was identified beneath the floor of a deep vault inside the southeastern portion of the larger subject building during said vault's decommissioning in 1993. The hydraulic fluid investigation resulted in the installation of three additional "temporary" monitor wells (two of which remain). The actual hydraulic fluid condition has been investigated and remediated to the extent practical, and the case has received closure.

During the various soils and groundwater investigations of the described former tank system, ink room and vault, PCE contamination (and other related halogenated volatile organic compound contamination resulting from the natural degradation of PCE) was identified in groundwater samples. Prior consultants investigating the subject property attributed the PCE contamination to an off-site source.

This known PCE groundwater contamination condition affects at least two aquifer zones and has been studied extensively at the hydrogeologically upgradient property adjacent to the east (2075 Williams Street). The groundwater contamination from this easterly facility is known to impact at least the southern portion of the subject property. At issue is whether the former on-site Printpack/James River flexible packaging operations also contributed to PCE contamination in soil and groundwater beneath the subject property.

In August 2012, Anton Geological redeveloped the 12 existing on-site monitor wells and collected groundwater samples for the first time in nearly a decade. A second episode of sampling was performed concurrently with this drilling work in February 2012. In February 2013, PCE concentrations as high as 270 ug/L were identified on the subject property. Groundwater samples from nine of wells tested exhibited PCE concentrations exceeding the 5.0 ug/L California Maximum Contaminant Level (MCL) for drinking water. The highest concentrations detected were in two monitor wells (W-5 and TW-3) that were accessible during the sampling work. As such, the majority of the plume identified on the subject property presently appears to extend beneath the largest on-site building. The groundwater gradient was calculated at 0.002 feet/foot in a west-southwesterly direction.

Based on the groundwater gradient, it would appear from the monitor well network data that the plume is extending from a known source on an easterly and adjacent parcel. Four upgradient A-Zone monitor wells on the adjacent parcel have historically shown similarly elevated concentrations of PCE in groundwater. There are no known monitor wells on the adjacent property between these off-site wells and the downgradient subject building.

¹ Note: the "new" underground storage tanks installed in 1989 do not appear to have been used for long (if at all). The business that installed these tanks appears to have vacated the property by 2000. During the reconnaissance of this area of the subject property in July 2012, the tanks were found to have been abandoned in-place with concrete.



A comparison of 2012/2013 groundwater monitoring data with previously reported PCE concentrations in groundwater generally have indicated that concentrations of PCE have been decreasing or stable since the early 2000s in most on-site wells.

Hydrogeologic Setting

Site Vicinity

According to the 1991 California Geological Survey's *Geologic Map of California – San Francisco-San Jose Sheet*, the subject property is situated on the East Bay Plain of the Coast Range geomorphic province of California. The general site vicinity is situated on the San Leandro Cone, one of three coalescing alluvial fans which form the broad lowlands and the bay and tidal marshes between the bedrock of the Diablo Range to the east and the San Francisco Bay to the west. The Holocene alluvium beneath the subject property and general vicinity includes several hundred feet of sediment deposited from San Leandro Creek and other nearby modern stream systems; the Holocene deposits slope gently toward the west. The described alluvium is underlain by the Mesozoic volcanic, metamorphic and marine sedimentary rocks of the San Leandro Mountains to the east; these rock formations typically include outcrops of serpentinite and rhyolite, as well as marine sandstones and shale.

According to a July 5, 2012 report for the easterly and adjacent property (2075 Williams Street) by P&D Environmental, Inc. (P&D) entitled *""Groundwater and Indoor Air Investigation Report (B25 Through B27, IA1 Through IA3), RWQCB Case #01S0426, Bluewater Environmental Services, Inc. (Former Watkins Terminal) Site, 2075 Williams Street, San Leandro, California", reports by other consultants working on other contaminated sites in the general vicinity were researched for a better understanding of area geology. In particular, P&D referenced a November 3, 2010 report by ARCADIS for a site at 1964 Williams Street (about 850 feet to the north) entitled "Combined Third Quarter 2010 Groundwater Monitoring Report and 2010 Annual Status Report", which was based in part on data compiled by Woodward-Clyde Consultants (WC) in 1995 from WC's other research and field activities within central San Leandro.*

The referenced ARCADIS report cited by P&D indicates that shallow groundwater in the site vicinity occurs in hydraulically distinct units, which have been assigned as the "A-Zone" and "B-Zone" by ARCADIS (and other area consultants). ARCADIS indicates that both units are comprised of fine- to coarse-grained sands and gravels separated by continuous aquitards of silt and clay.

ARCADIS recognizes that the A-Zone extends from 10 to 38 feet below ground surfaces, and further identifies two subunits within the A-Zone: "Shallow A-Zone" and "Deeper A-Zone". ARCADIS describes the Shallow A-Zone as approximately two feet thick, and occurring somewhere below depths of ten to 15 feet. The "Deeper A-Zone" varies in thickness from two to eight feet, which is underlain by a continuous aquitard that provides separation between the A-Zone and B-Zone. The B-Zone extends from approximately 50 to 60 feet (at the ARCADIS site), and consists of sands and gravels. ARCADIS indicates that groundwater flows to the southwest within each zone, and that the vertical gradients between the Shallow and Deeper A-Zones range from zero to 0.4 feet in the upward direction.

The cited P&D report indicates that on the easterly and adjacent parcel (2075 Williams Street), the described Shallow A-Zone is approximately two-feet thick and encountered at a depth of approximately 15 to 17 feet below ground surfaces. The Deeper A-Zone is described as being typically eight to 12 feet thick and as being encountered at depths between about 27 to 40 feet



below ground surfaces. The B-Zone is identified by P&D between depths of 48 to 60 feet below ground surfaces. The groundwater gradient is indicated to be predominantly southwesterly at this adjacent site.

Past On-Site Classification of Water-Bearing Zones

According to Harding Lawson Associates' (HLA) "Hydrogeologic Investigation, Fexible Packaging Division Facility, San Leandro, California", dated April 10, 1986, interbedded silts and clays are predominantly encountered at the subject property from the surface to depths of 22 to 25 feet, with apparently discontinuous silty sand layers also encountered at some locations. HLA made no differentiation between a Shallow A-Zone and a Deeper A-Zone at that time. The cited HLA report states that the "shallow aquifer" or "A-aquifer" was encountered in the oldest on-site monitor wells from the base of the described silts and clays to approximate depths of 33 to 38 feet. HLA indicates that the "A-aquifer" materials consist of coarse-grained, clean and well-sorted sands as well as sandy gravels. The average thickness of this water-bearing zone defined by HLA was reported to be 14 feet. HLA noted that the shallow water-bearing zone appears to dip gently toward San Francisco Bay, but that the data are insufficient to quantify a direction or degree of dip.

The cited HLA report also indicates that the "A-aquifer" is underlain by interbedded clays ("aquitard material") and sands/gravels ("aquifer material") to a total exploration depth of 80 feet below ground surfaces. HLA reports that clays were present in zones between 37 to 43 feet, 50 to 52 feet, 54 to 62 feet, and 74 to 80 feet, with sands in between.

Description and Discussion of On-Site Monitor Well Construction

Since the subject property appears impacted by the easterly and upgradient contaminated property, it is important to compare the water-bearing zone classifications used for the adjacent investigation and the reporting of their data. As mentioned above, the adjacent property data is reported as three distinct water-bearing zones, whereas past on-site investigations have recognized only two (past on-site investigations have essentially combined the Shallow and Deeper A-Zones that have since been defined by P&D).

Using the water-bearing zone depth classifications used by P&D for the contamination condition on the upgradient and adjacent site, the existing 12 on-site monitor wells appear to have been completed in one or more of the three P&D water-bearing zones (Shallow A-Zone, Deeper A-Zone, and B-Zone). The shallowest well (W-10) is completed to a depth of 16.88 feet and therefore would appear to be consistent with a strictly Shallow A-Zone well, as defined by P&D.

The next most-shallow wells (TW-2 and TW-3) were completed to depths of 19.5 feet. According to boring logs appended in Environmental Science and Engineering, Inc.'s (ESE)'s *"Report of Preliminary Site Assessment, James River Flexible Packaging Facility, San Leandro, California"* dated February 19, 1996, a sandy clay (approximately 20 percent sand and high plasticity clay) was encountered between depths of about 14 feet and the maximum 19.5-foot depths of exploration in the TW locations. The sandy clay was found to be saturated starting at depths between 15 and 18 feet below ground surfaces. No underlying "aquitard" or significant change in stratigraphy is indicated within or beneath the water-bearing sandy clay. As such, it is



considered possible that the Shallow and Deeper A-Zones are connected at the TW locations on the subject property. Both wells are screened from a depth of five feet to the bottom of the wells.

Similar cross-connections between the Shallow A-Zone and Deeper A-Zone may also exist in many of the other on-site Deeper A-Zone wells. These wells are generally completed to depths between 32 and 39 feet. The screened intervals of W-1, W-3, W-4, W-5 and W-6 are unknown at the time; these wells were constructed between 1984 and 1985, and the original reports with the associated boring logs and well construction diagrams were not identified during this current evaluation effort of on-site conditions. According to the referenced HLA report from 1986, the screened intervals of W-7, W-8 and W-9 start at depths of 17 to 22 feet, and extend to their bottom depths, ranging between 32 to 37.5 feet. As such, it would appear that wells W-7 through W-9 may be screened in both the Shallow and Deeper A-Zone depths, and that if said wells were designed to be similar to the older wells, then by reason W-1 through W-6 possibly could have similar screened depths combining the A zones.

The only B-Zone monitor well on the subject property is B-1, which is screened from a depth of 44 feet to its maximum 52.5-foot depth of completion.

Based upon the described available information, Anton Geological proposes that all wells on the subject property (except W-10 and B-1) be treated as "combined" A-Zone wells. For a better understanding of the on-site monitor well characteristics, please refer to the table presented in Appendix C.

During the background research for this evaluation, Anton Geological noted one additional feature concerning cross-connections between the Shallow and Deeper A-Zones. The earliermentioned deep bailer vault that was decommissioned inside the southeastern portion of the subject building (2101 Williams Street) in 1993 had once extended into groundwater to a depth of 20 feet, with an additional 2.5-foot diameter hydraulic ram extending an additional 14 feet below the floor of the vault (for a total depth of 34 feet). As such, the vault may have once presented a means of communication between the two A-Zones, and may still do, depending upon the nature of the construction backfill materials used to decommission the vault. (The former vault's location and dimensions are described in the earlier cited ESE report from February 1996.) It is noted that wells TW-2 and TW-3 (as well as former well TW-1) are located downgradient from the former vault.

CURRENT WORK

General

In order to address concerns raised by ACEH, a scope of work was discussed by telephone with ACEH's Mark Detterman. In accordance with Anton Geological's proposed strategy for investigation, and Mr. Detterman's informal review of the work plan and requests for changes, it was mutually decided that six borings would be prudent to help address ACEH concerns. Two of the borings were proposed in the vicinity of a former ink room area in order to obtain shallow soil and groundwater samples to confirm subsurface conditions with respect to previously reported (by others) PCE contamination. An additional four borings were proposed along the eastern and northeastern portions of the property via cone penetration testing (CPT) to confirm the presence



of shallow and deeper water-bearing A-Zones, as well as to collect groundwater samples from the discrete zones at each boring. The boring locations are shown on Plate 2, *Plot Plan*.

Underground Service Alert

Prior to drilling work, Anton Geological marked the portions of the property slated for subsurface investigation with survey paint, and initiated an Underground Service Alert (USA) check for buried utilities (USA Ticket Number 041661). No subsurface utilities were identified on the subject property in the vicinity of the proposed borings, with the exception of a natural gas line on the extreme northeastern portion of the property (outside the area of planned work). The gas line is not expected to be greater than five feet deep.

Hand digging was performed in the upper five feet of each of the borings as an additional precaution. An apparent storm water pipe was encountered in Boring AG-B1; the pipe appeared to be leading from the subject building toward in-ground storm drain conduit on the southern property margin, which in turn, discharges to the municipal storm drain system in the Doolittle Drive right-of-way off-site to the west. The pipe was identified within about three feet of ground surfaces, suggesting that the on-site private storm water collection system is within about five feet of ground surfaces within the study area.

The only other noteworthy unmarked buried utilities within the work area included in-ground fire suppression equipment (hydrants) for the subject building, as well as sanitary sewer lines. Some of the piping was exposed by a contractor performing renovation work at the time of our drilling work; the piping appeared to be within three feet of ground surfaces. At some locations on the property, the fire suppression system includes an underground vault for equipment and emergency water runoff collection (cistern); the underground equipment vault (eastern margin of subject property) appears to have a depth of about six feet, while the cistern (mid-southern portion of the property) likely extends to a depth of about eight feet. The sanitary sewer line on the subject property appears to be the deepest pipe-conduit utility. A man-hole cover for the sewer at the southeastern corner of the building revealed a bottom depth of about 6.5 feet, with a flow direction beneath the subject building to the west.

None of the identified buried utilities are expected to contact the A-Zone groundwater bearing units.

Work Plan and Permitting

A Work Plan and Site Safety Plan were present during all on-site activities in accordance with OSHA requirements. A drilling permit (W2013-0073) was obtained from the Alameda County Public Works Agency (ACPWA). The ACPWA Water Resources Division was notified prior to the actual drilling work. An ACPWA inspector (Steve Miller) was present at the subject property to observe the proper sealing and grouting of the borings following the soil and groundwater sampling activities.

Subsurface Exploration

On February 6 and 7, 2013, drilling was performed by Gregg Drilling & Testing. of Martinez, California (California C-57 License No. 485166) using both a truck-mounted Geoprobe direct



push rig fitted with approximate five-feet-long by two-inch diameter core samplers, and a direct push rig fitted with a 20-ton capacity cone with a tip area of 15 cm^2 and a friction sleeve area of 225 cm². All cone penetration test soundings were performed by the drilling company in accordance with the revised 2007 ASTM Standard D-5778-07. The boring logs from the conventional Geoprobe borings are shown together with the cone penetration methodology and data in Appendix A.

A total of six vertical soil borings were advanced at the locations shown on Plate 2, *Plot Plan*. All exploration and sampling equipment was decontaminated prior to arrival on-site. All soil contact equipment was cleaned between sample drives/boring locations using an Alconox solution followed by a series of tap water and distilled water rinsings.

The soil borings were successfully drilled with direct-push equipment at all locations, with the exception of Boring AG-B2, which was cited within the boundaries of the former ink room location on the southern property margin. During the hand auger preparation work at this boring location, the driller encountered loose pea gravel. The pea gravel was likely used as backfill material following the excavation work of the former ink room contamination. The driller noted that while drilling through pea gravel is against company policy (due to the potential for a buried utility), the loose condition of the pea gravel would make Geoprobe sampling work impossible. Consequently, this boring location was moved approximately five feet south from its originally proposed location to native soil conditions.

Soil samples were collected from each of the two shallow Geoprobe boring locations using a stainless steel sampler fitted with new plastic sleeves supplied by the drilling contractor. The soil samples and related cuttings from the borings were screened by visual/olfactory sense, and were logged by the on-site California Professional Geologist. One discrete soil sample was selected for laboratory analysis from each boring. Additionally, one groundwater sample generally was collected from each of the borings -- following the installation of temporary well casing by the drilling contractor -- using a clean stainless steel bailer that was washed between sample locations.

The four deeper cone penetration test boring locations were advanced using an integrated electronic cone system that provided measurements of cone bearing, sleeve friction and penetration pore water pressure at five centimeter intervals, providing a near-continuous log. The cone tip and steel rods were pressure-washed between drilling locations. Based upon the real-time soils and moisture data, which showed the presence of distinct water-bearing zones, specific depths were selected for groundwater sampling during the drilling work.

Groundwater samples generally were collected from each boring at a Shallow A-Zone depth of 16 to 18 feet below ground surfaces; in the deeper cone penetration test borings, additional groundwater samples also were collected from a Deeper A-Zone depth of about 28 to 30 feet below ground surfaces. The exception was at boring location AG-B5, where no groundwater was encountered within 35 feet of ground surfaces. For the two conventional Geoprobe borings, groundwater samples were collected after installing a temporary PVC casing within the bore holes. For the four cone penetration test locations, groundwater samples were collected from the center of the steel drilling rods upon retraction of the rods from the cone tip at a specific depth to expose a precleaned/disposable screen.



The two soil samples selected for analysis were fitted with Teflon tape and plastic end caps. Groundwater samples were transferred to a series of laboratory-supplied 40 mL VOA vials with hydrochloric acid preservative. The soil and groundwater samples were labeled, preserved with ice, and logged on a chain of custody document for shipment to a State-certified analytical laboratory, in accordance with industry practice.

Following soil sampling operations, the soil borings were backfilled by the drilling contractor with cement grout under the direction and oversight of the ACPWA inspector.

Excess soils generated from each boring during the fieldwork were placed in a sealed and labeled 55-gallon drum, which was labeled and left on-site pending laboratory analysis. Disposal of the containerized material is considered the responsibility of the owner of the subject property.

Field Observations

Soil conditions were found to vary across the subject property. The southern portion of the site generally is underlain by a medium-gray silty clay/clayey silt to depths between about 25 to 28 feet below ground surfaces. This upper material was found to include a thin (one- to two-feet thick) sand strata that produces water (Shallow A Zone) at about 16 to 18 feet. These upper clays and silts were found to be underlain by water-producing sands (Deeper A-Zone) below depths of 25 to 28 feet.

The mentioned thin sand strata at 16 to 18 feet was encountered in only one of two of the northern-most borings (AG-B6). Neither of the northern borings (AG-B5 and AG-B6) revealed sands in the Deeper A-Zone, to the maximum 38-foot depth of exploration, but rather showed a continuation of silts and clays. In AG-B6, the lower silts and clays produced water at a depth of about 30 feet, while no free groundwater was encountered in AG-B5, either via pore pressure dissipation testing or 30 minutes after exposing a screen to subsurface conditions.

No obvious visual or olfactory evidence of contamination was observed in soils or groundwater collected from any of the borings. It was noted that water samples from AG-B6 reacted with the hydrochloric acid preservative, causing effervescence.

Laboratory Analyses

A total of two selected soil samples and five groundwater samples obtained from the borings, as well as one trip blank, were submitted to SunStar Laboratories, Inc. of Lake Forest, California (a State-certified analytical laboratory) for analysis for volatile organic compounds (VOCs) by the EPA 8260B Method. The soil and groundwater samples were analyzed as shown below on Tables I and II. Actual laboratory data and chain-of-custody documentation are presented in Appendix B.



