Jones Development Company LLC

Commercial Property Development Consulting, Management & Investments

December 4, 2012

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

LETTER OF TRANSMITTAL AUGUST 2012 -QUARTERLY GROUNDWATER MONITORING FORMER JAMES RIVER CORPORATION 2101 Williams Street San Leandro, California 94577 RWQCB SLIC Case RO0002468 Geotracker Global ID T06019771096 Anton Geological Project No. 012-003

Dear Mr. Detterman:

Please find attached a copy of the August 2012 Quarterly Groundwater Monitoring report by Anton Geological dated October 31, 2012.

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,

Carey Andre \ 2101 Williams Associates LLC

Attachment

Donald L. Jones Company **Jones Partners LLC** 640 Hegenberger-Ileinz 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

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Alameda County Environmental Health

AUGUST 2012 QUARTERLY GROUNDWATER MONITORING FORMER JAMES RIVER CORPORATION 2101 Williams Street San Leandro, California RWQCB SLIC Case RO0002468 Geotracker Global ID T06019771096

Prepared For:

2101 Williams Associates, 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

October 31, 2012





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2101 Williams Associates, LLC Attention: Carey Andre 2228 Livingston Street Oakland, California 94606

AUGUST 2012 QUARTERLY GROUNDWATER MONITORING FORMER JAMES RIVER CORPORATION 2101 Williams Street

San Leandro, California 94577 RWQCB SLIC Case RO0002468 Geotracker Global ID T06019771096 Anton Geological Project No. 012-003

INTRODUCTION

In accordance with your request and authorization, Anton Geological has completed the redevelopment and a subsequent first episode of quarterly sampling of the existing 12 on-site monitor wells at the subject property. The purpose of the monitoring work has been to determine the condition of groundwater with respect to a chlorinated solvent contaminant plume, which appears to be extending onto the subject property from an easterly and adjacent site. In their letter of January 27, 2012, Alameda County Environmental Health (ACEH) requested "that remaining wells be redeveloped and sampled, initially on a quarterly basis." It is understood that the monitor wells were last sampled by a consultant for the prior property owner in 1992, 1994, 1995 and 2001 (depending upon the well).

Prior to commencing the well redevelopment work, Anton Geological visited the site and located the 12 of 13 previously documented on-site monitor wells. The 13th monitor well ("TW-1") reportedly was located inside a portion of the subject building that was undergoing renovation work at the time of the June 21, 2012 reconnaissance; the concrete floor of that portion of the building had been removed as part of the renovation activities (exposing underlying compacted soils and gravel base rock), and the well was not located. Prior to mobilization of field equipment to the site, Anton Geological also discussed the water well sampling work with ACEH's Mark Detterman, who confirmed the need for well redevelopment work and further indicated that conventional bailer/pump purge and sampling methods would be required, rather than micropurging technology.

Vicinity maps are presented as Plates 1A and 1B. The monitor well locations are shown together with the general layout of the subject property on Plate 2A, *Site Plan*. Actual laboratory data and chain of custody documentation are presented in Appendix A. Field work data sheets are attached 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. It is the responsibility of the owner of the subject property to report any contamination conditions to applicable County and State agencies for the purpose of obtaining regulatory closure and/or for complying with applicable regulations.

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

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.



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.

The purpose of the current work described in this report has been to redevelop the existing monitor well network at the subject property and restart a quarterly groundwater monitoring program in order to continue to collect data about the current condition of the contaminant plume, as requested by ACEH.

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 earlier-mentioned 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

As mentioned earlier, prior to commencing the well redevelopment work, Anton Geological visited the site and located the 12 of 13 previously documented on-site monitor wells. The 13th monitor well ("TW-1") reportedly was located inside a portion of the subject building that was undergoing renovation work at the time of the June 21, 2012 reconnaissance; the concrete floor of that portion of the building had been removed as part of the renovation activities (exposing underlying compacted soils and gravel base rock), and the well was not located. Anton Geological inspected the remaining on-site wells to confirm their identity and to assess their present condition. Locating the wells proved difficult at times, as the monitor well vaults were not labeled as monitor wells. Some of the vaults were rectangular in shape with metal plates for access covers, while others had a more traditional circular cover. In the case of TW-2, the well was found inside a concrete vault labeled "sewer". A summary of the monitor well vaults (showing their condition) were taken at that time for documentation purposes, but are not included in this report.

Prior to mobilization of field equipment to the site, Anton Geological also discussed the water well sampling work with ACEH's Mark Detterman, who confirmed the need for well redevelopment work and further indicated that conventional bailer/pump purge and sampling methods would be required.

The monitor well locations are shown together with the general layout of the subject property on Plate 2A, *Site Plan*.

Work Plan and Site Safety Plan

A Work Plan and Site Safety Plan were present during all on-site activities in accordance with OSHA requirements.

Well Redevelopment

The 12 on-site monitor wells were redeveloped on various dates between July 24, 2012 and August 16, 2012. Prior to opening the well casings, standing surface water was pumped and/or mud covering the casings was removed, as necessary. Inside the vault covers, most (but not all) monitor wells were additionally protected by a locking metal riser. In all cases, the metal risers were either unlocked or rusted to the point of no longer being lockable. The tops of each PVC well casing generally were found to be equipped with a Cherne-style locking well plug, with the



exception of W-9, which had a simple non-locking PVC slip cap. In all but two cases, the Cherne-style plugs were either unlocked and/or locked but not secure (i.e. not making a water-tight seal), resulting in the cap being readily removable with hand pressure. These two cases (W-6 and W-8) had their plugs covered with standing water.

Many of the wells were found to have obstacles (dedicated equipment) left behind by prior consultants. The obstructions included one-inch diameter solid PVC pipes that extended to the bottom of the wells (W-3, W-5, W-6, W-9, and W-10). These pipes were removed and disposed of to facilitate redevelopment work.

Additionally, several wells (W-1, W-8, TW-2, and TW-3) were found to have dedicated plastic bailers left behind by a prior consultant. Bailers were removed where possible. In the case of W-8 and TW-3, bailers had been lost in the wells and were floating on the surface. One of two lost bailers was successfully removed from TW-3. However, following multiple unsuccessful attempts to retrieve the obstacles, one bailer remains in W-8 and TW-3.

The only other noteworthy obstacle appears to be at the bottoms of W-3 and TW-3. While the bottoms of W-3 and TW-3 were easily sounded with a water level probe, larger objects such as a surge block and a purge pump encountered difficulty within a few feet of the bottom of W-3, and below a depth of 14 feet in TW-3. The nature of the obstacles are unknown, but is presumed to be sunken bailers or related equipment. As noted above, one of two lost floating bailers also remains in the well (the second having been successfully removed following multiple attempts).

During the redevelopment work, it was also noted that the casing of W-6 is bent at a depth of about ten feet, apparently bending approximately 15 degrees to the southwest (the water surface could not be seen when standing vertically over the well). However, the bend in W-6 did not impact the ability to purge or sample the well.

Actual well redevelopment work consisted of using a combination of surge-block and surge pump equipment to flush the well screens and associated sand filter pack using each well's own water. The surging activity was typically continued repeatedly along the length of the well casings for approximately five to ten minutes. The disturbed water was subsequently pumped to remove the dislodged silt, fine sand and debris that had accumulated in the well casings and associated sand filter packs over the years. Water was removed from each of the wells until obvious visual traces of sediment had been removed. A total of 533 gallons were removed from the wells and containerized on-site pending laboratory analysis and consideration of appropriate disposition options. A summary of the field observations and data from the well redevelopment work is presented in the table below.



	Summary of Well Redevelopment Data July – August 2012							
Monitor Well	Initial Bottom Depth (feet)	Final Bottom Depth (feet)	Gallons of Water Removed (approximate)	Notes				
W-1	38.90	38.90	45	Dark black water at bottom, but quickly cleared with pumping. Generally clear water after.				
B-1	48.30	48.30	60	Hard bottom and no obvious sediment accumulation; generally clear water				
W-3	37.5	39.5	90	Obstruction near bottom that gives way with pressure (plastic- like); pump sucks hard on the obstruction and flow is prevented. Murky water and sediment removed, but took time due to obstruction interference				
W-4	38.30	38.68	58	Murky water. Sandy at bottom – could not remove all sand with pump				
W-5	35.15	35.25	32	Murky bottom at first. Sediment removed.				
W-6	37.90	37.95	35	Murky bottom at first. Sediment removed.				
W-7	36.35	36.40	48	Slightly murky at bottom, but not clay-like (not sticky)				
W-8	35.75	35.75	45	Clayey silt at very bottom				
W-9	31.30	31.30	50	Hard bottom and no obvious sediment accumulation; generally clear water				
W-10	16.88	16.88	20	Very small amount of silt and murky water readily removed				
TW-2	19.45	19.5	32	Murky bottom, brown-yellow water, strong sweet/sulfur odor, leaf fragments, seeds and hair removed with silt				
TW-3	19.50	19.50	18	Hard bottom and no sediment accumulation; generally clear				

Immediately following purging work, new Cherne-style locking plugs were placed on each of the wells, with the exception of W-10 and TW-3, which had vault covers too low to permit clearance for the new style of Cherne plug. As such, the old plugs were left on these two wells pending consideration of other options.

Sampling Work

On August 21 and August 22, 2012 (five days after the last well had been redeveloped), Anton Geological purged and sampled the existing 12 monitor wells. Upon opening the wells, groundwater was allowed to stabilize for water level measurements prior to purging. The stabilized water depths and calculated groundwater elevations are presented on the attached Table I, *Groundwater Measurements and Elevation Data*. The measurements were collected with a Solinst electronic water level meter with an accuracy of 0.01 feet. Based upon the data collected, the groundwater gradient of the combined A-Zone was calculated to be in a west-southwesterly gradient at 0.008 feet/foot as shown on Plate 2B, *Groundwater Elevation Map*.