Table ISummary of Soil Laboratory AnalysesGeoprobe Locations2101 Williams Street, San Leandro – February 2013				
Sample				
Identification (feet) 8260B (in ug/kg)				
AG-B1@13'	13 - 13.75	<5.0		
AG-B2@14'	14 - 14.75	<5.0		

Table IISummary of Groundwater Laboratory AnalysesGeoprobe and CPT Locations2101 Williams Street, San Leandro – February 2013						
Sample	Sample Sample EPA					
Identification	Depth	8260B (in ug/L)				
	(feet)	PCE	TCE	cis-1,2-DCE	vinyl chloride	
AG-B1	15 - 20	2.5	<1.0	<1.0	<1.0	
AG-B2	15 - 20	<1.0	<1.0	7.6	16	
AG-B3-S	16	<1.0	<1.0	4.5	14	
AG-B3-D	28	410	63	17	<1.0	
AG-B4-S	18	2.5	<1.0	<1.0	<1.0	
AG-B4-D	30	750	94	47	<1.0	
AG-B6-S	17	<1.0	22	<1.0	<1.0	
AG-B6-D	29	<1.0	44	<1.0	<1.0	

Findings

No evidence of soil contamination was identified in the borings where soil was screened for volatile organic compounds (AG-B1 and AG-B2).

The laboratory also generally reported lower concentrations of VOCs in shallow groundwater than in the deeper zone groundwater. The highest concentration detected (750 parts-per-billion) was collected from groundwater at a depth of 30 feet (Deeper A-Zone) on the mid-eastern margin of the subject property.

Additional Indoor Soil Sampling Work

During Anton Geological's initial visit to the subject property in June 2012, it was noted that the southeastern corner of the interior of the subject building was undergoing major renovation work. The interior floor slab of the building had been removed, exposing underlying base rock and soils. Because this corner of the building is located nearest to the monitor well network and focus of previous environmental investigations, it was suggested that shallow soils beneath the former building slab be sampled and tested for VOCs prior to pouring a new floor foundation.



On June 25, 2012 a total of four soil samples were collected from various areas within the area of the subject building undergoing renovation work as shown on Plate 2H, *Indoor Soil Samples*. Samples were collected by driving clean, two-inch diameter brass or stainless steel sleeves into freshly exposed soils at a depth of approximately 1.5 to two feet below the surface of the exposed soils and base rock. The soils and base rock were found to be densely compacted, making sampling difficult. The sample sleeves were labeled, capped with Teflon tape and plastic end caps, placed on ice, and transported under documented chain-of-custody to SunStar Laboratories, Inc. of Lake Forest, California (a State-certified analytical laboratory) for analysis for volatile organic compounds (VOCs) by the EPA 8260B Method. The laboratory data for the indoor soil sampling work is included in Appendix B. No VOCs were detected in any of these four soil samples collected from beneath the former building foundation floor.

SUMMARY AND CONCLUSIONS

On February 6 and 7, 2013, a total of six soil borings were drilled on the subject property in order to help collect data to determine whether PCE contamination may be related to former on-site activities, or whether it the contamination is entirely from an off-site source.

To determine whether the subject property may have contributed to the contamination condition, two Geoprobe borings were drilled within the former location of an ink room on the southern property margin. Soils sampled from depths below the bottom of the former ink room excavation work (and above first encountered groundwater) revealed no evidence of contamination. Low concentrations of VOCs were detected in groundwater samples collected from the Upper A-Zone at both of these ink room boring locations; the concentrations detected are similar to (or lower than) other concentrations located in monitor wells across the subject property. As such, it does not appear that the former ink room has contributed significantly (if at all) to the existing groundwater contaminant plume.

To determine whether the subject property may be impacted from an off-site contaminant plume, four soil borings were drilled into the Deeper A-Zone along the eastern and northeastern margins of the subject property using cone penetration test (CPT) technology. The maximum depth of exploration was 38 feet, and two distinct A-Zone water-bearing zones were confirmed in all but one of the borings; Boring AG-B5 was found to consist of non-water-bearing clays and silts. Groundwater samples collected from the remaining three CPT borings revealed relatively low concentrations of VOCs in the Shallow A-Zone, and elevated concentrations of VOCs in the Deeper A-Zone, most notably along the mid-eastern property margin. The highest concentration detected, 750 ug/L (AG-B4) was found to be nearly three times higher than what was detected in any on-site monitor well during routine testing in the same month. The highest concentration of PCE detected in monitor wells in February 2013 was 270 ug/L, in a well located downgradient from AG-B4. When the boring sample data presented in this report are combined with the February 2013 monitor well data (as shown on Plates 2B through 2E), the majority of the contaminant plume identified on the subject property presently appears to originate from an offsite source to the east. The groundwater gradient was calculated at 0.002 feet/foot in a westsouthwesterly direction. Four upgradient A-Zone monitor wells on the adjacent parcel have historically shown similarly elevated concentrations of PCE in groundwater. There are no known monitor wells on the adjacent property between these off-site wells and the downgradient subject building.



In previous groundwater monitoring reports, it was noted that the existing on-site monitor well network include A-Zone wells that appear to be screened between two water-bearing zones (Shallow A-Zone and Deeper A-Zone). As such, most of the on-site wells (with the exception of W-10 and B-1) should be considered as "combined" A-Zone wells when comparing data with 2075 Williams Street. Additionally, prior drilling logs for the wells on the western portion of the property (TW-2 and TW-3) show no evidence of a change in stratigraphy to support a separation of the A-Zone, suggesting the possibility for combined zones in this area. Further, an in-ground vault that once extended into groundwater to a maximum depth of 34 feet was abandoned inside the building in the 1990s; the vault and/or its backfill materials may have provided additional opportunity for Shallow and Deeper A-Zone communication on the eastern side of the property, upgradient from TW-2 and TW-3.

Further, to determine whether indoor activities within the southeastern corner of the subject building added to contamination on the subject property (in the corner of the building nearest the majority of the on-site monitor wells), four shallow soil samples were collected from the upper two feet of soil and base rock that had been exposed during interior renovation work in June 2012. No VOCs were detected in any of the four near-surface samples collected.

A copy of this report should be forwarded by 2101 Williams Associates, LLC to Alameda County Environmental Health and the Regional Water Quality Control Board.

QUALITY CONTROL / QUALITY ASSURANCE

Decontamination of exploration equipment included the cleaning and rinsing of the of soil and groundwater contact equipment prior to field operations and between sample drives and boring locations. Soil sampling equipment included drilling contractor supplied plastic sleeves. Groundwater sampling equipment included laboratory supplied glassware (40 ml VOA vials), as well as drilling contractor supplied Schedule 40 PVC temporary well casing and a clean stainless steel bailer.

To assure that analyses are performed in accordance with accepted EPA and State analytical procedures, samples were transported and submitted to a State certified laboratory, which employs internal quality controls. Batch quality control data was requested with the laboratory report documentation.

STATEMENT OF QUALIFICATIONS

Anton Geological is a western U.S. environmental and geological consulting firm based in northern California. Anton Geological was founded by the firm's president, Kenneth Anton, in 1996. Prior to starting Anton Geological, Mr. Anton served as a geologist at a West Sacramento environmental and geotechnical consulting firm. Anton Geological's environmental projects have typically involved multi-acre properties of industrial, commercial, agricultural, and residential subdivision development for land developers, government agencies, and lending/financial institutions. Mr. Anton also is presently a consultant for colleagues at other northern California environmental and geotechnical firms.

Mr. Anton holds a Bachelor of Science degree in Geology form the University of California at Davis, and is a Registered Geologist in the State of California; Mr. Anton is a member of the



Association of Engineering Geologists (AEG). Mr. Anton also has been certified for hazardous waste operations and supervisory training in accordance with OSHA 29 CFR 1910.120. Mr. Anton has attended a number of courses in environmental hazard management through the University of California Extension Program and the California Groundwater Association (GRA). Mr. Anton has completed hundreds of Phase I and II environmental assessments in California, Colorado, Nevada, New Mexico, Oregon and Washington.



The following Tables, Plates and Appendices are attached and complete this report:

Plate 1A	- Topographic Map		
Plate 1B	- Aerial Photograph 2011		
Plate 2A	- Site Map		
Plate 2B	- Groundwater Elevation Map (February 2013 Well Data)		
Plates 2C-2F	- Groundwater Isoconcentration Maps (with February 2013 Well Data)		
Plate 2G	- Noteworthy Nearby Wells		
Plate 2H	- Indoor Soil Sample Locations		
Appendix A	- Boring Logs and Cone Penetration Test Report Data		
Appendix B	- Laboratory Data and Chain of Custody Documentation		

Please contact the undersigned if you have any questions or comments regarding this report.

Very truly yours,

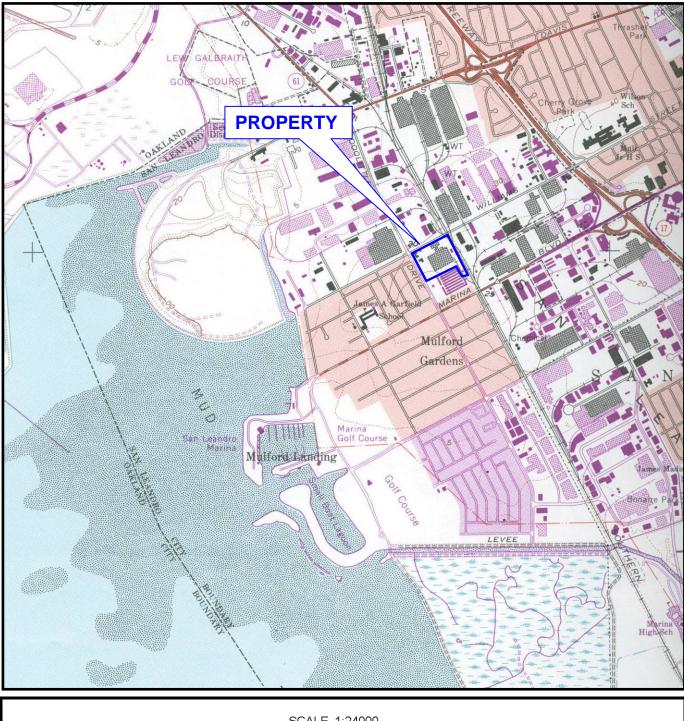
ANTON GEOLOGICAL Kenneth R. Anton Professional Geologist No. 6602

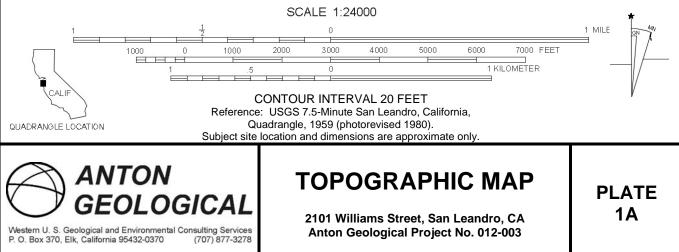
KA:ka

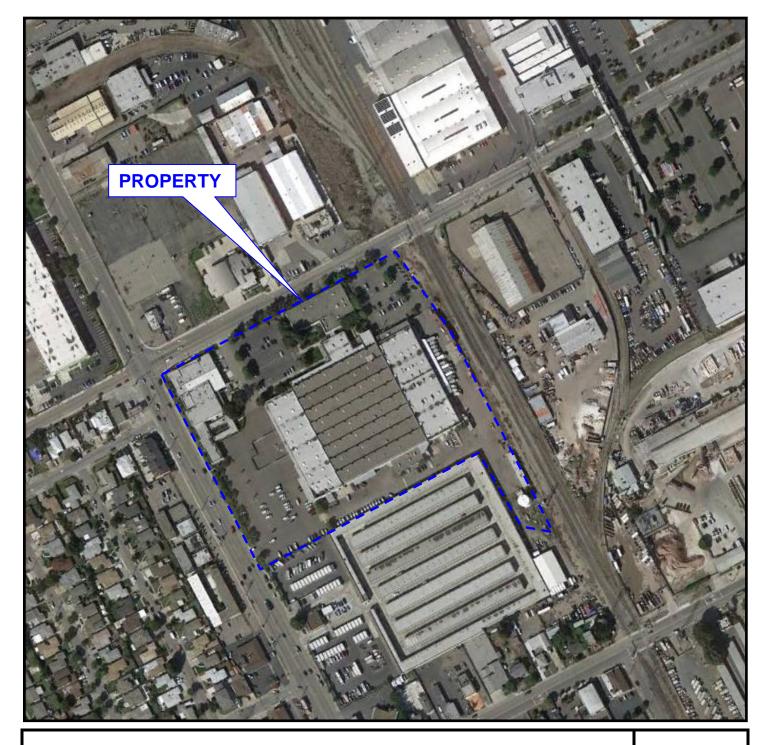
(3) addressee











Notes:

- Photograph dated October 11, 2011.
 Photograph obtained from Google.
- 3. Subject property location and dimensions are approximate only.



PLATE

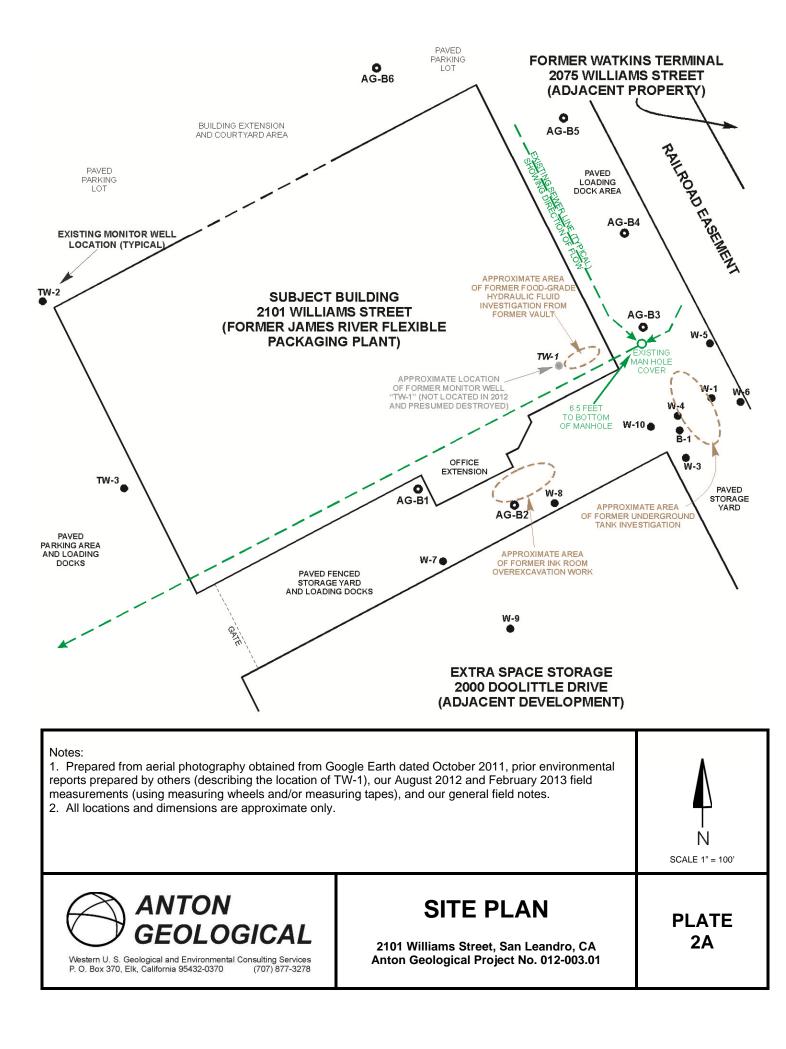
1B

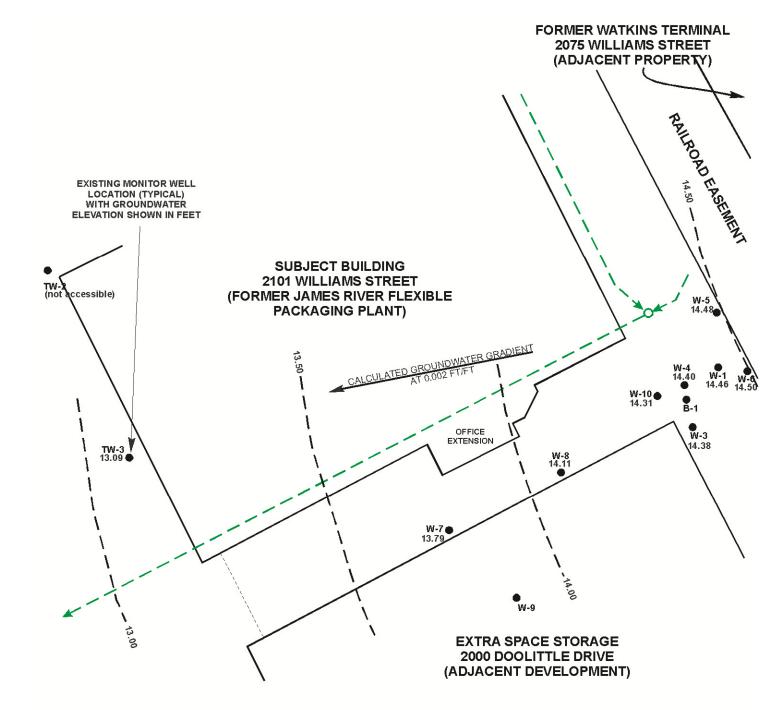


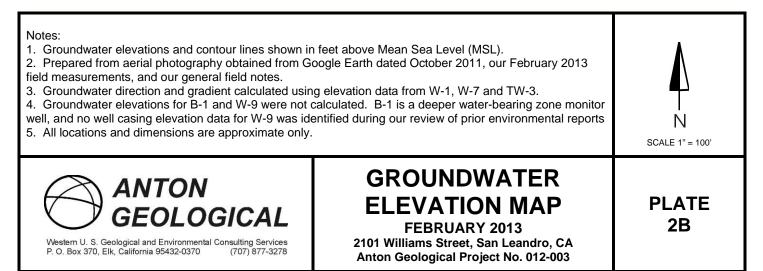
AERIAL PHOTOGRAPH 2011

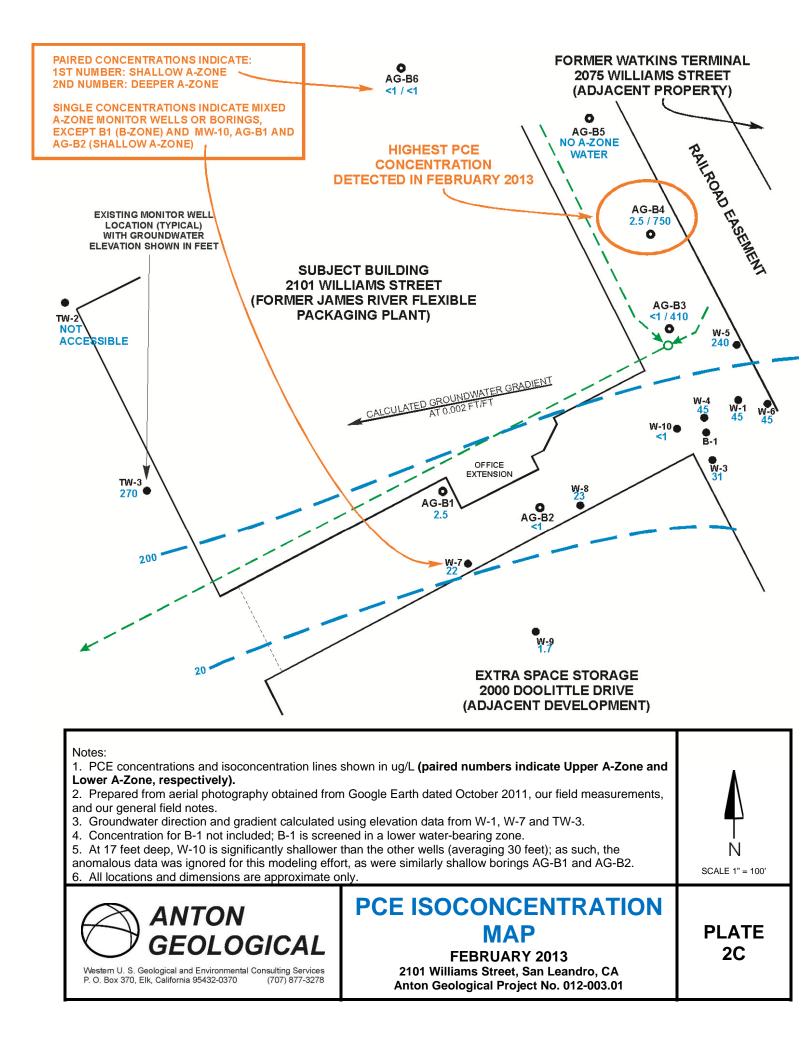
Western U. S. Geological and Environmental Consulting Services P. O. Box 370, Elk, California 95432-0370 (707) 877-3278