Purging was performed by removing a minimum of three well casings with a purge pump that was cleaned between sample locations with Alconox and a series of distilled water rinsings. Disposable discharge tubing was used between sample locations. The pump was additionally fitted with a check valve device that prevented backflow of disturbed (pumped) water into the well after the cessation of purging work.

During the purging work, discharged groundwater was monitored for temperature, pH and specific conductivity parameters to confirm that stabilization had been reached.** In most wells, stabilization of these parameters generally were found to occur after the first well casing volume had been removed. (Due to an issue with the meter (eventually isolated in the field as a loose battery terminal connection), parameters were not measured for B-1, W-5, W-6 and W-8, so a



minimum of three well volumes was removed from these wells.) The well purge data field work sheets are presented in Appendix B.

A total of 347 gallons of purge water were removed from the wells and containerized on-site pending laboratory analysis and consideration of appropriate disposition options.

Following purging work, the groundwater within each well casing was allowed to recharge to at least 80 percent of its displaced depth prior to sampling. Groundwater sampled using disposable polypropylene bailers. Water from the bailers was transferred (using a bottom check-valve device) into a series of labeled 40 mL VOA vials that had been supplied by the laboratory with hydrochloric acid preservative. The containers were immediately placed on ice and shipped to the laboratory under documented chain-of-custody.

Field Observations During Sampling

No sheen or odors were noted in the groundwater removed from the wells on the dates of purging and sampling. Odor and discoloration that had been noted in TW-2 during prior redevelopment of the well was not apparent during the later purging an sampling work

Laboratory Analyses

The groundwater sample, as well as one trip blank, was submitted to SunStar Laboratories, Inc. of Lake Forest, California (a State-certified analytical laboratory) for volatile organic compounds (VOCs) by the EPA 8260B Method. These laboratory data are summarized together with available historical data for the existing and pre-existing on-site monitor wells on the attached Table II, *Summary of Groundwater Laboratory Data*.

FINDINGS AND DISCUSSION

Groundwater Gradient

The August 2012 groundwater elevation data indicates a southwesterly gradient at 0.008 feet/foot, as shown on Plate 2B. Some previous on-site investigations have also indicated a more westerly or northwesterly gradient. However, the August 2012 elevation data is consistent with the easterly and adjacent parcel (2075 Williams Street) data reported by P&D in their earlier referenced report from July 2012.

Chemical Data Trends Over Time

Volatile organic compounds (VOCs) detected in groundwater during August 2012 almost entirely consist of PCE and three associated natural degradation or "daughter" components: TCE, cis-1,2 DCE, and vinyl chloride. (The only other VOCs detected in the groundwater samples include trace concentrations of other isomers of TCE and DCE in wells TW-2 and TW-3.) In a reductive dehalogenation reaction, PCE transforms to TCE, which in turn transforms into a DCE isomer. The DCE, in turn, transforms to vinyl chloride. Over time, natural degradation of vinyl chloride results in its transformation to carbon dioxide, water and chlorine ions, thus ending the reductive dehalogenation process.



The contaminant plume identified on the subject property is consistent with a PCE plume undergoing natural reductive dehalogenation. According to the graphs of historical concentrations versus time as shown on Plates 3A through 3F, the concentrations of PCE have been generally decreasing or stable since they were last sampled more than ten years ago, with the exception of concentrations in the B-Zone well, B-1. In this particular well, the concentration of PCE has increased, but it is also noted that the concentration is within the historical range of values, and that the concentration differences in B-1 are less than about 10 ug/L, while the variations in the remaining on-site A-Zone wells are generally in the 100s to 1000s ug/L.

With the exception of the southern-most well (W-9) and the shallowest well (W-10), groundwater samples from all on-site wells exhibited PCE concentrations exceeding the 5.0 ug/L California Maximum Contaminant Level (MCL) for drinking water.

Existing Lateral Extent of Plume

Plume maps of the August 2012 A-Zone VOCs are shown on Plates 2C through 2F. The maps indicate that the majority of the plume impacts the three northern-most wells (W-5, TW-2 and TW-3). Historically, these three wells have also shown the greatest concentrations of contaminants in A-Zone groundwater on the subject property. The plume was modeled based on equal lines of concentration and the groundwater gradient. The modeling indicates that the majority of the plume is located beneath the largest subject building (2101 Williams Street) and may be originating from an off-site source. Plate 2G is an overview map of the subject property with the approximate location of the PCE plume; this map also shows several off-site wells on the adjacent easterly parcel (2075 Williams Street) which have demonstrated similar concentrations of PCE in A-Zone groundwater in the past. There are no known monitor wells between these off-site wells and the subject building.

According to a Brown and Caldwell report entitled "Results of Off-site Groundwater Survey, James River Corporation, Flexible Packaging Plant, San Leandro, California", dated September 11, 1990, an attempt was made to assess groundwater along the northeastern property boundary further to the north of the existing on-site monitor wells. A total of 11 sampling locations were located along the adjacent Southern Pacific railroad right-of-way located immediately northeasterly of the James River building (extending from about the mid-point of the building northward). The sampling consisted of hydraulically driving one-inch-diameter rods to depths of 20 feet below ground surfaces. Groundwater was sampled from within the rods at each location. However, the report notes that the sample preparation and analytical procedure was not an EPAapproved method for laboratory analysis of chlorinated hydrocarbons. Brown and Caldwell further warned that the results reported are not indicative of actual concentrations that may be present. The cited report indicated that that the groundwater samples were screened with a portable PID/FID chromatograph operated by Western Geo-Engineers. The results indicate that TCE, PCE and DCE were detected at non-official concentrations of up to 176 ug/L, simply suggesting the presence of an upgradient off-site source. No other reports by prior consultants were identified to indicate that follow-up groundwater sampling work was performed in this area.

It is further noted that since the Brown and Caldwell borings reached a maximum depth of approximately 20 feet near the easterly and adjacent parcel, they would be considered to be within the Shallow A-Zone by the easterly and adjacent parcel owner's consultant.



Data Anomaly

During the research of prior on-site work and the work performed by other consultants on the adjacent parcel to the east (2075 Williams Street), it is apparent that most of the wells on the subject property may be constructed across two water-bearing zones (identified by the adjacent consultant as the Shallow A-Zone and Deeper A-Zone). The differentiation of two A-Zones was not made by previous environmental consultants working on the subject property. The shallowest on-site well (W-10) is completed to a depth of 16.88 feet; chemical groundwater data from this well is anomalous compared to surrounding A-Zone wells, as it lacks any trace of PCE or TCE while containing cis-1,2 DCE and vinyl chloride (normally indicative of being on the distal edge of a decayed PCE plume). Therefore, W-10 may be considered to be a true Shallow A-Zone well.

However, it should be additionally noted that the chemicals detected in this shallow well (cis-1,2 DCE and vinyl chloride) have specific densities lighter than that of TCE and PCE. The specific density of cis-1,2 DCE is 1.213 g/cm³, while vinyl chloride is lighter than water (1.0 g/cm³) at 0.910 g/cm³. By contrast, TCE and PCE have heavier specific densities (at 1.46 and 1.622 g/cm³, respectively). Therefore, if the two A-Zones communicate on the subject property (or if only one A-Zone exists), it would seem reasonable to expect less dense decay compounds in the shallowest well, which likely has a screened interval at the groundwater interface. Regardless of either possible explanation, the anomalous data for W-10 was not included while modeling the PCE and TCE plume isoconcentration lines on Plates 2C and 2D.

SUMMARY AND CONCLUSIONS

Between July and August 2012, each of the 12 existing on-site monitor wells were redeveloped, purged and sampled after more than 11 to 20 years of inactivity (depending on the well).

PCE concentrations as high as 1200 ug/L were identified on the subject property. Groundwater samples from ten of the 12 wells exhibited PCE concentrations exceeding the 5.0 ug/L California Maximum Contaminant Level (MCL) for drinking water. The highest concentrations detected were in the three northern-most on-site monitor wells. 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 0.008 feet/foot in a west-southwesterly direction.

Based on the groundwater gradient, it would appear 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 between these wells and the subject building at this time. Prior sampling between these wells and the subject property consisted of the 1990 advancement of 11 hydraulically driven soil probes near the northeastern region of the subject property which extended to depths of 20 feet (Shallow A-Zone). The probes were intended for screening purposes only in order to simply determine if PCE contamination was present upgradient from the subject property. However, the field test method used by the consultant was not approved by the EPA, and therefore the consultant warned that the concentrations in their report were not indicative of actual subsurface conditions.

The existing on-site monitor well network may include A-Zone wells that are screened between two water-bearing zones (Shallow A-Zone and Deeper A-Zone), as defined by the consultant for the easterly and adjacent parcel (2075 Williams Street). 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.

Monitor well redevelopment and purge water containerized on the subject property should be properly collected and disposed of by a licensed hazardous waste hauler. The collection should occur before the next scheduled quarterly monitoring activity in November 2012. A proposal and cost estimate for disposal of the water will be provided shortly.

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 groundwater contact equipment prior to field operations. With the exception of single-use disposable polypropylene bailers and disposable discharge tubing, all groundwater contact equipment was cleaned with an Alconox solution and a series of distilled water rinsings between wells. Groundwater sampling equipment included laboratory supplied glassware (40 ml VOA vials), as well as the mentioned disposable bailers. Disposable neoprene gloves were used at all times, and were changed immediately before sample container handling and between well locations as a minimum.

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. Preservatives used for the groundwater samples included hydrochloric acid inside the sample vials (laboratory prepared), and wet ice. The samples were accompanied by a trip blank to compare against the sample data for potential laboratory- or field-induced contamination. No PCE, TCE, cis-1,2 DCE or vinyl chloride was detected in the blank.

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 a number of banks, land developers, government agencies, and lending/financial institutions. Anton Geological also is presently a consultant for colleagues at other northern California environmental and geotechnical firms, as well as for two national property assessment corporations. A partial list of previous noteworthy clients includes: AMRESCO Commercial Finance, Inc., EI, Inc., Hawaii & San Francisco Development Company, LandAmerica Corporation, Petrovich Development Company, Presidio Hotel Group, Ramcon



Environmental Engineering and Contracting, US Bancorp, the United States Department of Agriculture, the United States Army Corps of Engineers, and Williams Communications.

Mr. Anton holds a Bachelor of Science degree in Geology from the University of California at Davis, and is a Professional Geologist in the State of California. Mr. Anton is a Member of the Association of Engineering Geologists (AEG). Mr. Anton also is 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 Resources Association (GRA). Mr. Anton has performed hundreds of Phase I and II environmental assessments in California, Colorado, Oregon, Nevada, New Mexico and Washington, and has provided professional quality control peer review services for environmental projects located in Florida, Maryland, New Jersey, North Carolina and Texas.



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

Table I	- Groundwater Measurements and Elevation Data
Table II	- Summary of Groundwater Laboratory Data
Plate 1A	- Topographic Map
Plate 1B	- Aerial Photograph 2011
Plate 2A	- Site Map
Plate 2B	- Groundwater Elevation Map
Plates 2C-2F	- Isoconcentration Maps
Plate 2G	- Noteworthy Nearby Wells
Plates 3A-3F	- Graphs, Contaminant Concentrations vs. Time
Appendix A	- Laboratory Data
Appendix B	- Field Work Sheets, Monitor Well Purging and Sampling
Appendix C	- Summary of Monitor Well Construction Details

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

(1) addressee (electronic)





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Monitor	Water-Bearing	Elevation	Depth To	Calculated	Bottom	Screened Interval
Well	Zone	of Casing	Groundwater	Groundwater	Depth of	
		(feet)	(feet)	Elevation (feet)	Well (feet)	
W-1	Combined A	24.34	10.68	13.66	38.90	Unconfirmed
B-1	В	24.25	10.65	13.60	48.30	44 feet to bottom
W-3	Combined A	24.49	10.86	13.63	31.30	Unconfirmed
W-4	Combined A	24.62	11.05	13.57	38.68	Unconfirmed
W-5	Combined A	25.39	11.63	13.76	35.25	Unconfirmed
W-6	Combined A	24.72	11.00	13.72	37.95	Unconfirmed
W-7	Combined A	24.04	10.95	13.09	36.40	17 feet to bottom
W-8	Combined A	23.83	10.45	13.38	35.75	22 feet to bottom
W-9	Combined A	Unknown	10.45	Not calculated	31.30	20 feet to bottom
W-10	Shallow A	24.77	11.22	13.55	16.88	Unconfirmed
TW-2	Combined A	25.79	13.91	11.88	19.50	5 feet to bottom
TW-3	Combined A	25.29	12.72	12.04	19.50	5 feet to bottom

TABLE IGroundwater Measurements and Elevation DataAugust 21, 2012

Table II Summary of Groundwater Laboratory Data Detected PCE and Associated Compounds in Micrograms/Liter (ug/L)¹ 1989 to Present

Monitor	Date	PCE ²	TCE ³	Cis-1,2	Vinyl	Test	Consultant / Laboratory
Well				DCE ⁴	Chloride	Method	·
W-1	04/895	300	<100	730	300	EPA 8240	Brown and Caldwell / same
	$08/89^{5}$	<500	<500	<500	<500	EPA 8240	Brown and Caldwell / same
	03/90 ⁶	<500	<500	<500	<500	EPA 8010	Brown and Caldwell / same
	06/90 ⁶	<2000	<2000	<2000	<2000	EPA 8010	Brown and Caldwell / same
	09/90 ⁶	330	58	320	100	EPA 8010	Brown and Caldwell / same
	12/90 ⁶	<500	<500	<500	<500	EPA 8010	Brown and Caldwell / same
	08/91 ⁶	4.9	2.9	22	3.2	EPA 8010	Brown and Caldwell / same
	11/91 ⁶	3.2	4.9	13	4.9	EPA 8010	Brown and Caldwell / same
	02/92 ⁶	330	140	330	39	EPA 8010	Brown and Caldwell / same
	05/92 ⁶	55	17	42	25	EPA 8010	Brown and Caldwell / same
	08/22/12	52	18	7.3	1.9	EPA 8260B	Anton Geological / Sunstar
B-1	04/89	12	<1	7	<1	EPA 8240	Brown and Caldwell / same
	08/89	6	<1	<1	<1	EPA 8240	Brown and Caldwell / same
	03/90	2	<1	2	<1	EPA 8010	Brown and Caldwell / same
	06/90	2	<1	1	<1	EPA 8010	Brown and Caldwell / same
	09/90	3	<1	2	<1	EPA 8010	Brown and Caldwell / same
	12/90	2	<1	1	<1	EPA 8010	Brown and Caldwell / same
	8/91	2.2	< 0.5	< 0.5	< 0.5	EPA 8010	Brown and Caldwell / same
	11/91	2.4	< 0.5	< 0.5	< 0.5	EPA 8010	Brown and Caldwell / same
	02/92	7.7	< 0.5	< 0.5	< 0.5	EPA 8010	Brown and Caldwell / same
	05/92	6.1	1.6	< 0.5	< 0.5	EPA 8010	Brown and Caldwell / same
	02/93	3.4	<1	<1	<1	EPA 8240	Harding Lawson / Anametrix
	11/93 ⁷	3	<5	<5	<5	EPA 8240	Harding Lawson / Anametrix
	03/947	<5	<5	<5	<10	EPA 8240	Harding Lawson / Anametrix
	06/94 ⁷	<5	<5	<5	<10	EPA 8240	Harding Lawson / Anametrix
	09/94 ⁷	<5	<5	<5	<10	EPA 8240	Harding Lawson / Anametrix
	12/94 ⁷	<5	<5	<5	<10	EPA 8240	Harding Lawson / Anametrix
	08/21/12	10	<1.0	<1.0	<1.0	EPA 8260B	Anton Geological / Sunstar
W-2	04/89	1000	<50	1400	450	EPA 8240	Brown and Caldwell / same
(formally	02/92	< 0.5	< 0.5	< 0.5	< 0.5	EPA 8010	Brown and Caldwell / same
destroyed							
in 1992)							
W-3	04/89	1200	230	170	39	EPA 8240	Brown and Caldwell / same
	08/89	100	<50	<50	<50	EPA 8240	Brown and Caldwell / same
	03/90	29	130	<5	24	EPA 8010	Brown and Caldwell / same
	06/90	340	200	<2	<2	EPA 8010	Brown and Caldwell / same
	09/90	190	140	<1	14	EPA 8010	Brown and Caldwell / same
	12/90	88	69	<1	11	EPA 8010	Brown and Caldwell / same
	08/91	75	48	39	14	EPA 8010	Brown and Caldwell / same
	11/91	< 0.5	46	73	1.9	EPA 8010	Brown and Caldwell / same
	02/92	340	290	76	20	EPA 8010	Brown and Caldwell / same
	05/92	250	210	28	12	EPA 8010	Brown and Caldwell / same
	02/93	250	190	24	19	EPA 8240	Harding Lawson / Anametrix
	11/93	<5	<5	14	26	EPA 8240	Harding Lawson / Anametrix
	03/94	<5	<5	25	<10	EPA 8240	Harding Lawson / Anametrix
	06/94	<5	<5	8	<10	EPA 8240	Harding Lawson / Anametrix
	09/94	19	14	8	<10	EPA 8240	Harding Lawson / Anametrix
	12/94	<5	<5	61	<10	EPA 8240	Harding Lawson / Anametrix
	10/957	320	150	19	200	unknown	CTEC-ESCM summary only
	11/95 ⁷	220	150	24	250	unknown	CTEC-ESCM summary only
	08/21/12	36	22	2.2	<1.0	EPA 8260B	Anton Geological / Sunstar

(present data shown in bold)