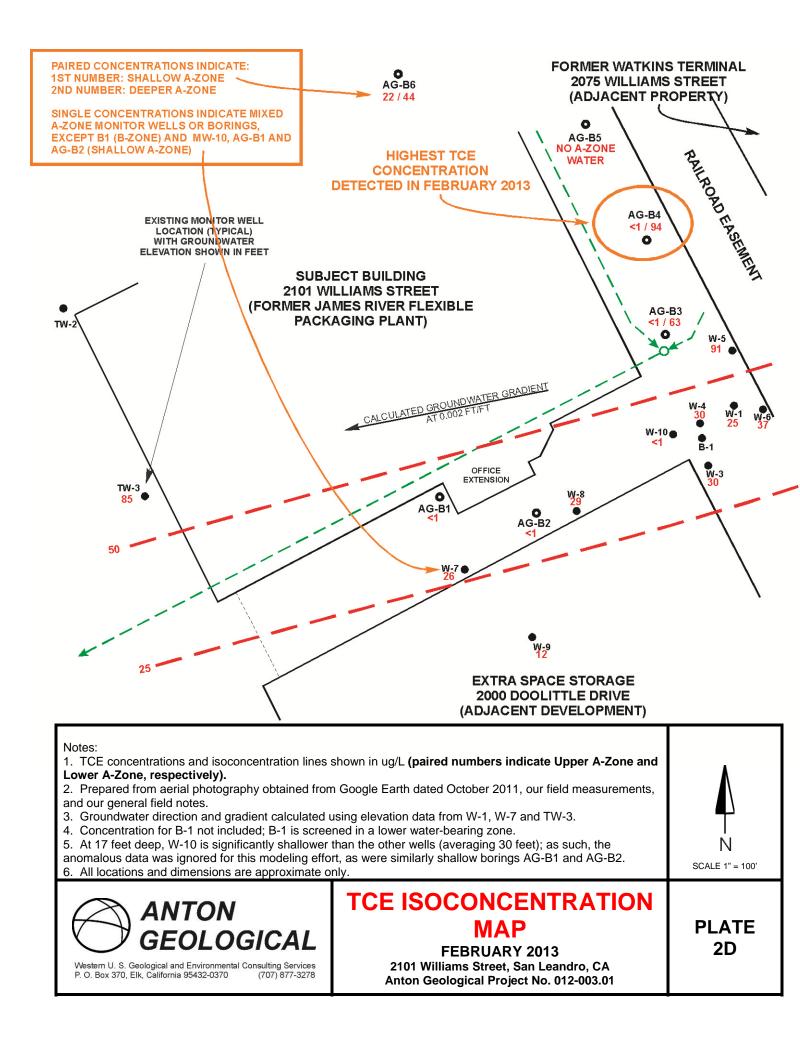
2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003

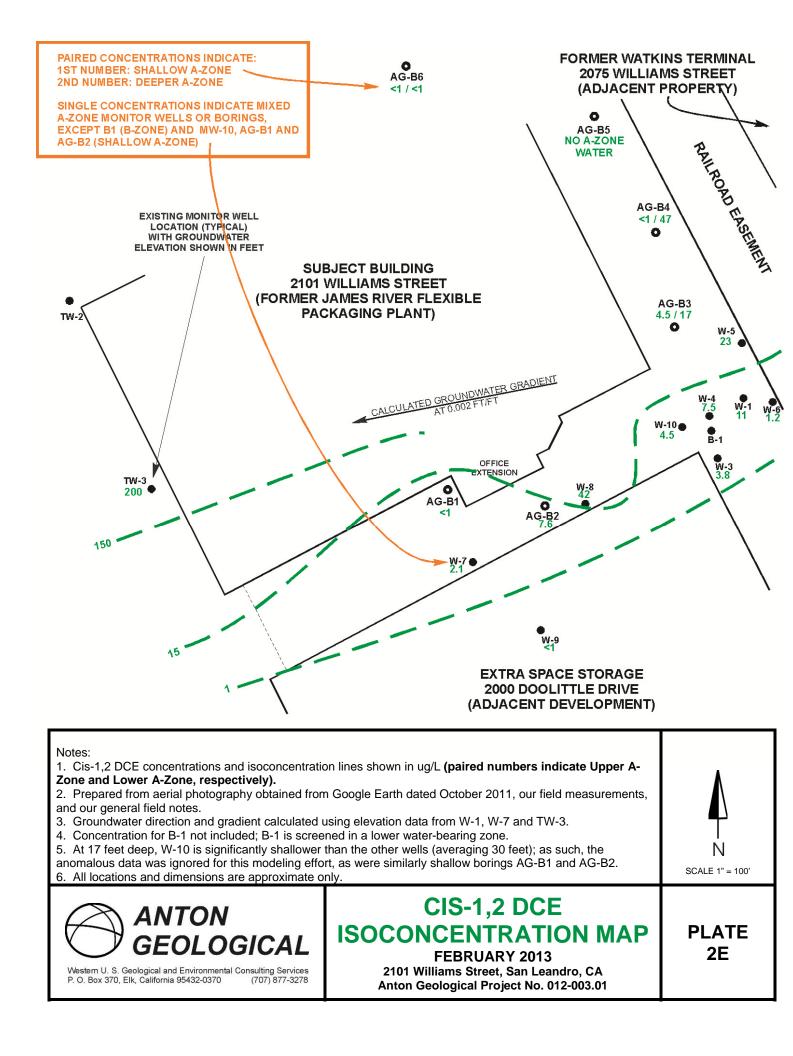


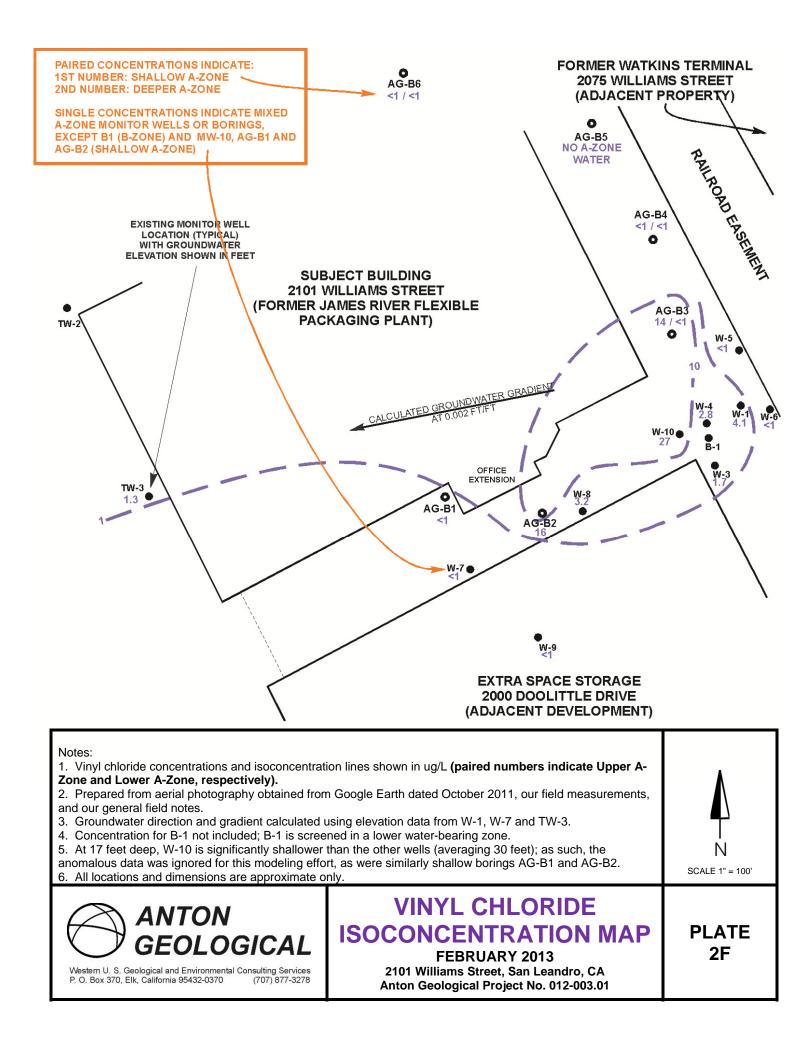


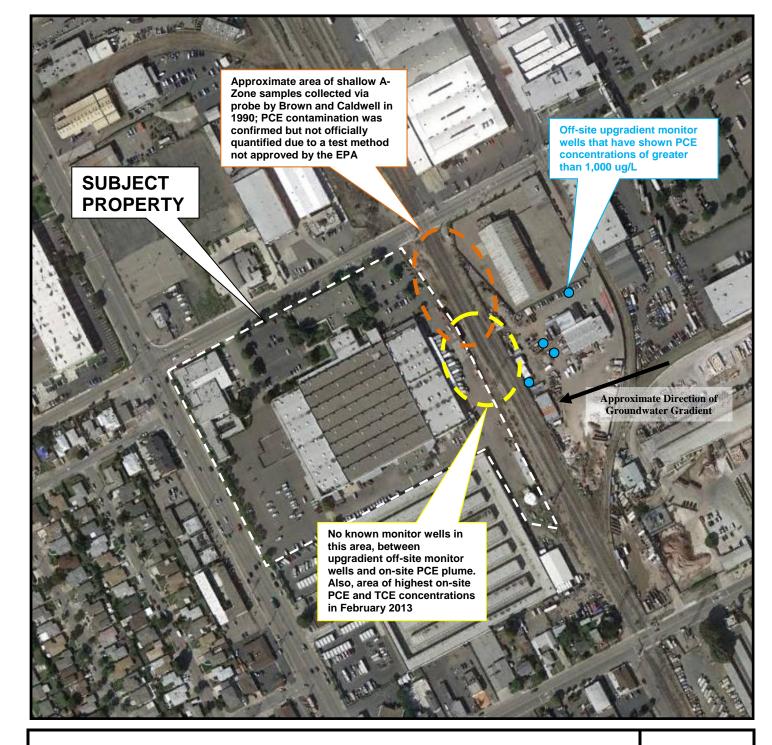












Notes:

- 1. Photograph dated October 11, 2011.
- 2. Photograph obtained from Google.
- 3. All locations and dimensions are approximate only.

4. Off-site well data (for off-site monitor well numbers MW-3/3A, MW-15, MW-15A and MW-16/16A) obtained from Figures 2 and 3 of P&D Environmental, Inc. report entitled "Groundwater and Indoor Air Investigation Report (B25 Through B27, IA1 Through IA3), RWQCB Case #01S0426, Bluewater Environmental Services, Inc. (Former Watkins Terminal) Site, 2075 Williams Street, San Leandro, California", dated July 5, 2012.



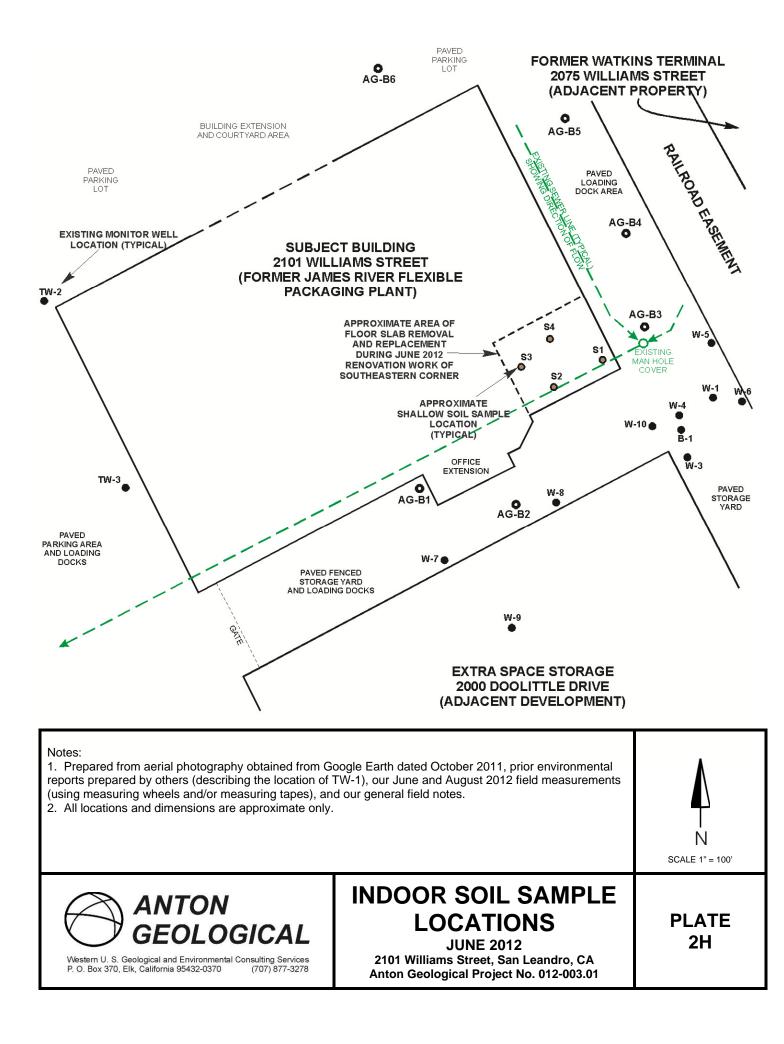
PLATE 2G



Western U. S. Geological and Environmental Consulting Services P. O. Box 370, Elk, California 95432-0370 (707) 877-3278

NOTEWORTHY NEARBY OFF-SITE MONITOR WELLS FEBRUARY 2013

2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003.01



APPENDIX A

BORING LOGS AND CONE PENETRATION TEST REPORT DATA



February 7, 2013

Anton Geotechnical Attn: Kenneth Anton

Subject: CPT Site Investigation 2101 Williams St. San Leandro, California GREGG Project Number: 13-031MA

Dear Mr. Anton:

The following report presents the results of GREGG Drilling & Testing's Cone Penetration Test investigation for the above referenced site. The following testing services were performed:

1	Cone Penetration Tests	(CPTU)	\square
2	Pore Pressure Dissipation Tests	(PPD)	\square
3	Seismic Cone Penetration Tests	(SCPTU)	
4	UVOST Laser Induced Fluorescence	(UVOST)	- 🗌 -
5	Groundwater Sampling	(GWS)	\square
6	Soil Sampling	(SS)	
7	Vapor Sampling	(VS)	
8	Pressuremeter Testing	(PMT)	
9	Vane Shear Testing	(VST)	
10	Dilatometer Testing	(DMT)	

A list of reference papers providing additional background on the specific tests conducted is provided in the bibliography following the text of the report. If you would like a copy of any of these publications or should you have any questions or comments regarding the contents of this report, please do not hesitate to contact our office at (925) 313-5800.

Sincerely, GREGG Drilling & Testing, Inc.

Mayaalden

Mary Walden Operations Manager



Cone Penetration Test Sounding Summary

-Table 1-

CPT Sounding	Date	Termination	Depth of Groundwater	Depth of Soil	Depth of Pore
Identification		Depth (feet)	Samples (feet)	Samples (feet)	Pressure Dissipation
					Tests (feet)
CPT-3	2/06/13	35	16, 28	-	25.1
CPT-4	2/06/13	35	18, 30	-	-
CPT-5	2/06/13	35	18, 30	-	-
CPT-6	2/06/13	38	17, 29	-	-



Bibliography

Lunne, T., Robertson, P.K. and Powell, J.J.M., "Cone Penetration Testing in Geotechnical Practice" E & FN Spon. ISBN 0 419 23750, 1997

Roberston, P.K., "Soil Classification using the Cone Penetration Test", Canadian Geotechnical Journal, Vol. 27, 1990 pp. 151-158.

Mayne, P.W., "NHI (2002) Manual on Subsurface Investigations: Geotechnical Site Characterization", available through www.ce.gatech.edu/~qeosys/Faculty/Mayne/papers/index.html, Section 5.3, pp. 107-112.

Robertson, P.K., R.G. Campanella, D. Gillespie and A. Rice, "Seismic CPT to Measure In-Situ Shear Wave Velocity", Journal of Geotechnical Engineering ASCE, Vol. 112, No. 8, 1986 pp. 791-803.

Robertson, P.K., Sully, J., Woeller, D.J., Lunne, T., Powell, J.J.M., and Gillespie, D.J., "Guidelines for Estimating Consolidation Parameters in Soils from Piezocone Tests", Canadian Geotechnical Journal, Vol. 29, No. 4, August 1992, pp. 539-550.

Robertson, P.K., T. Lunne and J.J.M. Powell, "Geo-Environmental Application of Penetration Testing", Geotechnical Site Characterization, Robertson & Mayne (editors), 1998 Balkema, Rotterdam, ISBN 90 5410 939 4 pp 35-47.