Monitor	Date	PCE ²	TCE ³	Cic 12	Vinyl	Test	Consultant / Laboratory
Well	Date	ICE	ICL	Cis-1,2 DCE ⁴	Chloride	Method	Consultant / Laboratory
W-4	04/89	140	<100	720	<100	EPA 8240	Brown and Caldwell / same
	08/89	<2000	<2000	<2000	<2000	EPA 8240	Brown and Caldwell / same
	03/90	<500	<500	<500	<500	EPA 8010	Brown and Caldwell / same
	06/90	390	<200	350	<200	EPA 8010	Brown and Caldwell / same
	09/90	40	14	120	41	EPA 8010	Brown and Caldwell / same
	12/90	<500	<500	<500	<500	EPA 8010	Brown and Caldwell / same
	08/91	30	15	52	<2	EPA 8010	Brown and Caldwell / same
	11/91	9	7	25	8	EPA 8010	Brown and Caldwell / same
	02/92	180	140	200	21	EPA 8010	Brown and Caldwell / same
	05/92	300	150	140	32	EPA 8010	Brown and Caldwell / same
	08/21/12	44	18	5.8	3.6	EPA 8260B	Anton Geological / Sunstar
W-5	04/89	5000	600	6000	1000	EPA 8240	Brown and Caldwell / same
VV-5	08/89	1300	450	5000	690	EPA 8240	Brown and Caldwell / same
	03/90	5600	460	<20	190	EPA 8010	Brown and Caldwell / same
	06/90	2100	340	<50	300	EPA 8010	Brown and Caldwell / same
	09/90	670	170	<20	220	EPA 8010	Brown and Caldwell / same
	12/90	130	63	480	99	EPA 8010	Brown and Caldwell / same
	08/91	1800	440	3600	80	EPA 8010	Brown and Caldwell / same
	11/91	2600	670	4400	90	EPA 8010	Brown and Caldwell / same
	02/92	3500	910	5500	80	EPA 8010	Brown and Caldwell / same
	05/92	3000	740	2700	120	EPA 8010	Brown and Caldwell / same
	02/93	3600	740	2500	120	EPA 8240	Harding Lawson / Anametrix
	11/93	2100	500	1000	160	EPA 8240	Harding Lawson / Anametrix
	03/94	2600	450	1200	<100	EPA 8240	Harding Lawson / Anametrix
	06/94	3400	500	1200	160	EPA 8240	Harding Lawson / Anametrix
	09/94	2500	480	1300	140	EPA 8240	Harding Lawson / Anametrix
	12/94	1800	530	1600	<100	EPA 8240	Harding Lawson / Anametrix
	10/95	3400	530	19	unknown	unknown	CTEC-ESCM summary only
	11/95	3700	350	24	unknown	unknown	CTEC-ESCM summary only
	08/21/12	430	66	15	<1.0	EPA 8260B	Anton Geological / Sunstar
W-6	04/89	1400	240	12	<1	EPA 8240	Brown and Caldwell / same
	08/89	920	240	<5	<5	EPA 8240	Brown and Caldwell / same
	03/90	1700	280	<20	<20	EPA 8010	Brown and Caldwell / same
	06/90	940	230	<5	<5	EPA 8010	Brown and Caldwell / same
	09/90	980	280	7	<5	EPA 8010	Brown and Caldwell / same
	12/90	540	210	6	<5	EPA 8010	Brown and Caldwell / same
	08/91	320	220	2	<2	EPA 8010	Brown and Caldwell / same
	11/91	430	310	<5	<2	EPA 8010	Brown and Caldwell / same
	02/92	410	360	<2	<2	EPA 8010	Brown and Caldwell / same
	05/92	380	390	<2	<2	EPA 8010	Brown and Caldwell / same
	02/93	520	340	<5	<5	EPA 8240	Harding Lawson / Anametrix
	11/93	280	170	<10	<10	EPA 8240	Harding Lawson / Anametrix
	03/94	220	160	56	<10	EPA 8240	Harding Lawson / Anametrix
	06/94	450	310	100	<10	EPA 8240	Harding Lawson / Anametrix
	09/94	310	230	380	<10	EPA 8240	Harding Lawson / Anametrix
	12/94	120	78	280	<10	EPA 8240	Harding Lawson / Anametrix
	10/95	470	250	unknown	unknown	unknown	CTEC-ESCM summary only
	11/95	430	250	unknown	unknown	unknown	CTEC-ESCM summary only
	12/20/00 ⁸	220	60	14	<20	EPA 8260	CTEC-ESCM / Severn Trent
	03/26/01 ^{8,9}	110	50	13	<10	EPA 8260	CTEC-ESCM summary only
	6/11/01 ⁸	220	62	10	<20	EPA 8260	CTEC-ESCM / Severn Trent
	08/21/12	60	30	1.2	<1.0	EPA 8260B	Anton Geological / Sunstar

Monitor	Date	PCE ²	TCE ³	Cis-1,2	Vinyl	Test	Consultant / Laboratory
Well				DCE ⁴	Chloride	Method	
W-7	04/89	1100	260	140	<1	EPA 8240	Brown and Caldwell / same
	08/89	940	240	60	<5	EPA 8240	Brown and Caldwell / same
	03/90	740	240	72	<5	EPA 8010	Brown and Caldwell / same
	06/90	590	210	81	<5	EPA 8010	Brown and Caldwell / same
	09/90	680	270	65	<5	EPA 8010	Brown and Caldwell / same
	12/90	480	170	32	<5	EPA 8010	Brown and Caldwell / same
	08/91	390	190	39	<2	EPA 8010	Brown and Caldwell / same
	11/91	430	220	50	<2	EPA 8010	Brown and Caldwell / same
	02/92	410	240	110	29	EPA 8010	Brown and Caldwell / same
	05/92	380	210	44	30	EPA 8010	Brown and Caldwell / same
	02/93	270	200	66	51	EPA 8240	Harding Lawson / Anametrix
	11/93	190	160	15	<20	EPA 8240	Harding Lawson / Anametrix
	03/94	220	230	21	<10	EPA 8240	Harding Lawson / Anametrix
	06/94	240	240	26	<10	EPA 8240	Harding Lawson / Anametrix
	09/94	86	120	230	<10	EPA 8240	Harding Lawson / Anametrix
	12/94	8	9	120	37	EPA 8240	Harding Lawson / Anametrix
	10/95	140	140	49	48	unknown	CTEC-ESCM summary only
	11/95	170	190	39	28	unknown	CTEC-ESCM summary only
	12/20/00	120	68	6.8	<10	EPA 8260	CTEC-ESCM / Severn Trent
	03/26/019	66	60	7.3	<10	EPA 8260	CTEC-ESCM summary only
	6/11/01	160	96	8	<10	EPA 8260	CTEC-ESCM / Severn Trent
	08/21/12	24	20	2.0	<1.0	EPA 8260B	Anton Geological / Sunstar
W-8	04/89	120	<5	35	15	EPA 8240	Brown and Caldwell / same
	08/89	<50	<50	<50	<50	EPA 8240	Brown and Caldwell / same
	03/90	<1000	<1000	<1000	<1000	EPA 8010	Brown and Caldwell / same
	06/90	<1000	<1000	<1000	<1000	EPA 8010	Brown and Caldwell / same
	09/90	1	3	31	5	EPA 8010	Brown and Caldwell / same
	12/90	<500	<500	<500	<500	EPA 8010	Brown and Caldwell / same
	08/91	<2	4	24	13	EPA 8010	Brown and Caldwell / same
	11/91	< 0.5	0.6	14	11	EPA 8010	Brown and Caldwell / same
	02/92	1.2	1.5	72	54	EPA 8010	Brown and Caldwell / same
	05/92	< 0.5	3	51	62	EPA 8010	Brown and Caldwell / same
	02/93	<1	7.6	200	170	EPA 8240	Harding Lawson / Anametrix
	11/93	<5	3	150	130	EPA 8240	Harding Lawson / Anametrix
	03/94	<5	<5	250	180	EPA 8240	Harding Lawson / Anametrix
	06/94	<5	<5	290	280	EPA 8240	Harding Lawson / Anametrix
	09/94	<5	<5	59	43	EPA 8240	Harding Lawson / Anametrix
	12/94	<5	<5	15	<10	EPA 8240	Harding Lawson / Anametrix
	10/95	ND^{10}	ND	230	230	unknown	CTEC-ESCM summary only
	11/95	ND	ND	280	290	unknown	CTEC-ESCM summary only
	12/20/00	<5	<5	<5	<10	EPA 8260	CTEC-ESCM / Severn Trent
	03/26/019	100	71	16	<10	EPA 8260	CTEC-ESCM summary only
	06/11/01	<5.0	<5.0	33	20	EPA 8260	CTEC-ESCM / Severn Trent
	08/21/12	25	21	35	2.1	EPA 8260B	Anton Geological / Sunstar

Monitor	Date	PCE ²	TCE ³	Cis-1,2	Vinyl	Test	Consultant / Laboratory
Well				DCE ⁴	Chloride	Method	
W-9	04/89	33	34	3	3	EPA 8240	Brown and Caldwell / same
	08/89	37	37	2	<1	EPA 8240	Brown and Caldwell / same
	03/90	13	21	<1	<1	EPA 8010	Brown and Caldwell / same
	06/90	23	28	<1	<1	EPA 8010	Brown and Caldwell / same
	09/90	20	26	<1	<1	EPA 8010	Brown and Caldwell / same
	12/90	19	26	<2	<2	EPA 8010	Brown and Caldwell / same
	08/91	22	39	0.8	< 0.5	EPA 8010	Brown and Caldwell / same
	11/91	23	43	1.1	< 0.5	EPA 8010	Brown and Caldwell / same
	02/92	27	61	3.0	< 0.5	EPA 8010	Brown and Caldwell / same
	05/92	19	59	1.3	< 0.5	EPA 8010	Brown and Caldwell / same
	02/93	22	99	1.8	<5	EPA 8240	Harding Lawson / Anametrix
	11/93	11	92	<5	<5	EPA 8240	Harding Lawson / Anametrix
	03/94	13	110	<5	>10	EPA 8240	Harding Lawson / Anametrix
	06/94	12	110	<5	<10	EPA 8240	Harding Lawson / Anametrix
	09/94	7	80	30	<10	EPA 8240	Harding Lawson / Anametrix
	12/94	<5	<5	110	<10	EPA 8240	Harding Lawson / Anametrix
	10/95	140	140	NR	200	unknown	CTEC-ESCM summary only
	11/95	170	190	NR	250	unknown	CTEC-ESCM summary only
	08/21/12	1.8	9.5	<1.0	<1.0	EPA 8260B	Anton Geological / Sunstar
W-10	12/90	<5000	<5000	<5000	<5000	EPA 8010	Brown and Caldwell / same
	08/91	500	200	1600	<100	EPA 8010	Brown and Caldwell / same
	11/91	400	200	1600	<100	EPA 8010	Brown and Caldwell / same
	02/92	400	<100	1100	<100	EPA 8010	Brown and Caldwell / same
	05/92	210	<50	520	<50	EPA 8010	Brown and Caldwell / same
	02/93	<300	<300	<300	<300	EPA 8240	Harding Lawson / Anametrix
	11/93	<5000	<5000	<5000	<10000	EPA 8240	Harding Lawson / Anametrix
	03/94	<1300	<1300	<1300	<2500	EPA 8240	Harding Lawson / Anametrix
	06/94	<2000	<2000	<2000	<4000	EPA 8240	Harding Lawson / Anametrix
	09/94	<2500	<2500	<2500	<5000	EPA 8240	Harding Lawson / Anametrix
	12/94	<500	<500	<500	<1000	EPA 8240	Harding Lawson / Anametrix
	10/95	ND	ND	unknown	unknown	unknown	CTEC-ESCM summary only
	11/95	ND	ND	unknown	unknown	unknown	CTEC-ESCM summary only
	12/20/00	180	69	14	<20	EPA 8260	CTEC-ESCM / Severn Trent
	03/26/01 ⁹	100	71	13	<10	EPA 8260	CTEC-ESCM summary only
	06/11/01	210	60	11	<20	EPA 8260	CTEC-ESCM / Severn Trent
	08/21/12	<1.0	<1.0	3.1	17	EPA 8260B	Anton Geological / Sunstar
TW-1	12/20/00	2300	<2000	<2000	<4000	EPA 8260	CTEC-ESCM / Severn Trent
(not	03/26/01 ⁹	6.7	<5.0	28	<10	EPA 8260	CTEC-ESCM summary only
located in	06/11/01	15	<5	23	<10	EPA 8260	CTEC-ESCM / Severn Trent
2012)							
TW-2	12/20/00	1700	130	<100	<200	EPA 8260	CTEC-ESCM / Severn Trent
	03/26/01 ⁹	NS ¹¹	NS	NS	NS	NS	NS
	06/11/01	2200	160	230	<100	EPA 8260	CTEC-ESCM / Severn Trent
	08/21/12	1100	190 ¹²	230	5.4	EPA 8260B	Anton Geological / Sunstar
TW-3	12/20/00	1100	150	210	<100	EPA 8260	CTEC-ESCM / Severn Trent
	03/26/019	580	120	280	<50	EPA 8260	CTEC-ESCM summary only
	06/11/01	1500	180	230	<100	EPA 8260	CTEC-ESCM / Severn Trent
	08/21/12	1200	300 ¹²	590 ¹³	<1.0	EPA 8260B	Anton Geological / Sunstar