Campanella, R.G. and I. Weemees, "Development and Use of An Electrical Resistivity Cone for Groundwater Contamination Studies", Canadian Geotechnical Journal, Vol. 27 No. 5, 1990 pp. 557-567.

DeGroot, D.J. and A.J. Lutenegger, "Reliability of Soil Gas Sampling and Characterization Techniques", International Site Characterization Conference - Atlanta, 1998.

Woeller, D.J., P.K. Robertson, T.J. Boyd and Dave Thomas, "Detection of Polyaromatic Hydrocarbon Contaminants Using the UVIF-CPT", 53rd Canadian Geotechnical Conference Montreal, QC October pp. 733-739, 2000.

Zemo, D.A., T.A. Delfino, J.D. Gallinatti, V.A. Baker and L.R. Hilpert, "Field Comparison of Analytical Results from Discrete-Depth Groundwater Samplers" BAT EnviroProbe and QED HydroPunch, Sixth national Outdoor Action Conference, Las Vegas, Nevada Proceedings, 1992, pp 299-312.

Copies of ASTM Standards are available through www.astm.org



Cone Penetration Testing Procedure (CPT)

Gregg Drilling carries out all Cone Penetration Tests (CPT) using an integrated electronic cone system, *Figure CPT*. The soundings were conducted using a 20 ton capacity cone with a tip area of 15 cm² and a friction sleeve area of 225 cm². The cone is designed with an equal end area friction sleeve and a tip end area ratio of 0.80.

The cone takes measurements of cone bearing (q_c) , sleeve friction (f_s) and penetration pore water pressure (u_2) at 5cm intervals during penetration to provide a nearly continuous log. CPT data reduction and interpretation is performed in real time facilitating on-site decision The making. above mentioned parameters are stored on disk for further analysis and reference. All CPT soundings are performed in accordance with revised (2007) ASTM standards (D 5778-07).

The cone also contains a porous filter element located directly behind the cone tip (u_2) . It consists of porous plastic and is 5.0mm thick. The filter element is used to obtain penetration pore pressure as the cone is advanced as well as Pore Pressure Dissipation Tests (PPDT's) during appropriate pauses in penetration. It should be noted that prior to penetration, the element is fully saturated with oil under vacuum pressure to ensure accurate and fast dissipation.

The cone has the following accuracy: 1 tsf for q_c , 0.02 tsf for f_s and 0.5 psi for u_2 . In soft clays, a lower capacity cone should be used for improved accuracy.

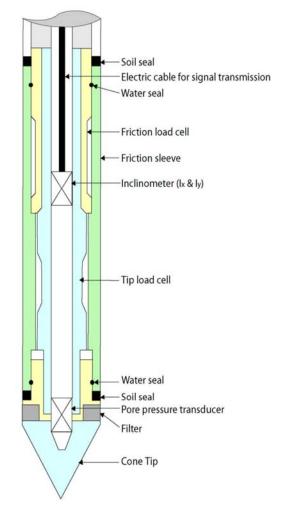


Figure CPT

When the soundings are complete, the test holes are grouted. The grouting procedures generally consist of pushing a hollow tremie pipe with a "knock out" plug to the termination depth of the CPT hole. Grout is then pumped under pressure as the tremie pipe is pulled from the hole. Disruption or further contamination to the site is therefore minimized.



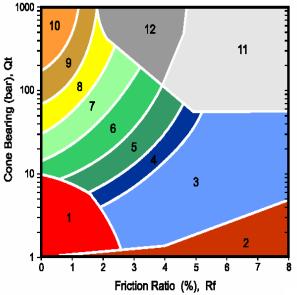
Cone Penetration Test Data & Interpretation

The Cone Penetration Test (CPT) data collected from your site are presented in graphical form in the attached report. The plots include interpreted Soil Behavior Type (SBT) based on the charts described by Robertson (1990). Typical plots display SBT based on the non-normalized charts of Robertson et al (1986). For CPT soundings extending greater than 50 feet, we recommend the use of the normalized charts of Robertson (1990) which can be displayed as SBTn, upon request. The report also includes spreadsheet output of computer calculations of basic interpretation in terms of SBT and SBTn and various geotechnical parameters using current published correlations based on the comprehensive review by Lunne, Robertson and Powell (1997), as well as recent updates by Professor Robertson. The interpretations are presented only as a guide for geotechnical use and should be carefully reviewed. Gregg Drilling & Testing Inc. do not warranty the correctness or the applicability of any of the geotechnical parameters interpreted by the software and do not assume any liability for any use of the results in any design or review. The user should be fully aware of the techniques and limitations of any method used in the software.

Some interpretation methods require input of the groundwater level to calculate vertical effective stress. An estimate of the in-situ groundwater level has been made based on field observations and/or CPT results, but should be verified by the user.

A summary of locations and depths is available in Table 1. Note that all penetration depths referenced in the data are with respect to the existing ground surface.

Note that it is not always possible to clearly identify a soil type based solely on q_t , f_s , and u_2 . In these situations, experience, judgment, and an assessment of the pore pressure dissipation data should be used to infer the correct soil behavior type.





(After Robertson, et al., 1986)

Figure SBT



Groundwater Sampling (GWS)

Gregg Drilling conducts groundwater sampling using a Hydropunch[®] type groundwater sampler, *Figure GWS*. The groundwater sampler has a retrievable stainless steel or disposable PVC screen with steel drop off tip. This allows for samples to be taken at multiple depth intervals within the same sounding location. In areas of slower water recharge, provisions may be made to set temporary PVC well screens during sampling to allow the drill rig to advance to the next sample location while the groundwater is allowed to infiltrate.

The groundwater sampler operates by advancing 1 ³/₄ inch hollow push rods with the filter tip in a closed configuration to the base of the desired sampling interval. Once at the desired sample depth, the push rods are retracted; exposing the encased filter screen allowing groundwater to and infiltrate hydrostatically from the formation into the A small diameter bailer inlet screen. (approximately 1/2 or 3/4 inch) is lowered through the push rods into the screen section for sample collection. The number of downhole trips with the bailer and time necessary to complete the sample collection at each depth interval is a function of sampling protocols, volume requirements, and the yield characteristics and storage capacity of the formation. Upon completion of sample collection, the push rods and sampler, with the exception of the PVC screen and steel drop off tip are retrieved to the ground surface, decontaminated and prepared for the next sampling event.

A summary of the groundwater samples collected, including the sampling date, depth and location identification, is presented in Table 1 and the corresponding CPT plot.

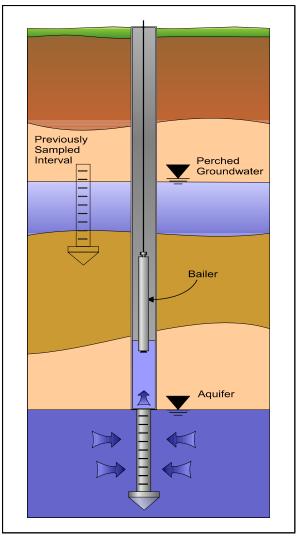


Figure GWS

For a detailed reference on direct push groundwater sampling, refer to Zemo et. al., 1992.



Pore Pressure Dissipation Tests (PPDT)

Pore Pressure Dissipation Tests (PPDT's) conducted at various intervals measured hydrostatic water pressures and determined the approximate depth of the ground water table. A PPDT is conducted when the cone is halted at specific intervals determined by the field representative. The variation of the penetration pore pressure (u) with time is measured behind the tip of the cone and recorded by a computer system.

Pore pressure dissipation data can be interpreted to provide estimates of:

- Equilibrium piezometric pressure
- Phreatic Surface
- In situ horizontal coefficient of consolidation (*c_h*)
- In situ horizontal coefficient of permeability (k_h)

In order to correctly interpret the equilibrium piezometric pressure and/or the phreatic surface, the pore pressure must be monitored until such time as there is no variation in pore pressure with time. Figure PPDT. This time is commonly referred to as t_{100} , the point at which 100% of the excess pore pressure has dissipated.

A complete reference on pore pressure dissipation tests is presented by Robertson et al. 1992.

A summary of the pore pressure dissipation tests is summarized in Table 1.

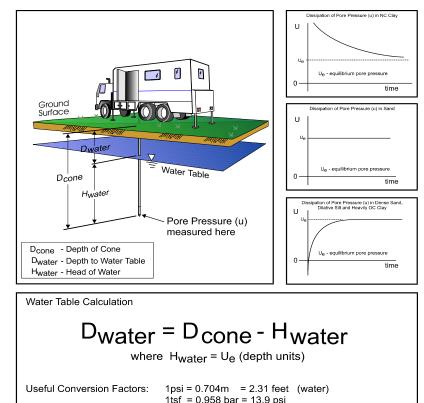
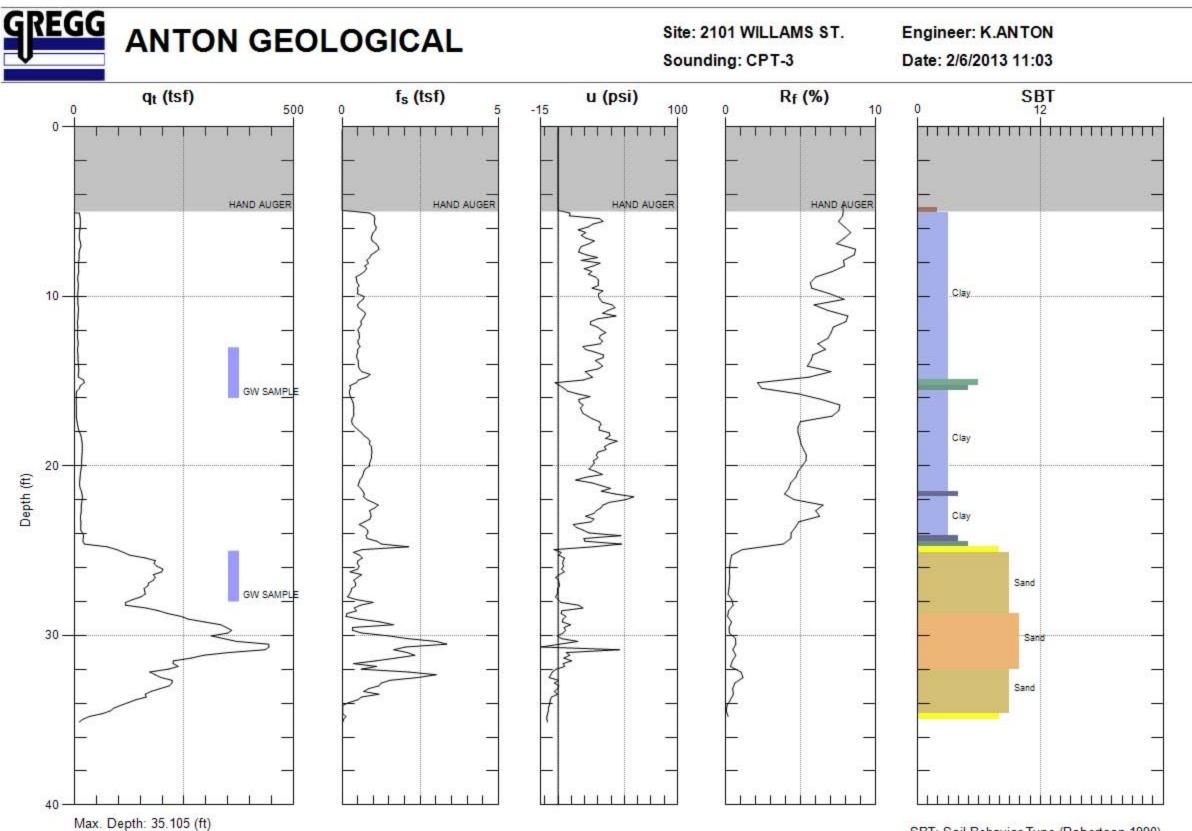


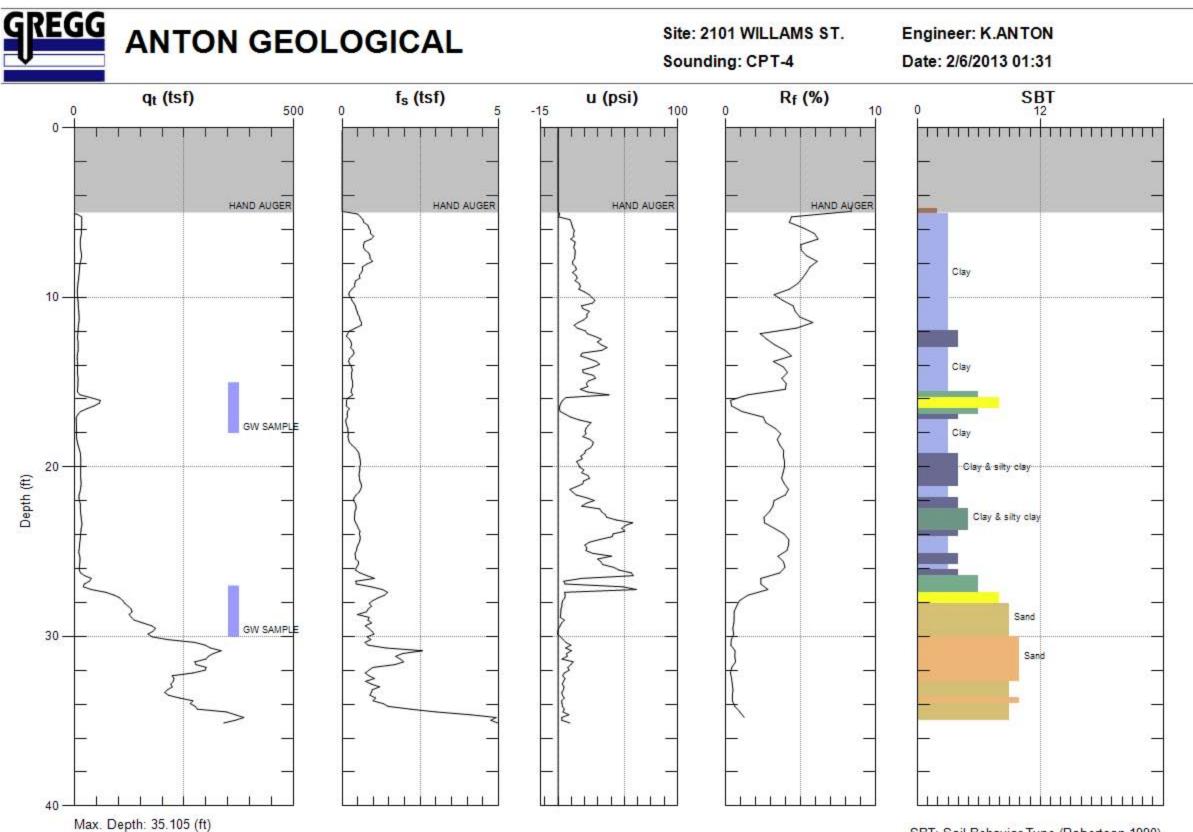
Figure PPDT

1m = 3.28 feet



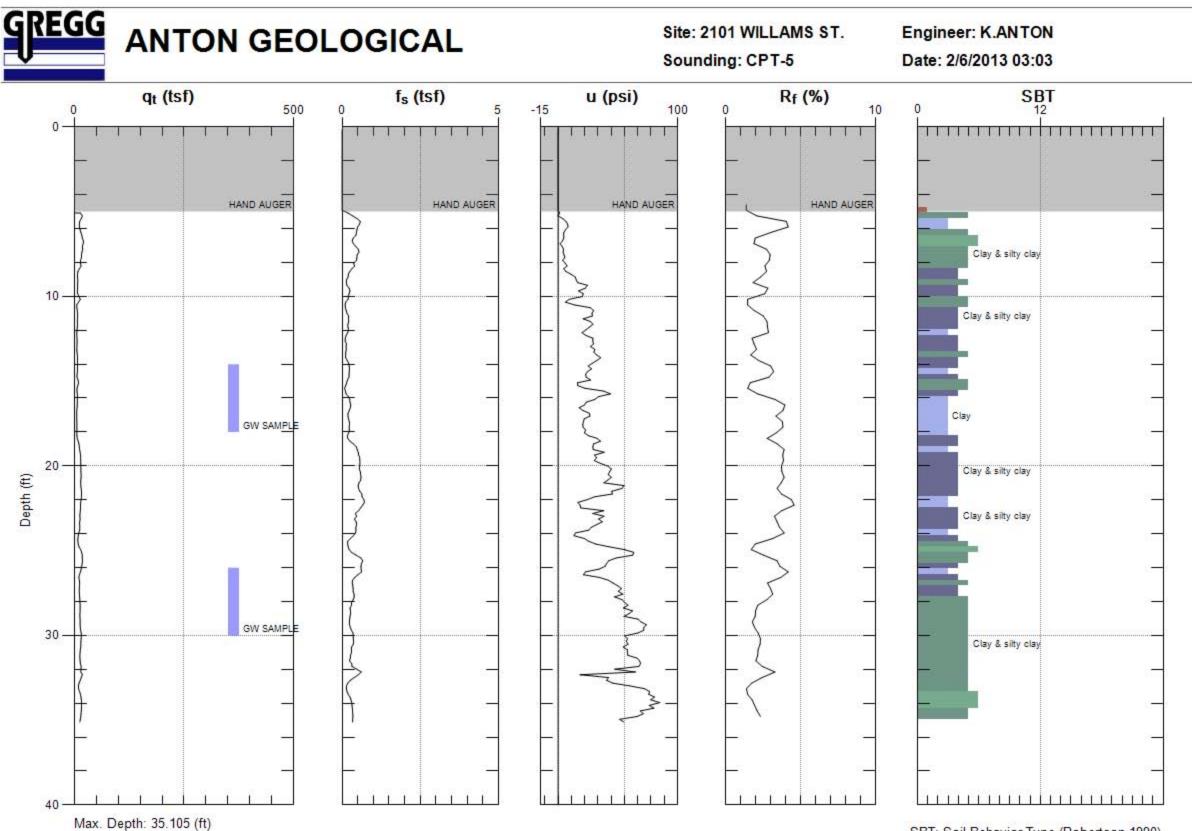
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)



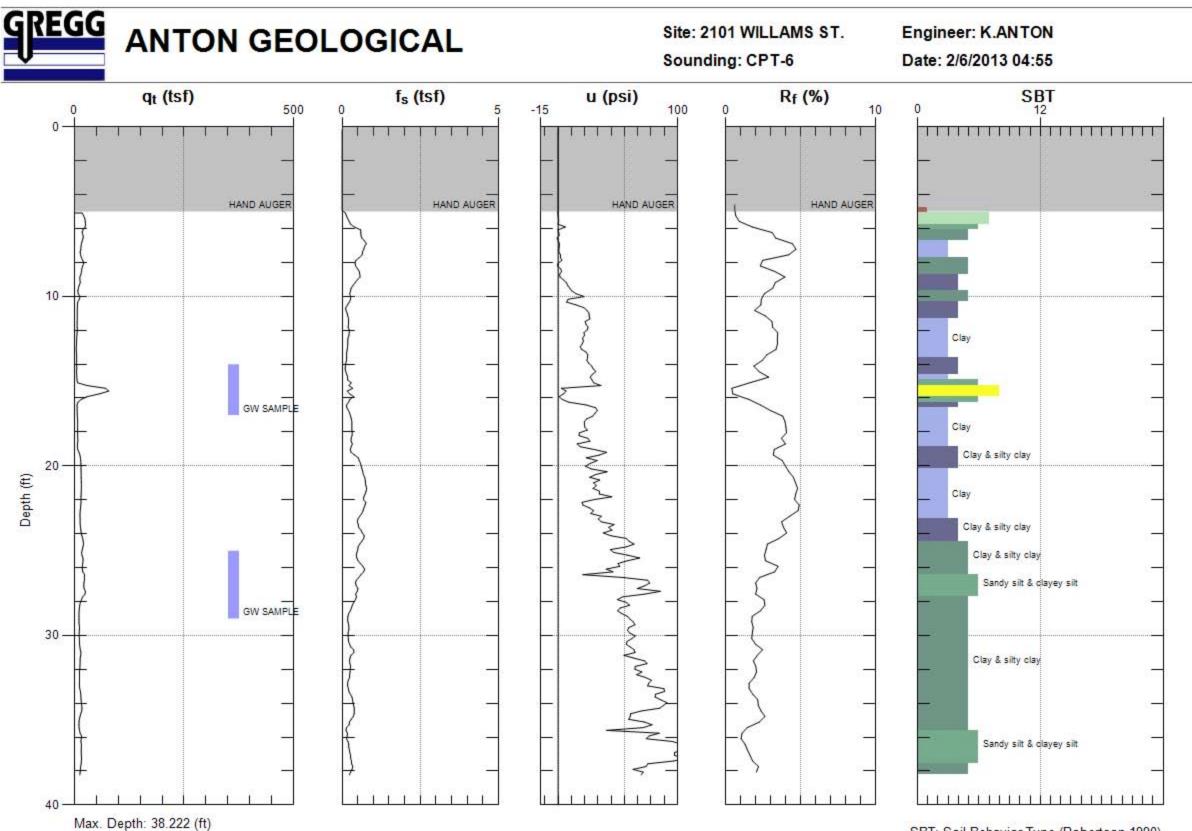
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)



Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)



Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

	ANTON GEOLOGICAL Stern US Environmental and Geological Consulting Services D. Box 370, Elk, California 95432 Tel: 707-877-3278 Internet: www.antongeological.com					BOREHO	
			cal.com		AL D	EPTH: 20'	
PROJEC	T INFOR	MATION		DR	ILLIN	IG INFORMAT	TION
PROJECT: 2101 Williams Street				ING CO.		Gregg Dri	lling & Testing
SITE LOCATION:	2010) Williams Street	DRILL	ER:			
JOB NO.:	012-	003.01	RIG T	YPE:		DP11 Geo	probe
LOGGED BY: Kenneth Anton MET				OD OF D	RILL	ING: continuou	s core
PERMIT NUMBER:	W20	013-0073	SAMP	LING ME	THO	DS: direct pus	h
DATE DRILLED: February 7, 2013 WEA				HER:		overcast, l	ight rain
\bigtriangledown Water level c	during drillin	g 📼 Water leve	l after drillin	ıg			
DEPTH SOIL SYMBOLS	USCS	SOIL DESCRIPTION		SAMPLE ID	PID ppm	BORING COMPLETION	COMPLETION DESCRIPTION
0	AC	Asphalt: Asphalt and gravel ba					
	ML	ML: Dark gray to medium brov silt - turns brown at five feet, ir clay content with depth, mottle feet, slightly most to dry, no or	ncreasing ad at 10 dor	AG-B1@13'	0		— Cement grout
	CL	CL: Brown sandy clay - some pebbles, saturated below 16 fe odor			0		
	CL	CL: Dark gray to black silty cla relatively stiff, slightly moist, n					

Western US Enviror	ANTON GEOLOGICAL estern US Environmental and Geological Consulting Services 0. Box 370, Elk, California 95432 Tel: 707-877-3278 Internet: www.antongeological.com PROJECT INFORMATION						FIELD BOREHOLE LOG BOREHOLE NO.: AG-B2 TOTAL DEPTH: 20'					
				cal.com	DRILLING INFORMATION							
PROJECT: 2101 Williams Street				DRILLI	NG CO.			lling & Testing				
SITE LOCAT	FION:	2010) Williams Street	DRILLI								
JOB NO.:			003.01	RIG T			DP11 Geog	-				
LOGGED BY			neth Anton				ING: continuous					
PERMIT NU			013-0073			THO	DS: direct pus					
DATE DRILL	LED:	Feb	ruary 7, 2013	WEAT			overcast, l	ight rain				
∞ Wa	ater level du	uring drillin	g 🗶 Water leve	I after drillin	g							
	SOIL MBOLS	USCS	SOIL DESCRIPTION		SAMPLE ID	PID ppm	BORING COMPLETION	COMPLETION DESCRIPTION				
		AC	Asphalt: Asphalt and gravel bather of the second state of the seco	ey silt - depth, ted below	AG-B2@14'	0		- Cement grout				
20		CL										
NOTES: Imm	ediately adja	acent to forr	ner ink room excavation					Page 1 of 1				

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 02/04/2013 By jamesy

Permit Numbers: W2013-0073 Permits Valid from 02/06/2013 to 02/07/2013

Application Id: Site Location: Project Start Date: Assigned Inspector:	1359159052272 2101 Williams Street 02/06/2013 Contact Steve Miller at (510) 670-5517 or stever	City of Project Site:San Leandro Completion Date:02/07/2013 m@acpwa.org
Applicant:	2778 - Kenneth Anton	Phone: 707-877-3278
Property Owner:	P. O. Box 370, Elk, CA 95432 Carey Andre	Phone:
Client:	2228 Livingston Street, Oakland, CA 94606 Carey Andre 2228 Livingston Street, Oakland, CA 94606	Phone:
Contact:	Ken Anton	Phone: 707-877-3278 Cell: 707-280-8897

Receipt Number: WR2013-0035 Payer Name : Kenneth R. Antor		\$265.00 <u>\$265.00</u> PAID IN FULL
--	--	---

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 6 Boreholes Driller: Gregg Drilling & Testing, Inc. - Lic #: 485166 - Method: CPT

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2013-	02/04/2013	05/07/2013	6	2.00 in.	35.00 ft
0073					

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled,

Alameda County Public Works Agency - Water Resources Well Permit

properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX B LABORATORY DATA



PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

14 February 2013

Ken Anton Anton Geological P.O. Box 370 Elk, CA 95432 RE: 2101 Williams

Enclosed are the results of analyses for samples received by the laboratory on 02/08/13 10:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wordy Hsia

Wendy Hsiao Project Manager



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	02/14/13 14:53

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AG-B3-S	T130286-01	Water	02/06/13 00:00	02/08/13 10:00
AG-B3-D	T130286-02	Water	02/06/13 00:00	02/08/13 10:00
AG-B4-S	T130286-03	Water	02/06/13 00:00	02/08/13 10:00
AG-B4-D	T130286-04	Water	02/06/13 00:00	02/08/13 10:00
AG-B6-S	T130286-05	Water	02/06/13 00:00	02/08/13 10:00
AG-B6-D	T130286-06	Water	02/06/13 00:00	02/08/13 10:00
AG-B2@14	T130286-07	Soil	02/07/13 00:00	02/08/13 10:00
AG-B2	T130286-08	Water	02/06/13 00:00	02/08/13 10:00
AG-B1@13	T130286-09	Soil	02/07/13 00:00	02/08/13 10:00
AG-B1	T130286-10	Water	02/06/13 00:00	02/08/13 10:00
TRIP BLANK	T130286-11	Water	02/06/13 00:00	02/08/13 10:00

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological P.O. Box 370			Reported:							
Elk CA, 95432	I	Project Manag	er: Ken A	Anton				02/14/13 14:53		
		А	G-B3-S							
		T13028	6-01 (W	ater)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
		SunStar La	aborator	ries, Inc.						
Volatile Organic Compounds by F	EPA Method 8260)B								
Bromobenzene	ND	1.0	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B		
Bromochloromethane	ND	1.0	"	"	"	"	"	"		
Bromodichloromethane	ND	1.0	"	"	"	"	"	"		
Bromoform	ND	1.0	"	"	"	"	"	"		
Bromomethane	ND	1.0	"	"	"	"	"	"		
n-Butylbenzene	ND	1.0	"	"	"	"	"			
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"		
tert-Butylbenzene	ND	1.0	"	"	"	"	"			
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"		
Chlorobenzene	ND	1.0	"	"	"	"	"	"		
Chloroethane	ND	1.0	"	"	"	"	"			
Chloroform	ND	1.0	"	"	"	"	"	"		
Chloromethane	ND	1.0	"	"	"	"	"	"		
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"		
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"		
Dibromochloromethane	ND	1.0	"	"	"	"	"	"		
1,2-Dibromo-3-chloropropane	ND	1.0	"	"	"	"	"	"		
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"		
Dibromomethane	ND	1.0	"	"	"	"	"	"		
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"		
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"		
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"		
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"		
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"		
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"		
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"		
cis-1,2-Dichloroethene	4.5	1.0	"	"		"	"			
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"		
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"		
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"		
2,2-Dichloropropane	ND	1.0	"	"		"	"			
1,1-Dichloropropene	ND	1.0	"	"	"		"	"		

SunStar Laboratories, Inc.

everly flsia



Anton Geological P.O. Box 370 Elk CA, 95432	Project: 2101 Williams Project Number: 012-003.01 Project Manager: Ken Anton								Reported: 02/14/13 14:53	
		A T13028	G-B3-S 6-01 (W	ater)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
		SunStar La	aborato	ries, Inc.						
Volatile Organic Compounds by	EPA Method 826)B								
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B		
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"		
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"		
Isopropylbenzene	ND	1.0	"	"	"	"	"	"		
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"		
Methylene chloride	ND	1.0	"	"	"		"	"		
Naphthalene	ND	1.0	"	"	"	"	"	"		
n-Propylbenzene	ND	1.0	"	"	"	"	"	"		
Styrene	ND	1.0	"	"	"	"	"	"		
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"		
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"		
Tetrachloroethene	ND	1.0	"	"	"	"	"	"		
1,2,3-Trichlorobenzene	ND	1.0	"	"	"		"	"		
1,2,4-Trichlorobenzene	ND	1.0	"	"	"		"	"		
1,1,2-Trichloroethane	ND	1.0	"	"	"		"	"		
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"		
Trichloroethene	ND	1.0	"	"	"	"	"	"		
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"		
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"		
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"		
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"		
Vinyl chloride	14	1.0	"	"	"	"	"	"		
Benzene	ND	0.50	"	"	"	"	"			
Foluene	ND	0.50	"	"	"	"	"			
Ethylbenzene	ND	0.50	"	"	"	"	"	"		
m,p-Xylene	ND	1.0	"	"	"	"	"	"		
p-Xylene	ND	0.50	"	"	"	"	"	"		
Surrogate: 4-Bromofluorobenzene		92.9 %	83.5	-119	"	"	"	"		
Surrogate: Dibromofluoromethane		112 %		136	"	"	"	"		
Surrogate: Toluene-d8		95.8 %		-117	"	"	"	"		

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological		-		Williams				Reported	
P.O. Box 370		Project Number: 012-003.01							
Elk CA, 95432	Pr	oject Manag	er: Ken	Anton				02/14/13 14	:53
		A	G- B3-D)					
		T13028	6-02 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
<i>,</i>		SunStar La	aborato	ries, Inc.		1			
Volatile Organic Compounds by H				,					
Bromobenzene	ND	1.0	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50		"			"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	17	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0		"		"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological		Proje	ct: 2101	Williams							
P.O. Box 370			Reported:								
Elk CA, 95432	Project Manager: Ken Anton							02/14/13 14:53			
		A	G-B3-D								
T130286-02 (Water)											
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
		SunStar La	aborato	ries, Inc.							
Volatile Organic Compounds by H	EPA Method 8260)B									
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B			
rans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"				
Hexachlorobutadiene	ND	1.0	"	"	"	"	"				
Isopropylbenzene	ND	1.0	"	"	"	"	"	"			
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"			
Methylene chloride	ND	1.0	"	"	"	"	"	"			
Naphthalene	ND	1.0	"	"	"	"	"				
n-Propylbenzene	ND	1.0	"	"		"	"	"			
Styrene	ND	1.0	"	"		"	"	"			
1,1,2,2-Tetrachloroethane	ND	1.0	"	"		"	"	"			
1,1,1,2-Tetrachloroethane	ND	1.0	"	"		"	"	"			
Fetrachloroethene	410	10	"	10		"	"	"			
1,2,3-Trichlorobenzene	ND	1.0	"	1	"	"	"	"			
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"			
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"				
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"				
Frichloroethene	63	1.0	"	"	"	"	"				
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"			
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"			
1,3,5-Trimethylbenzene	ND	1.0	"	"		"	"	"			
1,2,4-Trimethylbenzene	ND	1.0	"	"		"	"	"			
Vinyl chloride	ND	1.0	"	"		"	"	"			
Benzene	ND	0.50	"	"		"	"	"			
Foluene	ND	0.50	"	"		"	"				
Ethylbenzene	ND	0.50	"	"		"	"	"			
m,p-Xylene	ND	1.0	"	"		"	"	"			
p-Xylene	ND	0.50	"	"		"	"	"			
Surrogate: 4-Bromofluorobenzene		90.1 %	83 5	-119	"	"	"	"			
Surrogate: Dibromofluoromethane		115 %		136	"	"	"	"			
Surrogate: Toluene-d8		96.2 %		130 2-117	"	"	"	"			

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological P.O. Box 370 Elk CA, 95432	Project Number: 012-003.01								Reported: 02/14/13 14:53	
		A T13028	G-B4-S 6-03 (W	ater)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar La	aborato	ries, Inc.						
Volatile Organic Compounds by E	CPA Method 8260	3								
Bromobenzene	ND	1.0	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B		
Bromochloromethane	ND	1.0	"	"	"	"	"			
Bromodichloromethane	ND	1.0	"	"	"	"	"			
Bromoform	ND	1.0	"	"	"	"	"	"		
Bromomethane	ND	1.0	"	"	"	"	"			
n-Butylbenzene	ND	1.0	"	"	"	"	"	"		
sec-Butylbenzene	ND	1.0	"	"			"	"		
ert-Butylbenzene	ND	1.0	"	"			"	"		
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"		
Chlorobenzene	ND	1.0	"	"	"	"	"	"		
Chloroethane	ND	1.0	"	"	"	"	"	"		
Chloroform	ND	1.0	"	"	"	"	"	"		
Chloromethane	ND	1.0	"	"	"	"	"			
2-Chlorotoluene	ND	1.0	"	"	"	"	"			
4-Chlorotoluene	ND	1.0	"	"		"	"	"		
Dibromochloromethane	ND	1.0	"	"		"	"	"		
1,2-Dibromo-3-chloropropane	ND	1.0	"	"		"	"			
1,2-Dibromoethane (EDB)	ND	1.0	"	"		"	"			
Dibromomethane	ND	1.0	"	"			"	"		
1,2-Dichlorobenzene	ND	1.0	"	"			"	"		
1,3-Dichlorobenzene	ND	1.0	"	"			"			
1,4-Dichlorobenzene	ND	1.0	"	"			"			
Dichlorodifluoromethane	ND	0.50	"	"		"	"			
1,1-Dichloroethane	ND	1.0	"	"			"	"		
1,2-Dichloroethane	ND	0.50	"	"		"	"	"		
1,1-Dichloroethene	ND	1.0	"	"		"	"	"		
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"		
rans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"		
1,2-Dichloropropane	ND	1.0		"		"	"	"		
1,3-Dichloropropane	ND	1.0		"		"	"	"		
2,2-Dichloropropane	ND	1.0		"		"	"	"		
1,1-Dichloropropene	ND	1.0	"	"			"			

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological P.O. Box 370 Elk CA, 95432		Proje Project Numb Project Manag	er: 012-0					Reported 02/14/13 14	
		A(T13028	G-B4-S 6-03 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborator	ries, Inc.					
Volatile Organic Compounds by	EPA Method 826	0B							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"		"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	2.5	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"		"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"		"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"		"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"		"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"		"	"	
Vinyl chloride	ND	1.0	"	"	"		"	"	
Benzene	ND	0.50	"	"	"	"	"		
Foluene	ND	0.50	"	"	"	"	"		
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
n,p-Xylene	ND	1.0	"	"	"	"	"	"	
p-Xylene	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.5 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		121 %		136	"	"	"	"	
Surrogate: Toluene-d8		96.5 %		-117	"	"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological		-		Williams				D ()	
P.O. Box 370		roject Numb						Reported	
Elk CA, 95432	Pr	oject Manag	er: Ken A	Anton				02/14/13 14	:53
			G-B4-D						
		T13028	6-04 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	:	SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by F	EPA Method 8260H	3							
Bromobenzene	ND	1.0	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"		
Bromodichloromethane	ND	1.0	"	"	"	"	"		
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"		"	"	"	
sec-Butylbenzene	ND	1.0	"	"		"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"		
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"		"	"	"	
Chloroform	ND	1.0	"	"	"	"	"		
Chloromethane	ND	1.0	"	"	"	"	"		
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"		"	"		
1,4-Dichlorobenzene	ND	1.0	"	"		"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"		"	"	"	
1,1-Dichloroethane	ND	1.0	"	"		"	"		
1,2-Dichloroethane	ND	0.50	"	"		"	"		
1,1-Dichloroethene	ND	1.0	"	"			"		
cis-1,2-Dichloroethene	47	1.0	"	"		"	"		
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"		
1,2-Dichloropropane	ND	1.0	"	"	"	"	"		
1,3-Dichloropropane	ND	1.0	"	"		"	"		
2,2-Dichloropropane	ND	1.0	"	"		"	"		
1,1-Dichloropropene	ND	1.0	"	"			"		