Table Notes:

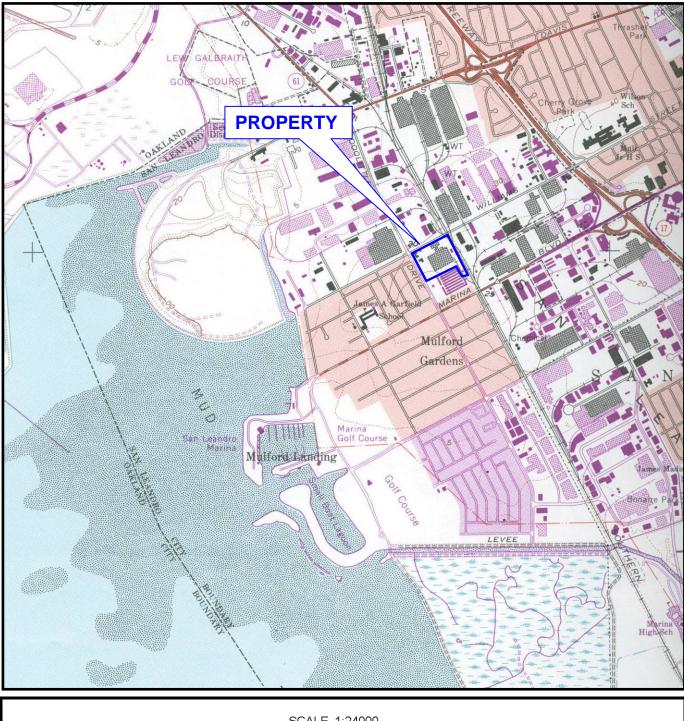
1. All concentrations shown in ug/L (a.k.a. parts-per-billion). Detection levels vary by test method and by sample (due to laboratory dilution).

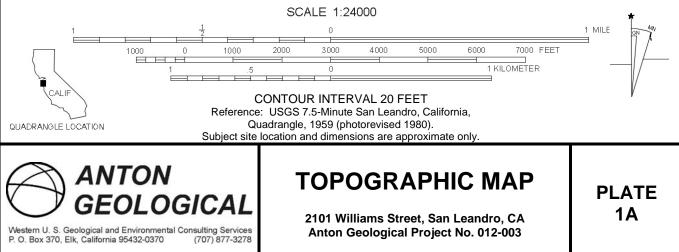
- 2. PCE = tetrachloroethene (a.k.a. perchloroethene)
- 3. TCE = trichloroethene
- 4. Cis-1,2-DCE = cis-1,2-dichloroethene (reported as "1,2-dichloroethene (total)" in reports prior to 2012).

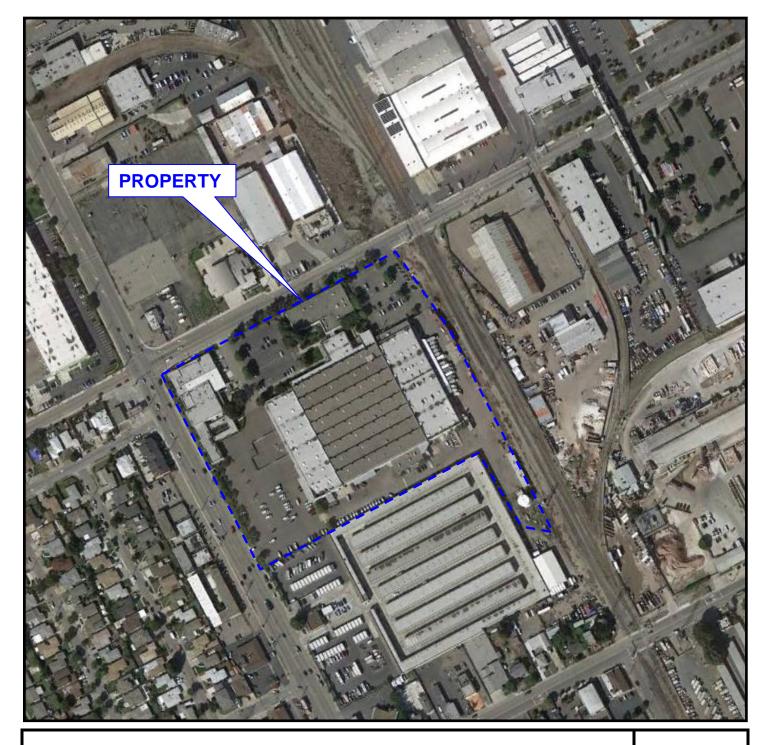
5. Data for these monitoring dates obtained from a Brown and Caldwell report entitled "First Quarter Groundwater Monitoring Report, James River Corporation, Flexible Packaging Plant, 2101 Williams Street, San Leandro, California" dated July 10, 1990.

6. Data for these monitoring dates obtained from a Brown and Caldwell report entitled "February 1992 Quarterly Self-Monitoring Report, James River Corporation, Flexible Packaging Group, San Leandro, California" dated March 24, 1992, and a Brown and Caldwell report entitled "Amended Groundwater Monitoring Program/Frequency, James River Corporation, Flexible Packaging Group, 2101 Williams Street, San Leandro, California" dated October 9, 1992.

- 7. Data for these monitoring dates obtained from Harding Lawson Associates reports entitled "Quarterly Groundwater Monitoring, Aerial Photograph Review, Agency File Search, and Degradation Products Research, James River Corporation, San Leandro, California" dated February 11, 1994, and entitled "Revised Fourth Quarter 1994 Groundwater Monitoring Report, James River Corporation, San Leandro, California" dated January 4, 1995.
- Data for these monitoring dates obtained from a CTEC-ESCM, Inc. report entitled "Chlorinated Solvent Plume Report, Don Jones Property (Formerly Printpack), 2101 Williams Street, Alameda County, San Leandro, California" dated July 23, 2001, and from a CTEC-ESCM, Inc. report entitled "Environmental Report, Former Printpack Property, 2101 Williams Street, San Leandro, CA" dated January 31, 2001.
- 9. Chain of custody documents for the samples have conflicting dates. The sampling date is listed as March 26, 2001. The signature releasing custody of the samples is dated March 18, 2001.
- 10. ND = None Detected. Data obtained from summary information; laboratory detection limits not indicated in the summary.
- 11. NS = Not Sampled. Review of report and laboratory data confirm that this well was skipped during the date of this sampling episode.
- 12. Laboratory additionally reported 1.2 ug/L 1,1,1-trichloroethane in this sample on this date.
- 13. Laboratory additionally reported 1.5 ug/L 1,2-dichloroethene and 2.3 ug/L trans 1,2-dichloroethene in this sample on this date.