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological		Proje	ct: 2101	Williams					
P.O. Box 370		Project Numb	er: 012-0	03.01				Reported	:
Elk CA, 95432	:	Project Manag	er: Ken A	Anton				02/14/13 14	:53
			G-B4-D						
		T13028	6-04 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by l	EPA Method 826)B							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"		
Hexachlorobutadiene	ND	1.0	"	"	"	"	"		
Isopropylbenzene	ND	1.0	"	"	"	"	"		
p-Isopropyltoluene	ND	1.0	"	"	"	"	"		
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	750	10	"	10	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	1	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"		
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"		
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"		
Trichloroethene	94	1.0	"	"	"	"	"		
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"		
Ethylbenzene	ND	0.50	"	"	"	"	"		
m,p-Xylene	ND	1.0	"	"		"	"		
p-Xylene	ND	0.50	"	"		"	"		
Surrogate: 4-Bromofluorobenzene		89.2 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		107 %		136	"	"	"	"	
Surrogate: Toluene-d8		100 %		-117	"	"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological P.O. Box 370 Elk CA, 95432		Proje Project Numb roject Manag	er: 012-0					Reported 02/14/13 14	
		A T13028	G-B6-S 6-05 (W						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by E	PA Method 8260	В							
Bromobenzene	ND	1.0	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"		"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"		"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
ert-Butylbenzene	ND	1.0	"	"	"	"		"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"		"		"	
Chloroform	ND	1.0	"	"		"		"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"		"	"	"	
Dibromochloromethane	ND	1.0	"	"		"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.0	"	"		"		"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"		"		"	
Dibromomethane	ND	1.0	"	"		"		"	
1,2-Dichlorobenzene	ND	1.0	"	"		"		"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"		"	
1,4-Dichlorobenzene	ND	1.0		"		"		"	
Dichlorodifluoromethane	ND	0.50		"		"		"	
1,1-Dichloroethane	ND	1.0		"		"		"	
1,2-Dichloroethane	ND	0.50	"	"		"		"	
1,1-Dichloroethene	ND	1.0	"	"			"	"	
cis-1,2-Dichloroethene	ND	1.0		"			"	"	
trans-1,2-Dichloroethene	ND	1.0		"			"	"	
1,2-Dichloropropane	ND	1.0		"			"	"	
1,3-Dichloropropane	ND	1.0	"	"			"	"	
2,2-Dichloropropane	ND	1.0		"				"	
1,1-Dichloropropene	ND	1.0						"	

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological P.O. Box 370 Elk CA, 95432		Proje Project Numb Project Manag	er: 012-0					Reported 02/14/13 14	
		A T13028	G-B6-S 6-05 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by	EPA Method 826	0B							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"		"	"	"	
Naphthalene	ND	1.0	"	"		"	"	"	
n-Propylbenzene	ND	1.0	"	"		"	"	"	
Styrene	ND	1.0	"	"		"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"		"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"		"	"	"	
Tetrachloroethene	ND	1.0	"	"		"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"		"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"		"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"		"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"		"	"	"	
Trichloroethene	22	1.0	"	"		"	"	"	
Trichlorofluoromethane	ND	1.0	"	"		"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"		"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"		"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"		"	"	"	
Vinyl chloride	ND	1.0	"	"		"	"	"	
Benzene	ND	0.50	"	"		"	"	"	
Foluene	ND	0.50	"	"		"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.0 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		120 %		136	"	"	"	"	
Surrogate: Toluene-d8		99.0 %		-117	"	"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological P.O. Box 370 Elk CA, 95432		Proje roject Numb roject Manag	er: 012-0					Reported 02/14/13 14	
		A(T13028	G-B6-D 6-06 (W						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by E	EPA Method 8260I	3							
Bromobenzene	ND	1.0	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"		"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"		
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"		
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"		
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"		"	"		
Dibromomethane	ND	1.0	"	"			"	"	
1,2-Dichlorobenzene	ND	1.0	"	"			"	"	
1,3-Dichlorobenzene	ND	1.0	"	"		"	"		
1,4-Dichlorobenzene	ND	1.0	"	"		"	"		
Dichlorodifluoromethane	ND	0.50	"	"			"	"	
1,1-Dichloroethane	ND	1.0	"	"			"	"	
1,2-Dichloroethane	ND	0.50	"	"		"	"	"	
1,1-Dichloroethene	ND	1.0	"	"		"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"		"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"		"	"		
1,2-Dichloropropane	ND	1.0	"	"		"	"		
1,3-Dichloropropane	ND	1.0	"	"		"	"		
2,2-Dichloropropane	ND	1.0	"	"		"	"	"	
1,1-Dichloropropene	ND	1.0		"			"	"	

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological		Proje	ct: 2101	Williams					
P.O. Box 370		Project Numb	er: 012-0	03.01				Reported	:
Elk CA, 95432	1	Project Manag	er: Ken A	Anton				02/14/13 14	:53
		A	G-B6-D						
		T13028	6-06 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborator	ries, Inc.					
Volatile Organic Compounds by	EPA Method 8260)B							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"		"	"	"	
n-Propylbenzene	ND	1.0	"	"		"	"	"	
Styrene	ND	1.0	"	"	"	"	"		
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"		
1,1,1,2-Tetrachloroethane	ND	1.0	"	"		"	"	"	
Tetrachloroethene	ND	1.0	"	"		"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"		"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"		"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"		"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"		"	"		
Trichloroethene	44	1.0	"	"		"	"		
Trichlorofluoromethane	ND	1.0	"	"	"	"	"		
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"		
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"		
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"		
Vinyl chloride	ND	1.0	"	"	"	"	"		
Benzene	ND	0.50	"	"		"	"	"	
Foluene	ND	0.50	"	"	"	"	"		
Ethylbenzene	ND	0.50	"	"		"	"		
m,p-Xylene	ND	1.0	"	"		"	"		
p-Xylene	ND	0.50	"	"		"	"		
Surrogate: 4-Bromofluorobenzene		89.9 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		114 %		136	"	"	"	"	
Surrogate: Toluene-d8		100 %		-117	"	"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological		5	ect: 2101					D ()		
P.O. Box 370		oject Numb						Reported:		
Elk CA, 95432	Pro	oject Manag	er: Ken A	Anton				02/14/13 14	:53	
			-B2@1							
		T1302	86-07 (S	oil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
	S	SunStar La	aborator	ies, Inc.						
Volatile Organic Compounds by E	EPA Method 8260B	6								
Bromobenzene	ND	5.0	ug/kg	1	3020825	02/08/13	02/08/13	EPA 8260B		
Bromochloromethane	ND	5.0	"	"		"	"			
Bromodichloromethane	ND	5.0	"	"	"	"	"			
Bromoform	ND	5.0	"	"	"	"	"			
Bromomethane	ND	5.0	"	"	"	"	"			
n-Butylbenzene	ND	5.0	"	"	"	"	"	"		
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"		
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"		
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"		
Chlorobenzene	ND	5.0	"	"	"	"	"	"		
Chloroethane	ND	5.0	"	"	"	"	"	"		
Chloroform	ND	5.0	"	"	"	"	"	"		
Chloromethane	ND	5.0	"	"	"	"	"	"		
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"		
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"		
Dibromochloromethane	ND	5.0	"	"	"	"	"	"		
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"		
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"		
Dibromomethane	ND	5.0	"	"	"	"	"	"		
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"		
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"			
1,4-Dichlorobenzene	ND	5.0	"	"			"	"		
Dichlorodifluoromethane	ND	5.0	"	"			"	"		
1,1-Dichloroethane	ND	5.0	"	"			"	"		
1,2-Dichloroethane	ND	5.0	"	"		"	"	"		
1,1-Dichloroethene	ND	5.0	"	"			"	"		
cis-1,2-Dichloroethene	ND	5.0	"	"		"	"	"		
trans-1,2-Dichloroethene	ND	5.0	"	"		"	"	"		
1,2-Dichloropropane	ND	5.0	"			"	"	"		
1,3-Dichloropropane	ND	5.0	"	"		"	"	"		
2,2-Dichloropropane	ND	5.0	"	"		"	"	"		
1,1-Dichloropropene	ND	5.0	"			"	"	"		

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological P.O. Box 370 Elk CA, 95432		Proje Project Numb Project Manag		03.01				Reported 02/14/13 14	
			-B2@1 86-07 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborator	ries, Inc.					
Volatile Organic Compounds by 1	EPA Method 826)B							
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	3020825	02/08/13	02/08/13	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"		
Tetrachloroethene	ND	5.0	"	"	"	"	"		
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Foluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	5.0	"	"	"	"	"	"	
p-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	81.2	-123	"	"	"	"	
Surrogate: Dibromofluoromethane		108 %		-135	"	"	"	"	
Surrogate: Toluene-d8		89.6 %		-116	"	"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological P.O. Box 370 Elk CA, 95432		Proje roject Numb oject Manag	er: 012-0					Reported 02/14/13 14	
		A T13028	G-B2 6-08 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
	:	SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by E	EPA Method 8260I	3							
Bromobenzene	ND	1.0	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"		
Bromodichloromethane	ND	1.0	"	"	"	"	"		
Bromoform	ND	1.0	"	"	"	"	"		
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"		"	"		
Chloroethane	ND	1.0	"	"		"	"		
Chloroform	ND	1.0	"	"		"	"		
Chloromethane	ND	1.0	"	"		"	"	"	
2-Chlorotoluene	ND	1.0	"	"		"	"	"	
4-Chlorotoluene	ND	1.0	"	"					
Dibromochloromethane	ND	1.0	"	"					
1,2-Dibromo-3-chloropropane	ND	1.0	"	"			"		
1,2-Dibromoethane (EDB)	ND	1.0	"	"			"		
Dibromomethane	ND	1.0	"	"		"		"	
1,2-Dichlorobenzene	ND	1.0	"	"		"		"	
1,3-Dichlorobenzene	ND	1.0	"	"		"	"		
1,4-Dichlorobenzene	ND	1.0	"	"			"	"	
Dichlorodifluoromethane	ND	0.50	"	"			"	"	
1,1-Dichloroethane	ND	1.0	"	"			"	"	
1,2-Dichloroethane	ND	0.50	"	"		"	"	"	
1,1-Dichloroethene	ND	1.0	"	"		"	"	"	
cis-1,2-Dichloroethene	7.6	1.0	"	"		"	"	"	
trans-1,2-Dichloroethene	ND	1.0		"			"		
1,2-Dichloropropane	ND	1.0		"			"		
1,3-Dichloropropane	ND	1.0	"	"		"	"		
2,2-Dichloropropane	ND	1.0	"	"		"	"	"	
1,1-Dichloropropene	ND	1.0		"		"			

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological P.O. Box 370 Elk CA, 95432		Proje Project Numb Project Manag	er: 012-0					Reported 02/14/13 14	
		A T13028	G-B2 6-08 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La							
Volatile Organic Compounds by	EDA Mothod 826		aborato	nes, mc.					
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"		"	"	
Isopropylbenzene	ND	1.0	"	"	"		"	"	
p-Isopropyltoluene	ND	1.0	"	"	"		"	"	
Methylene chloride	ND	1.0	"	"	"		"	"	
Naphthalene	ND	1.0	"	"	"		"	"	
n-Propylbenzene	ND	1.0	"	"	"		"	"	
Styrene	ND	1.0	"	"	"		"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"		"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"		"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"		"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"		"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
Vinyl chloride	16	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Foluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"		
o-Xylene	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.9 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		113 %	81-	136	"	"	"	"	
Surrogate: Toluene-d8		96.4 %	88.8	-117	"	"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological P.O. Box 370	Pr	Proje oject Numb	et: 2101					Reported	:
Elk CA, 95432		oject Manag						02/14/13 14:53	
			-B1@1						
			-Б1@1. 86-09 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
, ,	5	SunStar La		ies, Inc.		1			
Volatile Organic Compounds by E				,					
Bromobenzene	ND	5.0	ug/kg	1	3020825	02/08/13	02/08/13	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"		
Bromodichloromethane	ND	5.0	"	"		"	"		
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"		
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"		
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"		
1,3-Dichlorobenzene	ND	5.0	"	"			"		
1,4-Dichlorobenzene	ND	5.0	"	"		"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"		"	"	"	
1,1-Dichloroethane	ND	5.0	"	"		"	"	"	
1,2-Dichloroethane	ND	5.0	"	"		"	"		
1,1-Dichloroethene	ND	5.0	"			"	"		
cis-1,2-Dichloroethene	ND	5.0	"	"		"	"		
trans-1,2-Dichloroethene	ND	5.0	"	"		"	"		
1,2-Dichloropropane	ND	5.0	"			"	"		
1,3-Dichloropropane	ND	5.0	"			"	"		
2,2-Dichloropropane	ND	5.0	"	"		"	"		
1,1-Dichloropropene	ND	5.0	"			"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological P.O. Box 370 Elk CA, 95432		Proje Project Numb Project Manag		03.01				Reported : 02/14/13 14	
			-B1@13 86-09 (S						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborator	ies, Inc.					
Volatile Organic Compounds by	EPA Method 826)B							
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	3020825	02/08/13	02/08/13	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"		
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	5.0	"	"	"	"	"	"	
o-Xylene	ND	5.0	"			"	"		
Surrogate: 4-Bromofluorobenzene		87.6 %	81.2	-123	"	"	"	"	
Surrogate: Dibromofluoromethane		139 %	95.7		"	"	"	"	S-GC
Surrogate: Toluene-d8		104 %		-116	"	"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological P.O. Box 370 Elk CA, 95432		Proje Project Numb roject Manag	er: 012-0					Reported 02/14/13 14	
		A T13028	G-B1 6-10 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by E	PA Method 8260	В							
Bromobenzene	ND	1.0	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"			"	
sec-Butylbenzene	ND	1.0	"	"	"			"	
tert-Butylbenzene	ND	1.0	"	"	"			"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"		"	"	"	
Chloroethane	ND	1.0	"	"		"	"	"	
Chloroform	ND	1.0	"	"		"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"		
2-Chlorotoluene	ND	1.0	"	"	"	"	"		
4-Chlorotoluene	ND	1.0	"	"			"	"	
Dibromochloromethane	ND	1.0	"	"			"	"	
1,2-Dibromo-3-chloropropane	ND	1.0	"	"			"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"		"	"	"	
Dibromomethane	ND	1.0	"	"				"	
1,2-Dichlorobenzene	ND	1.0	"	"				"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"		"	
1,4-Dichlorobenzene	ND	1.0	"	"	"	"		"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"		"	
1,1-Dichloroethane	ND	1.0	"	"	"	"		"	
1,2-Dichloroethane	ND	0.50	"	"		"		"	
1,1-Dichloroethene	ND	1.0	"	"		"		"	
cis-1,2-Dichloroethene	ND	1.0	"	"		"		"	
trans-1,2-Dichloroethene	ND	1.0	"	"		"		"	
1,2-Dichloropropane	ND	1.0	"	"		"		"	
1,3-Dichloropropane	ND	1.0	"	"		"		"	
2,2-Dichloropropane	ND	1.0	"	"		"	"	"	
1,1-Dichloropropene	ND	1.0		"			"	"	

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological		Proje	ct: 2101	Williams					
P.O. Box 370		Project Numb	er: 012-0	03.01				Reported	:
Elk CA, 95432]	Project Manag	er: Ken A	Anton				02/14/13 14	:53
		A	G-B1						
		T13028	6-10 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborator	ries, Inc.					
Volatile Organic Compounds by	EPA Method 826)B							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"		"	"	"	
n-Propylbenzene	ND	1.0	"	"		"	"	"	
Styrene	ND	1.0	"	"		"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"		"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"		
Tetrachloroethene	2.5	1.0	"	"		"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"		"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"		
Trichloroethene	ND	1.0	"	"	"	"	"		
Trichlorofluoromethane	ND	1.0	"	"	"	"	"		
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"		
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"		
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"		
Vinyl chloride	ND	1.0	"	"		"	"	"	
Benzene	ND	0.50	"	"		"	"	"	
Foluene	ND	0.50	"	"		"	"	"	
Ethylbenzene	ND	0.50	"	"		"	"	"	
m,p-Xylene	ND	1.0	"	"		"	"	"	
o-Xylene	ND	0.50	"	"		"	"		
Surrogate: 4-Bromofluorobenzene		91.2 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		128 %		136	"	"	"	"	
Surrogate: Toluene-d8		94.5 %		-117	"	"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological P.O. Box 370		Proje Project Numb		Williams 003.01				Reported	:
Elk CA, 95432	Ι	Project Manag	er: Ken A	Anton				02/14/13 14	:53
			9 BLAN 6-11 (W						
Analyta	Result	Reporting Limit	Units	Dilution	Batch	Droporod	Analyzad	Method	Notos
Analyte	Kesun				Baten	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by E	PA Method 8260								
Bromobenzene	ND	1.0	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
Bromochloromethane	ND	1.0	"	"		"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"		"	"	"	
Chloroethane	ND	1.0	"	"		"	"	"	
Chloroform	ND	1.0	"	"		"	"	"	
Chloromethane	ND	1.0	"	"		"	"	"	
2-Chlorotoluene	ND	1.0	"	"		"	"	"	
4-Chlorotoluene	ND	1.0	"	"		"		"	
Dibromochloromethane	ND	1.0	"	"	"	"		"	
1,2-Dibromo-3-chloropropane	ND	1.0	"	"	"	"		"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"		"	
Dibromomethane	ND	1.0	"	"		"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"		"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"		"	"	"	
1,4-Dichlorobenzene	ND	1.0	"	"				"	
Dichlorodifluoromethane	ND	0.50	"	"				"	
1,1-Dichloroethane	ND	1.0	"			"			
1,2-Dichloroethane	ND	0.50	"	"				"	
1,1-Dichloroethene	ND	1.0	"	"				"	
cis-1,2-Dichloroethene	ND	1.0	"	"				"	
trans-1,2-Dichloroethene	ND	1.0	"					"	
1,2-Dichloropropane	ND	1.0	"	"				"	
1,3-Dichloropropane	ND	1.0	"	"				"	
2,2-Dichloropropane	ND	1.0		"			"		
1,1-Dichloropropene	ND			"					
1,1-Diemoropropene	ND	1.0							

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological P.O. Box 370		Project Numb	er: 012-0					Reported	
Elk CA, 95432		Project Manag	er: Ken /	Anton				02/14/13 14	:53
		TRII T13028	9 BLAN 6-11 (W						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by 1	EPA Method 826)B							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	3020821	02/08/13	02/13/13	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Foluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"		"	"	"	
m,p-Xylene	ND	1.0	"	"		"	"	"	
o-Xylene	ND	0.50	"	"		"	"	"	
Surrogate: 4-Bromofluorobenzene		87.2 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		120 %		136	"	"	"	"	
Surrogate: Toluene-d8		94.6 %		-117	"	"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	02/14/13 14:53

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3020821 - EPA 5030 GCMS										
Blank (3020821-BLK1)				Prepared:	02/08/13	Analyzed	: 02/13/13			
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0								
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0								
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	1.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1.4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	02/14/13 14:53

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Amaluta	Result	Reporting	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Made
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3020821 - EPA 5030 GCMS										
Blank (3020821-BLK1)				Prepared:	02/08/13	Analyzed	: 02/13/13			
p-Isopropyltoluene	ND	1.0	ug/l							
Methylene chloride	ND	1.0	"							
Naphthalene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Frichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	1.0	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
p-Xylene	ND	0.50	"							
Surrogate: 4-Bromofluorobenzene	7.43		"	8.00		92.9	83.5-119			
Surrogate: Dibromofluoromethane	8.55		"	8.00		107	81-136			
Surrogate: Toluene-d8	7.76		"	8.00		97.0	88.8-117			
LCS (3020821-BS1)				Prepared:	02/08/13	Analyzed	: 02/13/13			
Chlorobenzene	18.9	1.0	ug/l	20.0		94.4	75-125			
1,1-Dichloroethene	19.7	1.0	"	20.0		98.3	75-125			
Trichloroethene	19.1	1.0	"	20.0		95.3	75-125			
Benzene	19.3	0.50	"	20.0		96.4	75-125			
Toluene	16.9	0.50	"	20.0		84.4	75-125			
Surrogate: 4-Bromofluorobenzene	8.62		"	8.00		108	83.5-119			
Surrogate: Dibromofluoromethane	7.99		"	8.00		99.9	81-136			
Surrogate: Toluene-d8	7.25		"	8.00		90.6	88.8-117			

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	02/14/13 14:53

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3020821 - EPA 5030 GCMS										

LCS Dup (3020821-BSD1)				Prepared: 02/0	08/13 Analyze	d: 02/13/13			
Chlorobenzene	18.6	1.0	ug/l	20.0	93.0	75-125	1.44	20	
1,1-Dichloroethene	22.4	1.0	"	20.0	112	75-125	13.2	20	
Trichloroethene	20.3	1.0	"	20.0	102	75-125	6.40	20	
Benzene	20.1	0.50	"	20.0	101	75-125	4.31	20	
Toluene	17.4	0.50	"	20.0	87.2	75-125	3.26	20	
Surrogate: 4-Bromofluorobenzene	8.33		"	8.00	104	83.5-119			
Surrogate: Dibromofluoromethane	9.32		"	8.00	116	81-136			
Surrogate: Toluene-d8	7.36		"	8.00	92.0	88.8-117			

Batch 3020825 - EPA 5030 GCMS

Blank (3020825-BLK1)				Prepared & Analyzed: 02/08/13
Bromobenzene	ND	5.0	ug/kg	
Bromochloromethane	ND	5.0	"	
Bromodichloromethane	ND	5.0	"	
Bromoform	ND	5.0	"	
Bromomethane	ND	5.0	"	
n-Butylbenzene	ND	5.0	"	
sec-Butylbenzene	ND	5.0	"	
tert-Butylbenzene	ND	5.0	"	
Carbon tetrachloride	ND	5.0	"	
Chlorobenzene	ND	5.0	"	
Chloroethane	ND	5.0	"	
Chloroform	ND	5.0	"	
Chloromethane	ND	5.0	"	
2-Chlorotoluene	ND	5.0	"	
4-Chlorotoluene	ND	5.0	"	
Dibromochloromethane	ND	5.0	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	
Dibromomethane	ND	5.0	"	
1,2-Dichlorobenzene	ND	5.0	"	
1,3-Dichlorobenzene	ND	5.0	"	
1,4-Dichlorobenzene	ND	5.0	"	
Dichlorodifluoromethane	ND	5.0	"	
1,1-Dichloroethane	ND	5.0	"	

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	02/14/13 14:53

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

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

Batch 3020825 - EPA 5030 GCMS

Blank (3020825-BLK1)				Prepared & Analyzed: 02/08/13
1,2-Dichloroethane	ND	5.0	ug/kg	
1,1-Dichloroethene	ND	5.0	"	
cis-1,2-Dichloroethene	ND	5.0	"	
trans-1,2-Dichloroethene	ND	5.0	"	
1,2-Dichloropropane	ND	5.0	"	
1,3-Dichloropropane	ND	5.0	"	
2,2-Dichloropropane	ND	5.0	"	
1,1-Dichloropropene	ND	5.0	"	
cis-1,3-Dichloropropene	ND	5.0	"	
trans-1,3-Dichloropropene	ND	5.0	"	
Hexachlorobutadiene	ND	5.0	"	
Isopropylbenzene	ND	5.0	"	
p-Isopropyltoluene	ND	5.0	"	
Methylene chloride	ND	5.0	"	
Naphthalene	ND	5.0	"	
n-Propylbenzene	ND	5.0	"	
Styrene	ND	5.0	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	
Tetrachloroethene	ND	5.0	"	
1,2,3-Trichlorobenzene	ND	5.0	"	
1,2,4-Trichlorobenzene	ND	5.0	"	
1,1,2-Trichloroethane	ND	5.0	"	
1,1,1-Trichloroethane	ND	5.0	"	
Trichloroethene	ND	5.0	"	
Trichlorofluoromethane	ND	5.0	"	
1,2,3-Trichloropropane	ND	5.0	"	
1,3,5-Trimethylbenzene	ND	5.0	"	
1,2,4-Trimethylbenzene	ND	5.0	"	
Vinyl chloride	ND	5.0	"	
Benzene	ND	5.0	"	
Toluene	ND	5.0	"	
Ethylbenzene	ND	5.0	"	
m,p-Xylene	ND	5.0	"	
o-Xylene	ND	5.0	"	
Tert-amyl methyl ether	ND	20	"	

SunStar Laboratories, Inc.

Wordy Flsia

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

Wendy Hsiao, Project Manager



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	02/14/13 14:53

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
-	Result	Emit	Onits	Lever	Result	/orcle	Linits	IC D	Linit	110105
Batch 3020825 - EPA 5030 GCMS										
Blank (3020825-BLK1)				Prepared	& Analyze	ed: 02/08/	13			
Tert-butyl alcohol	ND	50	ug/kg							
Di-isopropyl ether	ND	20	"							
Ethyl tert-butyl ether	ND	20	"							
Methyl tert-butyl ether	ND	20	"							
Surrogate: 4-Bromofluorobenzene	41.7		"	40.0		104	81.2-123			
Surrogate: Dibromofluoromethane	46.6		"	40.0		116	95.7-135			
Surrogate: Toluene-d8	41.6		"	40.0		104	85.5-116			
LCS (3020825-BS1)				Prepared:	02/08/13	Analyzed	1: 02/09/13			
Chlorobenzene	92.2	5.0	ug/kg	100		92.2	75-125			
1,1-Dichloroethene	109	5.0	"	100		109	75-125			
Trichloroethene	92.0	5.0	"	100		92.0	75-125			
Benzene	105	5.0	"	100		105	75-125			
Toluene	91.2	5.0	"	100		91.2	75-125			
Surrogate: 4-Bromofluorobenzene	41.8		"	40.0		104	81.2-123			
Surrogate: Dibromofluoromethane	48.9		"	40.0		122	95.7-135			
Surrogate: Toluene-d8	40.2		"	40.0		100	85.5-116			
Matrix Spike (3020825-MS1)	Sou	irce: T13018	9-39	Prepared:	02/08/13	Analyzed	1: 02/09/13			
Chlorobenzene	89.2	5.0	ug/kg	100	ND	89.2	75-125			
1,1-Dichloroethene	103	5.0	"	100	ND	103	75-125			
Trichloroethene	85.2	5.0	"	100	ND	85.2	75-125			
Benzene	97.0	5.0	"	100	ND	97.0	75-125			
Toluene	89.8	5.0	"	100	ND	89.8	75-125			
Surrogate: 4-Bromofluorobenzene	43.4		"	40.0		109	81.2-123			
Surrogate: Dibromofluoromethane	51.8		"	40.0		129	95.7-135			
Surrogate: Toluene-d8	39.4		"	40.0		98.6	85.5-116			

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	02/14/13 14:53

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Allalyte	Kesuit	Liiiit	Units	Level	Kesult	/0KEC	Linits	KF D	Liiiit	INOLES
Batch 3020825 - EPA 5030 GCMS										
Matrix Spike Dup (3020825-MSD1)	Sour	ce: T13018	9-39	Prepared:	02/08/13	Analyzed	1: 02/09/13			
Chlorobenzene	90.0	5.0	ug/kg	100	ND	90.0	75-125	0.948	20	
1,1-Dichloroethene	109	5.0	"	100	ND	109	75-125	5.72	20	
Trichloroethene	91.8	5.0	"	100	ND	91.8	75-125	7.45	20	
Benzene	98.6	5.0	"	100	ND	98.6	75-125	1.58	20	
Toluene	90.0	5.0	"	100	ND	90.0	75-125	0.111	20	
Surrogate: 4-Bromofluorobenzene	42.0		"	40.0		105	81.2-123			
Surrogate: Dibromofluoromethane	45.2		"	40.0		113	95.7-135			
Surrogate: Toluene-d8	39.0		"	40.0		97.5	85.5-116			

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	02/14/13 14:53

Notes and Definitions

- S-GC Surrogate recovery outside of established control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager

Chain of Custody Record

SunStar Laboratories, Inc. 25712 Commercentre Dr Lake Forest, CA 92630 949-297-5020

Client: ANTON C Address: <u>Po Box 3</u> Phone: <u>707-877-</u> Project Manager: <u>KEN</u>	EOLOGIC 70, ELK 3278 VERH A	AL CA Fax: 707	7543 -877-	Z - 3Z.78	· · · · · · · · · · · · · · · · · · ·	P C	roject ollect	Nar or:	ne:_ <u>K</u> e	2	101 SES	1 W	s NILC Ant	TON	15	ST. It Proj	/ ect #:	Of	/ 203.0	<u>> </u>
Sample ID AG - $B3 - 5$ AG - $B3 - 5$ AG - $B4 - 5$ AG - $B4 - 5$ AG - $B6 - 5$ AG - $B7 - 2$ AG - $B7 $	Date Sampled Z/6/13 V Z/7/13 V	Time	Sample Type WATER SoiL SoiL WATER	Container Type VOA SLEEVE YOA SLEEVE YOA	X 8260 B	8260 BTEX, OXY only	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals				11 0 6 8 2 9 5 6 8 2 9 2 9 2 9 2 9 2 9 2 9 2 1 2 4 2 1 2 4		Comme I Er	D. T		MN/N/N/N/N/N/Total # of containers
ThiP BLANK Relinquished by: (signature) Belinquished by: (signature) Relinquished by: (signature) Sample disposal Instructions:	Date / Ti Date / Ti 2 · 8 · 13	1:15 (M me me 10:00	Received b	y: (signature)	2	Date	Time Time		Cha R	ain of	f Cusi Se ved g	tody s als int ood c	of contra eal Y act? Y ondition	N/NA N/NA n/cold				Notes		

COC 90703

SunStar Laboratories, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE			Page 1 of
			•
SAMPLE RECEIVING REVIE	W SH	EET	
BATCH #			
Client Name: <u>ANTON GEOLOGICAL</u> Project: 2	2101 111	ULIAMS	SF.
Received by: <u>Survy</u> Date/Time Re	eceived:	1.8.13/	10:00
Delivered by : Client SunStar Courier GSO FedEx	Other	-	
Total number of coolers received Temp criteria = $6^{\circ}C$	> 0°C (no	<u>frozen</u> col	ntainers)
Temperature: cooler #1 <u>2.8</u> °C +/- the CF (-0.2°C) = <u>2.6</u> °C corre	cted temperati	ıre	•
cooler #2°C +/- the CF (- 0.2°C) =°C corre	cted temperat	ure	•
cooler #3°C +/- the CF (- 0.2° C) =°C corre	ected temperation	ıre	
Samples outside temp. but received on ice, w/in 6 hours of final sampling.	Yes	∐No*	□N/A
Custody Seals Intact on Cooler/Sample	⊠Yes	∐No*	N/A
Sample Containers Intact	Yes	⊡No*	
Sample labels match COC ID's	⊠Yes	∐No*	
Total number of containers received match COC	Yes	∐No*	
Proper containers received for analyses requested on COC	∕∕Yes	⊡No*	
Proper preservative indicated on COC/containers for analyses requested	Yes	[]No*	□N/A
Complete shipment received in good condition with correct temperatures, c preservatives and within method specified holding times. \square Yes \square No		abels, volu	mes
* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample R	eview - Initia	als and date	82 2.8.13
Comments:			
			· · · · · · · · · · · · · · · · · · ·
	· · · · · · · · · · · · · · · · · · ·		



PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

02 July 2012

Ken Anton Anton Geological P.O. Box 370 Elk, CA 95432 RE: 2101 Williams

Enclosed are the results of analyses for samples received by the laboratory on 06/26/12 09:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wordy Hsia

Wendy Hsiao Project Manager



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	07/02/12 15:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S1 @ 24"	T121100-01	Soil	06/25/12 11:30	06/26/12 09:45
S2 @ 24"	T121100-02	Soil	06/25/12 11:39	06/26/12 09:45
S3 @ 18"	T121100-03	Soil	06/25/12 11:50	06/26/12 09:45
S4 @ 18"	T121100-04	Soil	06/25/12 12:01	06/26/12 09:45

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological		5	ect: 2101							
P.O. Box 370		Project Numb						Reported		
Elk CA, 95432]	Project Manag	er: Ken A	Anton				07/02/12 15:44		
		S1	@ 24''							
			.00-01 (S							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar L	aborato	ries, Inc.						
Volatile Organic Compounds by F	EPA Method 826()B								
Bromobenzene	ND	5.0	ug/kg	1	2062615	06/26/12	06/28/12	EPA 8260B		
Bromochloromethane	ND	5.0	"	"	"	"	"	"		
Bromodichloromethane	ND	5.0	"	"	"	"	"	"		
Bromoform	ND	5.0	"	"	"	"	"	"		
Bromomethane	ND	5.0	"	"	"	"	"	"		
n-Butylbenzene	ND	5.0	"	"	"	"	"	"		
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"		
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"		
Carbon tetrachloride	ND	5.0		"	"	"	"	"		
Chlorobenzene	ND	5.0	"	"	"	"	"	"		
Chloroethane	ND	5.0		"	"	"	"	"		
Chloroform	ND	5.0	"	"	"			"		
Chloromethane	ND	5.0	"	"	"	"	"	"		
2-Chlorotoluene	ND	5.0	"	"	"			"		
4-Chlorotoluene	ND	5.0		"	"		"	"		
Dibromochloromethane	ND	5.0		"	"		"	"		
1,2-Dibromo-3-chloropropane	ND	5.0		"	"		"	"		
1,2-Dibromoethane (EDB)	ND	5.0		"	"		"	"		
Dibromomethane	ND	5.0		"	"		"	"		
1,2-Dichlorobenzene	ND	5.0		"				"		
1,3-Dichlorobenzene	ND	5.0		"	"			"		
1,4-Dichlorobenzene	ND	5.0		"	"			"		
Dichlorodifluoromethane	ND	5.0		"	"			"		
1,1-Dichloroethane	ND	5.0		"	"			"		
1,2-Dichloroethane	ND	5.0		"	"			"		
1,1-Dichloroethene	ND	5.0		"	"		"			
cis-1,2-Dichloroethene	ND	5.0		"			"	"		
trans-1,2-Dichloroethene	ND	5.0		"			"	"		
1,2-Dichloropropane	ND	5.0		"			"	"		
1,3-Dichloropropane	ND	5.0 5.0								
2,2-Dichloropropane	ND ND	5.0 5.0		"			"	"		
				"			"	"		
1,1-Dichloropropene	ND	5.0								

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological			ect: 2101							
P.O. Box 370		Project Numb	er: 012-0	03.01				Reported: 07/02/12 15:44		
Elk CA, 95432]	Project Manag	er: Ken A	Anton						
		S1	@ 24''							
		T1211	00-01 (S	oil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
		SunStar La	aboratoi	ries, Inc.						
Volatile Organic Compounds by I	EPA Method 826)B								
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	2062615	06/26/12	06/28/12	EPA 8260B		
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"		
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"		
Isopropylbenzene	ND	5.0	"	"	"	"	"	"		
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"		
Methylene chloride	ND	5.0	"	"	"	"	"	"		
Naphthalene	ND	5.0	"	"		"	"	"		
n-Propylbenzene	ND	5.0	"	"		"	"	"		
Styrene	ND	5.0	"	"	"	"	"			
1,1,2,2-Tetrachloroethane	ND	5.0	"	"		"	"	"		
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"			
Tetrachloroethene	ND	5.0	"	"	"	"	"	"		
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"		
1,2,4-Trichlorobenzene	ND	5.0	"	"		"	"	"		
1,1,2-Trichloroethane	ND	5.0	"	"		"	"	"		
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"		
Frichloroethene	ND	5.0	"	"		"	"	"		
Trichlorofluoromethane	ND	5.0	"	"		"	"	"		
1,2,3-Trichloropropane	ND	5.0	"	"		"	"	"		
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"			
1,2,4-Trimethylbenzene	ND	5.0	"	"		"	"	"		
Vinyl chloride	ND	5.0	"	"		"	"	"		
Benzene	ND	5.0	"	"		"	"	"		
Foluene	ND	5.0	"	"		"	"	"		
Ethylbenzene	ND	5.0	"	"	"	"	"	"		
m,p-Xylene	ND	5.0	"	"	"	"	"	"		
p-Xylene	ND	5.0	"		"		"			
Surrogate: 4-Bromofluorobenzene		104 %	81.2	-123	"	"	"	"		
Surrogate: Dibromofluoromethane		108 %		-135	"	"	"	"		
Surrogate: Toluene-d8		101 %		-116	"	"	"	"		