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



PLATE

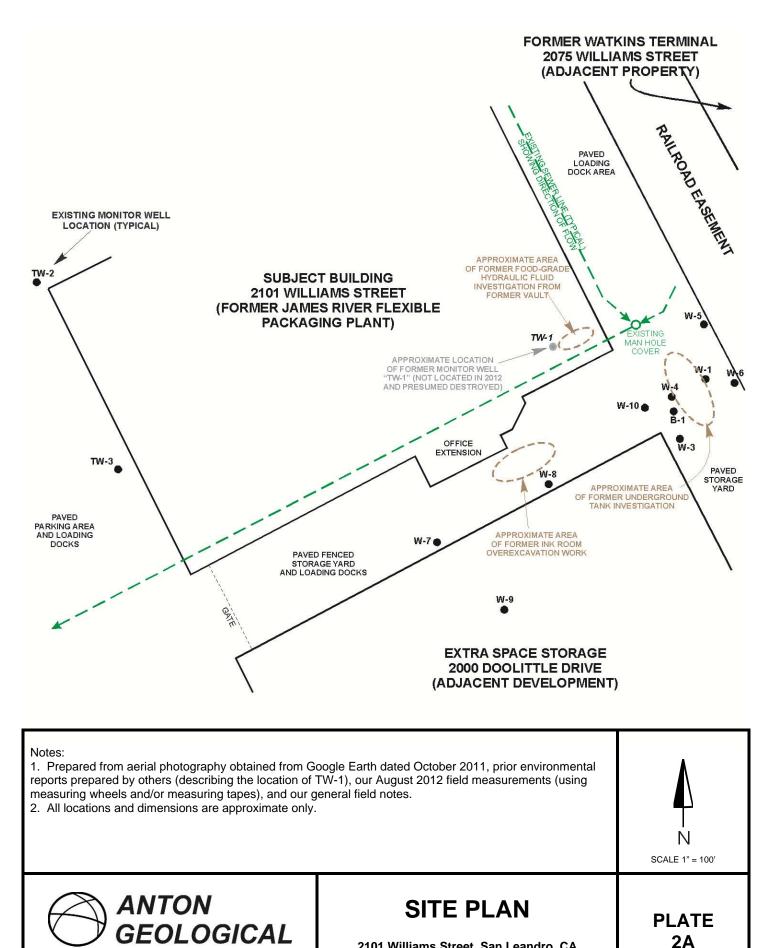
1B



AERIAL PHOTOGRAPH 2011

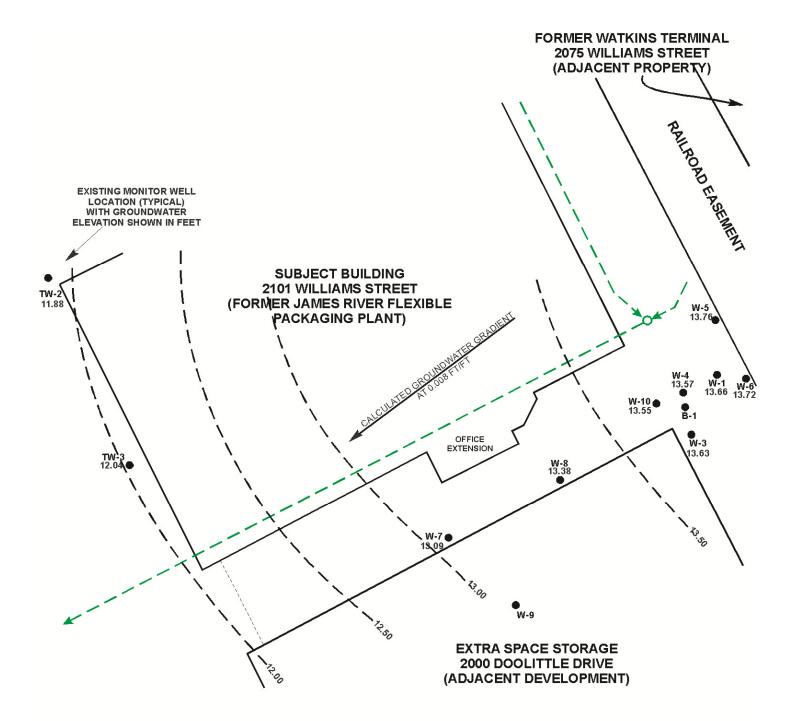
Western U. S. Geological and Environmental Consulting Services P. O. Box 370, Elk, California 95432-0370 (707) 877-3278

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

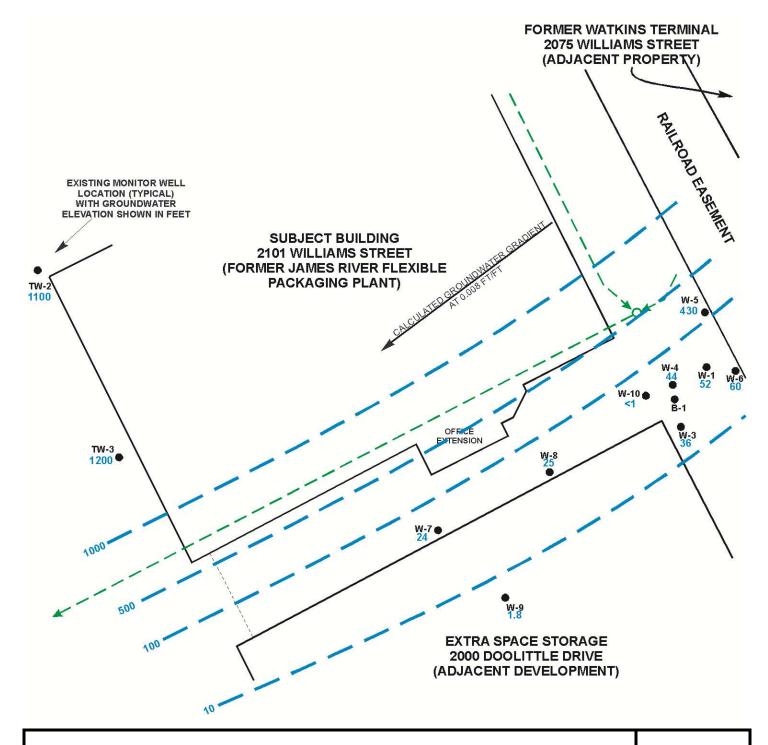


2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003

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



 Notes: Groundwater elevations and contour lines shown in Prepared from aerial photography obtained from Gemeasurements, and our general field notes. Groundwater direction and gradient calculated usin Groundwater elevations for B-1 and W-9 were not of well, and no well casing elevation data for W-9 was ide All locations and dimensions are approximate only. 	N SCALE 1" = 100'	
Western U. S. Geological and Environmental Consulting Services P. O. Box 370, Elk, California 95432-0370 (707) 877-3278	GROUNDWATER ELEVATION MAP AUGUST 2012 2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003	PLATE 2B



- 1. PCE concentrations and isoconcentration lines shown in ug/L.
- 2. Prepared from aerial photography obtained from Google Earth dated October 2011, our August 2012 field measurements, and our general field notes.
- 3. Groundwater direction and gradient calculated using elevation data from W-1, W-7 and TW-2.
- 4. Concentration for B-1 not included; B-1 is screened in a lower water-bearing zone.
- 5. At 17 feet deep, W-10 is significantly shallower than the other wells (averaging 30 feet); as such, the
- anomalous data was ignored for this modeling effort.
- 6. All locations and dimensions are approximate only.



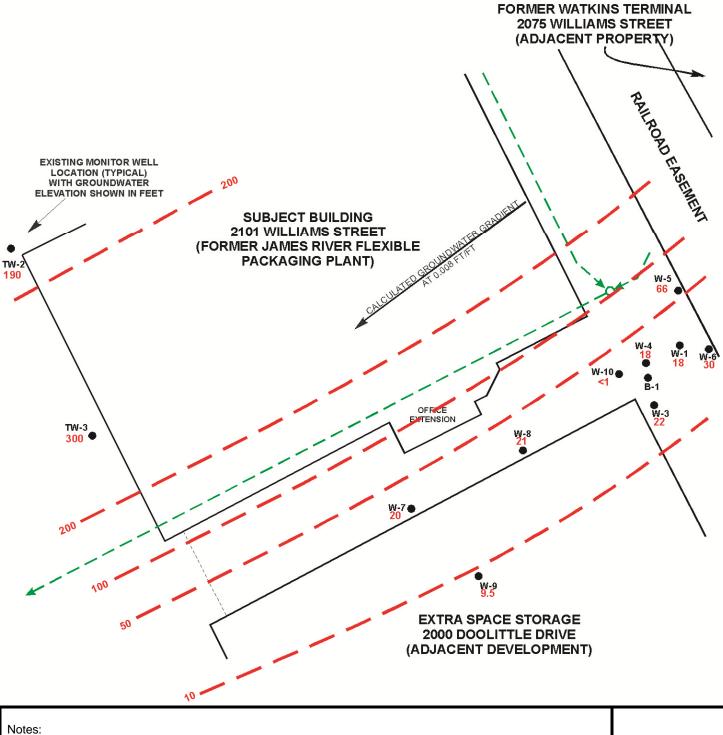
PCE ISOCONCENTRATION MAP

AUGUST 2012 2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003



PLATE

2C



- 1. TCE concentrations and isoconcentration lines shown in ug/L.
- 2. Prepared from aerial photography obtained from Google Earth dated October 2011, our August 2012 field measurements, and our general field notes.
- 3. Groundwater direction and gradient calculated using elevation data from W-1, W-7 and TW-2.
- 4. Concentration for B-1 not included; B-1 is screened in a lower water-bearing zone.
- 5. At 17 feet deep, W-10 is significantly shallower than the other wells (averaging 30 feet); as such, the
- anomalous data was ignored for this modeling effort.
- 6. All locations and dimensions are approximate only.



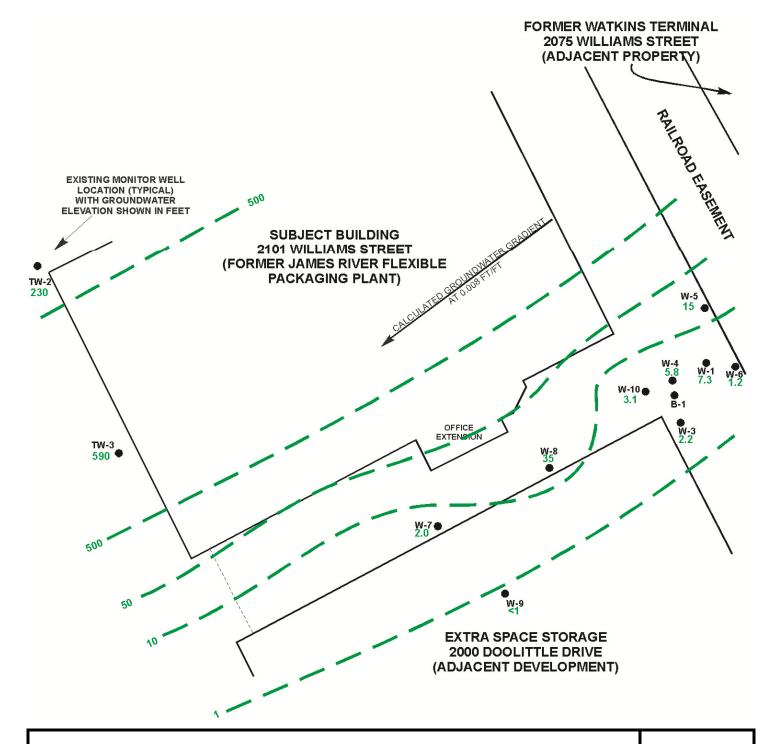
TCE ISOCONCENTRATION MAP

AUGUST 2012 2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003



PLATE

2D



- 1. Cis-1,2 DCE concentrations and isoconcentration lines shown in ug/L.
- 2. Prepared from aerial photography obtained from Google Earth dated October 2011, our August 2012 field measurements, and our general field notes.
- 3. Groundwater direction and gradient calculated using elevation data from W-1, W-7 and TW-2.
- 4. Concentration for B-1 not included; B-1 is screened in a lower water-bearing zone.
- 5. All locations and dimensions are approximate only.

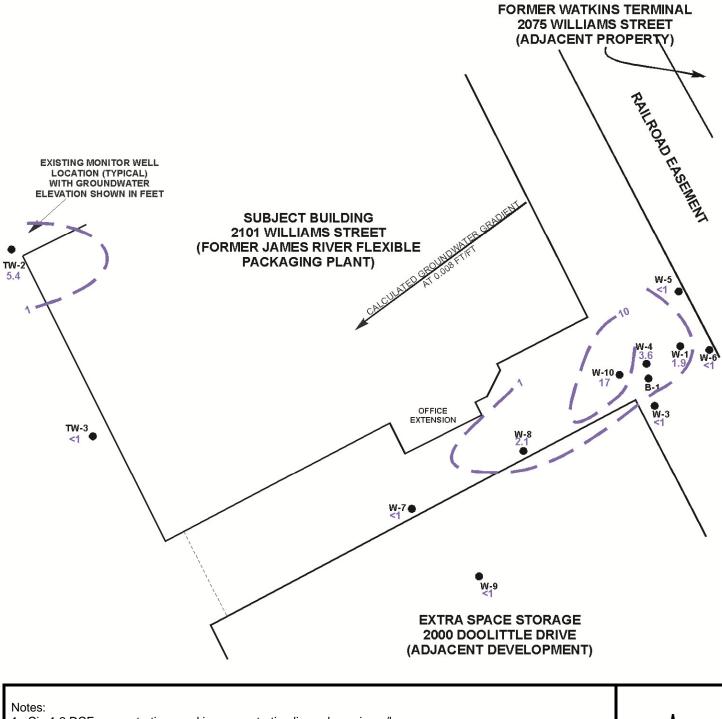


CIS-1,2 DCE ISOCONCENTRATION MAP AUGUST 2012

2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003 PLATE 2E

N SCALE 1" = 100'

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



- 1. Cis-1,2 DCE concentrations and isoconcentration lines shown in ug/L.
- 2. Prepared from aerial photography obtained from Google Earth dated October 2011, our August 2012 field measurements, and our general field notes.
- 3. Groundwater direction and gradient calculated using elevation data from W-1, W-7 and TW-2.
- 4. Concentration for B-1 not included; B-1 is screened in a lower water-bearing zone.
- 5. All locations and dimensions are approximate only.

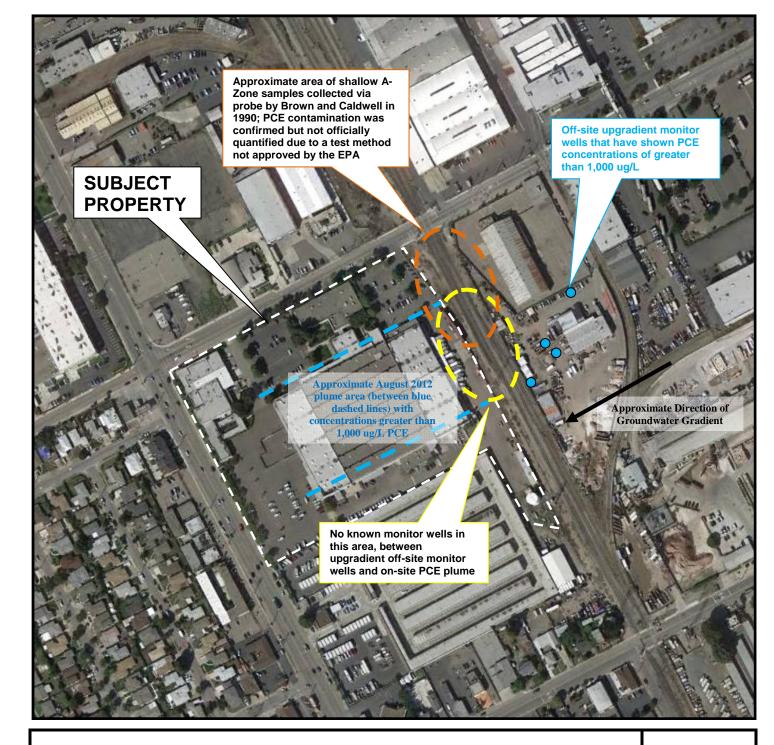


VINYL CHLORIDE ISOCONCENTRATION MAP AUGUST 2012

2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003 PLATE 2F

N SCALE 1" = 100'

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- 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.



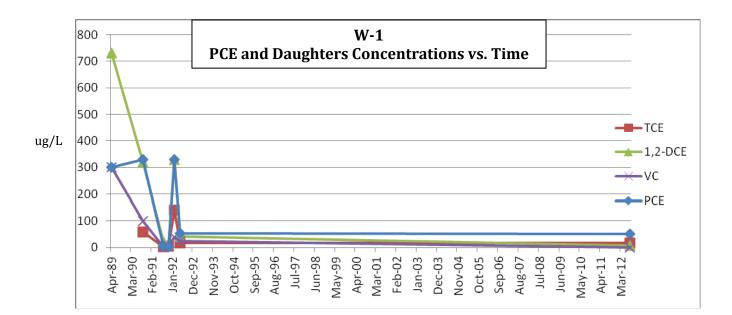


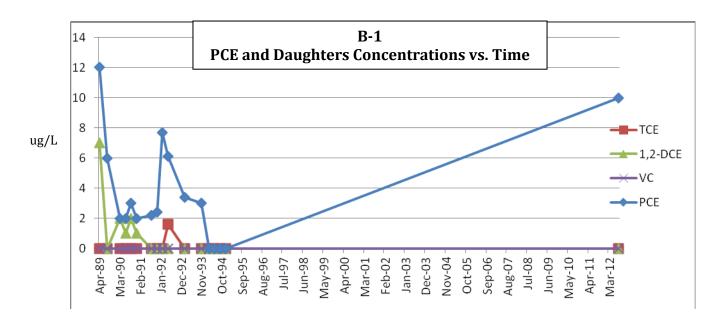
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NOTEWORTHY NEARBY OFF-SITE MONITOR WELLS AUGUST 2012

PLATE 2G

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



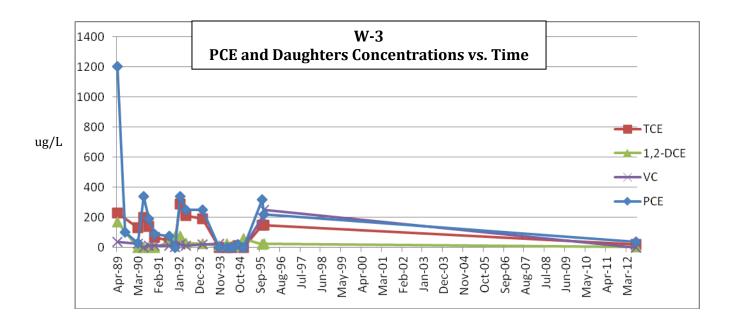


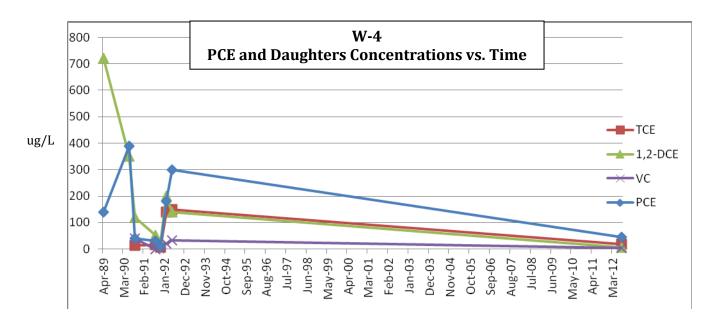
- 1. All concentrations shown in ug/L (a.k.a. parts-per-billion). Laboratory detection limits vary by test method and by sample (due to laboratory dilution). Detection limits at or less than 10 ug/L were treated as "zero", while detection limits above 10 ug/L were treated as data gaps, with graph lines connecting data before and after the gaps.
- 2. PCE = tetrachloroethene (a.k.a. perchloroethene).
- 3. TCE = trichloroethene.
- 4. Cis-1,2-DCE = cis-1,2-dichloroethene (reported as "1,2-dichloroethene (total)" in reports prior to 2012).
- 5. VC = vinyl chloride.
- 6. Data developed prior to August 21, 2012 was published by prior consultants. Please refer to the report text for a listing of the previous reports by others.