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological P.O. Box 370 Elk CA, 95432	Project: 2101 Williams Project Number: 012-003.01 Project Manager: Ken Anton									
			a @ 24'' 00-02 (S							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
	S	SunStar La	aboratoi	ries, Inc.						
Volatile Organic Compounds by E	CPA Method 8260B	5								
Bromobenzene	ND	5.0	ug/kg	1	2062615	06/26/12	06/28/12	EPA 8260B		
Bromochloromethane	ND	5.0	"	"	"	"	"	"		
Bromodichloromethane	ND	5.0	"	"		"	"	"		
Bromoform	ND	5.0	"	"	"	"	"	"		
Bromomethane	ND	5.0	"	"	"	"	"	"		
n-Butylbenzene	ND	5.0	"	"	"	"	"	"		
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"		
ert-Butylbenzene	ND	5.0	"	"	"	"	"	"		
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"		
Chlorobenzene	ND	5.0	"	"	"	"	"			
Chloroethane	ND	5.0	"	"	"	"	"	"		
Chloroform	ND	5.0	"	"			"	"		
Chloromethane	ND	5.0	"	"			"	"		
2-Chlorotoluene	ND	5.0	"	"			"	"		
4-Chlorotoluene	ND	5.0	"	"		"	"	"		
Dibromochloromethane	ND	5.0	"	"		"	"	"		
1,2-Dibromo-3-chloropropane	ND	5.0	"	"			"	"		
1,2-Dibromoethane (EDB)	ND	5.0	"	"			"	"		
Dibromomethane	ND	5.0	"	"			"	"		
1,2-Dichlorobenzene	ND	5.0	"	"			"	"		
1,3-Dichlorobenzene	ND	5.0		"			"	"		
1,4-Dichlorobenzene	ND	5.0		"						
Dichlorodifluoromethane	ND	5.0		"						
1,1-Dichloroethane	ND	5.0	"	"						
1,2-Dichloroethane	ND	5.0	"	"			"			
1,1-Dichloroethene	ND	5.0	"	"			"			
cis-1,2-Dichloroethene	ND	5.0	"	"			"			
trans-1,2-Dichloroethene	ND	5.0	"	"			"			
1,2-Dichloropropane	ND	5.0	"	"			"	"		
1,3-Dichloropropane	ND	5.0		"		"	"			
2,2-Dichloropropane	ND	5.0		"			"			
1,1-Dichloropropene	ND	5.0 5.0		"			"			

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological P.O. Box 370	•											
Elk CA, 95432		Project Manag						Reported 07/02/12 15				
		51	2 @ 24''									
			. @ 24 .00-02 (S	oil)								
		Reporting										
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note			
		SunStar La	aboratoi	ies, Inc.								
Volatile Organic Compounds by	EPA Method 826											
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	2062615	06/26/12	06/28/12	EPA 8260B				
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"					
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"				
Isopropylbenzene	ND	5.0	"	"	"	"	"	"				
p-Isopropyltoluene	ND	5.0	"	"		"	"	"				
Methylene chloride	ND	5.0	"	"	"	"	"	"				
Naphthalene	ND	5.0	"	"	"	"	"					
n-Propylbenzene	ND	5.0	"	"	"	"	"	"				
Styrene	ND	5.0	"	"	"	"	"					
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"				
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"				
Tetrachloroethene	ND	5.0	"	"	"	"	"					
1,2,3-Trichlorobenzene	ND	5.0	"	"		"	"	"				
1,2,4-Trichlorobenzene	ND	5.0	"	"		"	"	"				
1,1,2-Trichloroethane	ND	5.0	"	"		"	"	"				
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"				
Trichloroethene	ND	5.0	"	"	"	"	"	"				
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"				
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"				
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"					
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"					
Vinyl chloride	ND	5.0	"	"	"	"	"					
Benzene	ND	5.0	"	"	"	"	"	"				
Foluene	ND	5.0	"	"		"	"	"				
Ethylbenzene	ND	5.0	"	"		"	"					
m,p-Xylene	ND	5.0	"	"		"	"					
p-Xylene	ND	5.0	"		"	"	"					
Surrogate: 4-Bromofluorobenzene		103 %	81.2	-123	"	"	"	"				
Surrogate: Dibromofluoromethane		112 %		-135	"	"	"	"				
Surrogate: Toluene-d8		100 %		-116	"	"	"	"				

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological		Proje	ect: 2101	Williams						
P.O. Box 370]	Project Numb	er: 012-0	03.01				Reported: 07/02/12 15:44		
Elk CA, 95432	F	roject Manag	er: Ken A	Anton						
		S3	@ 18''							
			00-03 (S	oil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
Thuryte	Result				Duton	Tiepureu	ThuryZou	memor	11010	
		SunStar La	aboratoi	ries, Inc.						
Volatile Organic Compounds by E Bromobenzene	ND	5.0	ug/kg	1	2062615	06/26/12	06/29/12	EPA 8260B		
Bromochloromethane	ND	5.0	ug/kg "	1	2002013	"	"	EFA 8200B		
Bromodichloromethane	ND ND	5.0 5.0		"			"	"		
Bromodicitoromethane	ND ND	5.0 5.0		"			"	"		
Bromomethane	ND	5.0		"			"			
n-Butylbenzene	ND	5.0		"				"		
sec-Butylbenzene	ND	5.0		"				"		
tert-Butylbenzene	ND	5.0		"				"		
Carbon tetrachloride	ND	5.0		"			"			
Chlorobenzene	ND	5.0	"	"				"		
Chloroethane	ND	5.0		"				"		
Chloroform	ND	5.0	"	"				"		
Chloromethane	ND	5.0		"				"		
2-Chlorotoluene	ND	5.0	"	"				"		
4-Chlorotoluene	ND	5.0	"	"				"		
Dibromochloromethane	ND	5.0		"						
1,2-Dibromo-3-chloropropane	ND	5.0	"	"			"	"		
1,2-Dibromoethane (EDB)	ND	5.0		"			"	"		
Dibromomethane	ND	5.0		"			"	"		
1,2-Dichlorobenzene	ND	5.0	"	"			"	"		
1,3-Dichlorobenzene	ND	5.0		"			"	"		
1,4-Dichlorobenzene	ND	5.0		"						
Dichlorodifluoromethane	ND	5.0		"						
1,1-Dichloroethane	ND	5.0		"			"	"		
1,2-Dichloroethane	ND	5.0	"	"			"	"		
1,1-Dichloroethene	ND	5.0	"	"			"	"		
cis-1,2-Dichloroethene	ND	5.0	"	"		"	"			
trans-1,2-Dichloroethene	ND	5.0	"	"			"	"		
1,2-Dichloropropane	ND	5.0	"	"			"	"		
1,3-Dichloropropane	ND	5.0	"	"		"	"			
2,2-Dichloropropane	ND	5.0	"	"		"	"			
1,1-Dichloropropene	ND	5.0	"	"			"	"		

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological	·											
P.O. Box 370		5						Reported				
Elk CA, 95432	-	Project Manag	er: Ken A	Anton				07/02/12 15	:44			
			@ 18'' 00-03 (S	ojl)								
			00-03 (5	011)								
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note			
		SunStar La	aborator	ies, Inc.								
Volatile Organic Compounds by	EPA Method 826	0B										
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	2062615	06/26/12	06/29/12	EPA 8260B				
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"				
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"				
Isopropylbenzene	ND	5.0	"	"	"	"	"	"				
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"				
Methylene chloride	ND	5.0	"	"	"	"	"	"				
Naphthalene	ND	5.0	"	"	"	"	"	"				
n-Propylbenzene	ND	5.0	"	"	"	"	"	"				
Styrene	ND	5.0	"	"	"	"	"	"				
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"				
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"				
Tetrachloroethene	ND	5.0	"	"	"	"	"	"				
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"				
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"				
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"				
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"				
Trichloroethene	ND	5.0	"	"	"	"	"	"				
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"				
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"				
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"				
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"				
Vinyl chloride	ND	5.0	"	"	"	"	"	"				
Benzene	ND	5.0	"	"	"	"	"	"				
Toluene	ND	5.0	"	"	"	"	"	"				
Ethylbenzene	ND	5.0	"	"	"	"	"	"				
m,p-Xylene	ND	5.0	"	"			"	"				
o-Xylene	ND	5.0	"	"			"	"				
Surrogate: 4-Bromofluorobenzene		90.0 %	81.2	-123	"	"	"	"				
Surrogate: Dibromofluoromethane		99.2 %		-135	"	"	"	"				
Surrogate: Toluene-d8		97.6 %		-116	"	"	"	"				

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological		Proje	ect: 2101	Williams					
P.O. Box 370		Project Numb	er: 012-0	03.01				Reported	:
Elk CA, 95432	I	Project Manag	er: Ken A	Anton				07/02/12 15	:44
		S4	@ 18''						
		T1211	00-04 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by E	PA Method 8260	B							
Bromobenzene	ND	5.0	ug/kg	1	2062615	06/26/12	06/29/12	EPA 8260B	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
1-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"		
ert-Butylbenzene	ND	5.0	"	"	"	"	"		
Carbon tetrachloride	ND	5.0	"	"	"	"	"		
Chlorobenzene	ND	5.0	"	"	"	"	"		
Chloroethane	ND	5.0	"	"	"	"	"		
Chloroform	ND	5.0	"	"	"	"	"		
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"		"	"		
1,2-Dibromo-3-chloropropane	ND	5.0	"	"		"	"		
I,2-Dibromoethane (EDB)	ND	5.0	"	"		"	"		
Dibromomethane	ND	5.0	"	"			"		
1,2-Dichlorobenzene	ND	5.0	"	"			"		
I,3-Dichlorobenzene	ND	5.0	"	"			"	"	
1,4-Dichlorobenzene	ND	5.0		"			"		
Dichlorodifluoromethane	ND	5.0		"					
1,1-Dichloroethane	ND	5.0	"	"					
1,2-Dichloroethane	ND	5.0	"	"					
1,1-Dichloroethene	ND	5.0		"			"		
cis-1,2-Dichloroethene	ND	5.0		"			"		
rans-1,2-Dichloroethene	ND	5.0	"	"			"		
1,2-Dichloropropane	ND	5.0		"			"		
1,3-Dichloropropane	ND	5.0		"			"		
2,2-Dichloropropane	ND	5.0		"			"		
1,1-Dichloropropene	ND	5.0		"			"		

SunStar Laboratories, Inc.

Wordy Flsia



Anton Geological P.O. Box 370 Elk CA, 95432		Proje Project Numb Project Manag		03.01				Reported 07/02/12 15	
EIK CA, 93432		Project Manag	er. Ken A	AIITOII				07/02/12 13	:44
			@ 18''						
		T1211	00-04 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratoi	ries, Inc.					
Volatile Organic Compounds by	EPA Method 826	0 B							
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	2062615	06/26/12	06/29/12	EPA 8260B	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	5.0	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"		
Surrogate: 4-Bromofluorobenzene		91.4 %	81.2	-123	"	"	"	"	
Surrogate: Dibromofluoromethane		94.8 %		-135	"	"	"	"	S-GC
Surrogate: Toluene-d8		98.2 %		-116	"	"	"	"	

SunStar Laboratories, Inc.

Wordy Flsia

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

Wendy Hsiao, Project Manager



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	07/02/12 15:44

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

		SunStar	Labora	atories, I	Inc.					
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2062615 - EPA 5030 GCMS										
Blank (2062615-BLK1)				Prepared:	06/26/12	Analyzed	: 06/29/12			
Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							
4-Chlorotoluene	ND	5.0	"							
Dibromochloromethane	ND	5.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
Dibromomethane	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Dichlorodifluoromethane	ND	5.0	"							
1,1-Dichloroethane	ND	5.0	"							

ND

5.0

5.0

5.0

5.0

5.0

5.0

5.0

5.0

5.0

5.0

5.0

5.0

••

..

SunStar Laboratories, Inc.

1,2-Dichloroethane

1,1-Dichloroethene

cis-1,2-Dichloroethene

1,2-Dichloropropane

1,3-Dichloropropane

2,2-Dichloropropane

1,1-Dichloropropene

Hexachlorobutadiene

Isopropylbenzene

cis-1,3-Dichloropropene

trans-1,3-Dichloropropene

trans-1,2-Dichloroethene

Wordy Flsia



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	07/02/12 15:44

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

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

Batch 2062615 - EPA 5030 GCMS

Blank (2062615-BLK1)				Prepared: 06/2	26/12 Analyze	d: 06/29/12	
p-Isopropyltoluene	ND	5.0	ug/kg				
Methylene chloride	ND	5.0	"				
Naphthalene	ND	5.0	"				
n-Propylbenzene	ND	5.0	"				
Styrene	ND	5.0	"				
1,1,2,2-Tetrachloroethane	ND	5.0	"				
1,1,1,2-Tetrachloroethane	ND	5.0	"				
Tetrachloroethene	ND	5.0	"				
1,2,3-Trichlorobenzene	ND	5.0	"				
1,2,4-Trichlorobenzene	ND	5.0	"				
1,1,2-Trichloroethane	ND	5.0	"				
1,1,1-Trichloroethane	ND	5.0	"				
Trichloroethene	ND	5.0	"				
Trichlorofluoromethane	ND	5.0	"				
1,2,3-Trichloropropane	ND	5.0	"				
1,3,5-Trimethylbenzene	ND	5.0	"				
1,2,4-Trimethylbenzene	ND	5.0	"				
Vinyl chloride	ND	5.0	"				
Benzene	ND	5.0	"				
Toluene	ND	5.0	"				
Ethylbenzene	ND	5.0	"				
m,p-Xylene	ND	5.0	"				
o-Xylene	ND	5.0	"				
Surrogate: 4-Bromofluorobenzene	36.6		"	40.0	91.5	81.2-123	
Surrogate: Dibromofluoromethane	36.6		"	40.0	91.6	95.7-135	S-GC
Surrogate: Toluene-d8	34.8		"	40.0	87.0	85.5-116	
LCS (2062615-BS1)				Prepared: 06/2	26/12 Analyze	d: 06/29/12	
Chlorobenzene	91.1	5.0	ug/kg	100	91.1	75-125	
1,1-Dichloroethene	89.8	5.0	"	100	89.8	75-125	
Trichloroethene	90.4	5.0	"	100	90.4	75-125	
Benzene	89.7	5.0	"	100	89.7	75-125	
Toluene	89.6	5.0	"	100	89.6	75-125	
Surrogate: 4-Bromofluorobenzene	38.4		"	40.0	96.0	81.2-123	
Surrogate: Dibromofluoromethane	42.2		"	40.0	105	95.7-135	
Surrogate: Toluene-d8	39.8		"	40.0	99.4	85.5-116	

SunStar Laboratories, Inc.

evenly flsia



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	07/02/12 15:44

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

				/						
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2062615 - EPA 5030 GCMS										
Matrix Spike (2062615-MS1)	Sou	rce: T12109	8-01	Prepared:	06/26/12	Analyze	d: 06/29/12			
Chlorobenzene	95.4	5.0	ug/kg	100	ND	95.4	75-125			
1,1-Dichloroethene	93.7	5.0	"	100	ND	93.7	75-125			
Trichloroethene	95.6	5.0	"	100	ND	95.6	75-125			
Benzene	96.0	5.0	"	100	ND	96.0	75-125			
Toluene	95.1	5.0	"	100	ND	95.1	75-125			
Surrogate: 4-Bromofluorobenzene	40.0		"	40.0		100	81.2-123			
Surrogate: Dibromofluoromethane	45.2		"	40.0		113	95.7-135			
Surrogate: Toluene-d8	40.3		"	40.0		101	85.5-116			
Matrix Spike Dup (2062615-MSD1)	Sou	rce: T12109	8-01	Prepared:	06/26/12	Analyze	d: 06/29/12			
Chlorobenzene	94.4	5.0	ug/kg	100	ND	94.4	75-125	1.16	20	

				1		,				
Chlorobenzene	94.4	5.0	ug/kg	100	ND	94.4	75-125	1.16	20	
1,1-Dichloroethene	94.0	5.0	"	100	ND	94.0	75-125	0.266	20	
Trichloroethene	96.2	5.0	"	100	ND	96.2	75-125	0.730	20	
Benzene	98.0	5.0	"	100	ND	98.0	75-125	2.16	20	
Toluene	96.6	5.0	"	100	ND	96.6	75-125	1.62	20	
Surrogate: 4-Bromofluorobenzene	39.0		"	40.0		97.6	81.2-123			
Surrogate: Dibromofluoromethane	44.4		"	40.0		111	95.7-135			
Surrogate: Toluene-d8	40.6		"	40.0		101	85.5-116			

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003.01	Reported:
Elk CA, 95432	Project Manager: Ken Anton	07/02/12 15:44

Notes and Definitions

- S-GC Surrogate recovery outside of established control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

SunStar Laboratories, Inc.

Wordy Flsia

Wendy Hsiao, Project Manager

Chain of Custody Record

SunStar Laboratories, Inc. 25712 Commercentre Dr Lake Forest, CA 92630 949-297-5020

Client: ANTON Address: PO BOX 3 Phone: 707 877 37 Project Manager: KEN	GEOLX 370, EL 278 - 1 NETH	ГЛ СМ К, С Алто	A 950 AME	132	2 - - -						2: E		12 1 0 71	JICO Ar	LA MON	Page	e:Of Project #:	- 0	
Sample ID SI © 24 [#] S2 © 24 [#] S3 © 18 [#] S4 © 18 [#]	Date Sampled 6/25/12 6/25/12 6/25/12	Time //:30 //:39 //:50 /2:01	Sample Type SolL	Container Type SLEENE	XXXX 8260 VOCS	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals				6 2 3 1 Laboratory ID #	Comments/Preservative	Total # of containers	
Relinquished by (signature)	pate // Tim			y: (signature)		<u>S</u> -	-2	> / Tin	-)2	1.	Chain	of Cu	stody s	seals Y	tainers //N/NA		Notes STD, TAT		
Relinquished by: (signature)		ne	Received b	y: (signature)	/	6/20	Date	e / Tin <i>09</i> .	ne			eived (onditio	on/cold		6/26/12		Bc

e.

COC 90698

	SAMPLE	RECEIVING REVIEW	SHEET
--	--------	-------------------------	-------

SunStar — Laboratories, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

BATCH #		. •	2
Client Name: ANTON GEO Project: 31	of will	ams	
Received by: <u>BRIDAN</u> Date/Time Re	ceived:	6/26/12	09:45
Delivered by : Client SunStar Courier X GSO FedEx	Other		-
Total number of coolers received Temp criteria = 6°C	> 0°C (no	<u>frozen</u> co	ntainers)
Temperature: cooler #1 <u>5.0</u> °C +/- the CF (-0.2°C) = <u>4.8</u> °C corrections	cted temperat	ure	
cooler #2°C +/- the CF (- 0.2°C) =°C correction contractions $^{\circ}$ C corrections $^{\circ}$ C corr	cted temperat	ure	
cooler #3°C +/- the CF (- 0.2°C) =°C correction $^{\circ}$ C correction	cted temperat	ure	
Samples outside temp. but received on ice, w/in 6 hours of final sampling.	Yes	□No*	N/A
Custody Seals Intact on Cooler/Sample	Yes	No*	N/A
Sample Containers Intact	Yes	□No*	
Sample labels match COC ID's	Yes	No*	
Total number of containers received match COC	∢Yes	□No*	-
Proper containers received for analyses requested on COC	Yes	No*	
Proper preservative indicated on COC/containers for analyses requested	Yes	□No*	XN/A
Complete shipment received in good condition with correct temperatures, correservatives and within method specified holding times. \searrow Yes \square No		abels, volu	mes
* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample Re	eview - Initi	als and date	BC 6/26/12
Comments:			1
			.
		<u> </u>	

Page 1 of ____