GRAPHS

CONTAMINANT CONCENTRATIONS VS. TIME AS OF AUGUST 2012 2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003 PLATE 3A



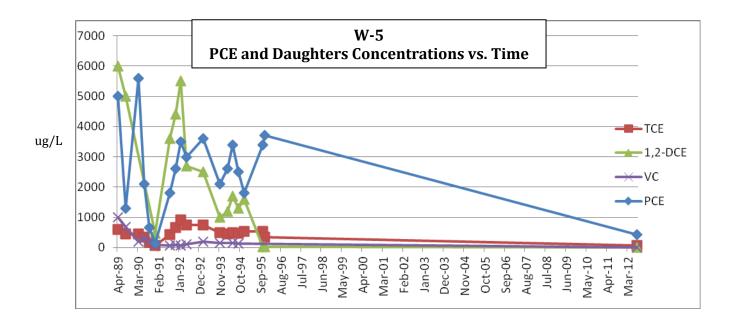


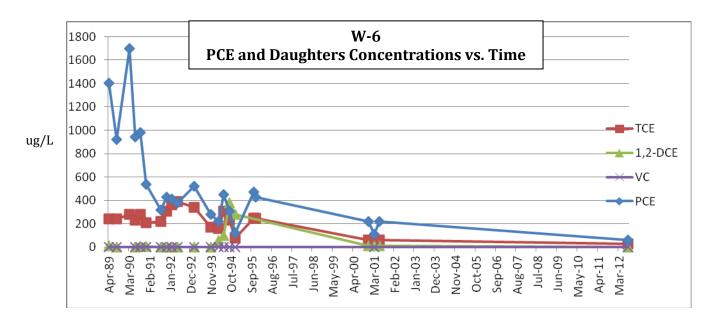
- 1. All concentrations shown in ug/L (a.k.a. parts-per-billion). Laboratory detection limits vary by test method and by sample (due to laboratory dilution). Detection limits at or less than 10 ug/L were treated as "zero", while detection limits above 10 ug/L were treated as data gaps, with graph lines connecting data before and after the gaps.
- 2. PCE = tetrachloroethene (a.k.a. perchloroethene).
- 3. TCE = trichloroethene.
- 4. VC = vinyl chloride.
- 5. Cis-1,2-DCE = cis-1,2-dichloroethene (reported as "1,2-dichloroethene (total)" in reports prior to 2012).
- 6. Data developed prior to August 21, 2012 was published by prior consultants. Please refer to the report text for a listing of the previous reports by others.



GRAPHS

CONTAMINANT CONCENTRATIONS VS. TIME AS OF AUGUST 2012 2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003 PLATE 3B



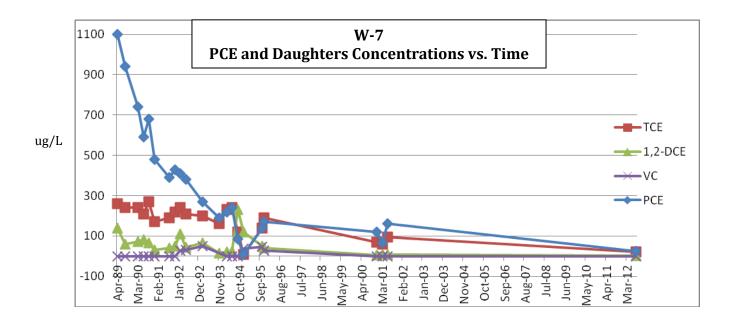


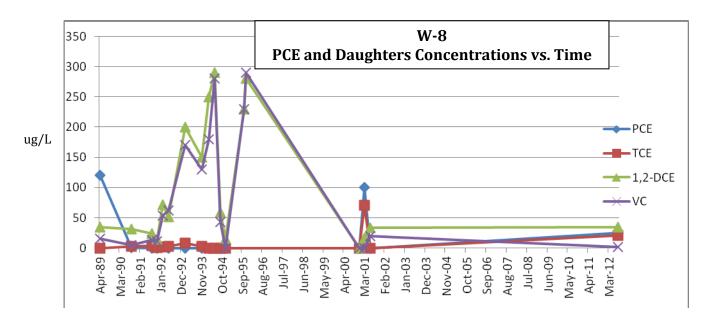
- 1. All concentrations shown in ug/L (a.k.a. parts-per-billion). Laboratory detection limits vary by test method and by sample (due to laboratory dilution). Detection limits at or less than 10 ug/L were treated as "zero", while detection limits above 10 ug/L were treated as data gaps, with graph lines connecting data before and after the gaps.
- 2. PCE = tetrachloroethene (a.k.a. perchloroethene).
- 3. TCE = trichloroethene.
- 4. Cis-1,2-DCE = cis-1,2-dichloroethene (reported as "1,2-dichloroethene (total)" in reports prior to 2012).
- 5. VC = vinyl chloride.
- 6. Data developed prior to August 21, 2012 was published by prior consultants. Please refer to the report text for a listing of the previous reports by others.



GRAPHS

CONTAMINANT CONCENTRATIONS VS. TIME AS OF AUGUST 2012 2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003



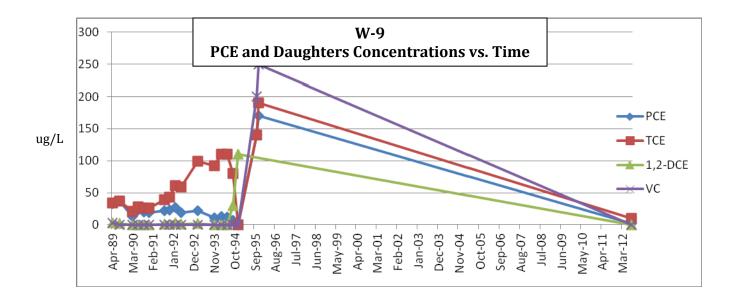


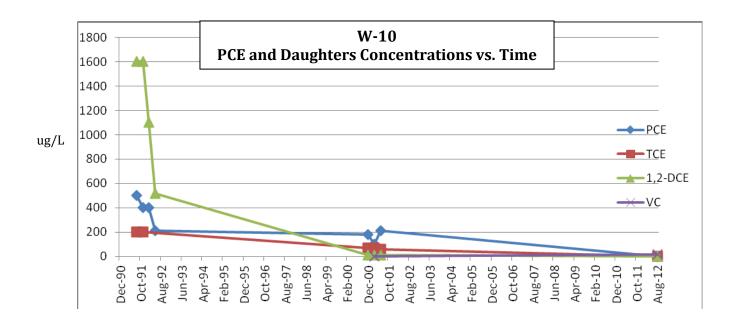
- 1. All concentrations shown in ug/L (a.k.a. parts-per-billion). Laboratory detection limits vary by test method and by sample (due to laboratory dilution). Detection limits at or less than 10 ug/L were treated as "zero", while detection limits above 10 ug/L were treated as data gaps, with graph lines connecting data before and after the gaps.
- 2. PCE = tetrachloroethene (a.k.a. perchloroethene).
- 3. TCE = trichloroethene.
- 4. Cis-1,2-DCE = cis-1,2-dichloroethene (reported as "1,2-dichloroethene (total)" in reports prior to 2012).
- 5. VC = vinyl chloride.
- 6. Data developed prior to August 21, 2012 was published by prior consultants. Please refer to the report text for a listing of the previous reports by others.



GRAPHS

CONTAMINANT CONCENTRATIONS VS. TIME AS OF AUGUST 2012 2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003 PLATE 3D





- All concentrations shown in ug/L (a.k.a. parts-per-billion). Laboratory detection limits vary by test method and by sample (due to laboratory dilution). Detection limits at or less than 10 ug/L were treated as "zero", while detection limits above 10 ug/L were treated as data gaps, with graph lines connecting data before and after the gaps.
- 8. PCE = tetrachloroethene (a.k.a. perchloroethene).
- 9. TCE = trichloroethene.

P. O. Box 370, Elk, California 95432-0370

10. Cis-1,2-DCE = cis-1,2-dichloroethene (reported as "1,2-dichloroethene (total)" in reports prior to 2012).

(707) 877-3278

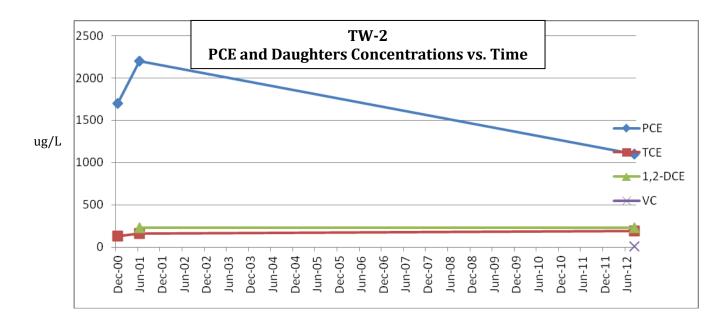
11. Data developed prior to August 21, 2012 was published by prior consultants. Please refer to the report text for a listing of the previous reports by others.

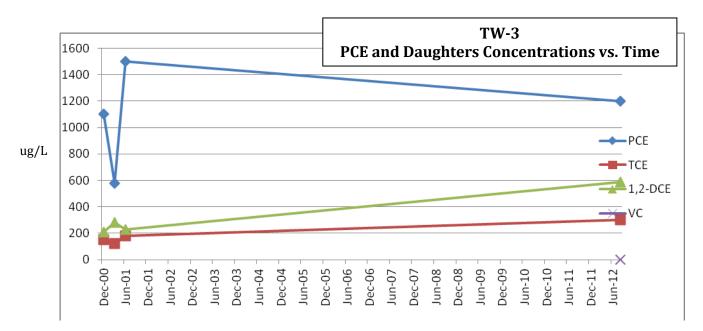


GRAPHS

CONTAMINANT CONCENTRATIONS VS. TIME AS OF AUGUST 2012

2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003 PLATE 3E





Notes:

- 1. All concentrations shown in ug/L (a.k.a. parts-per-billion). Laboratory detection limits vary by test method and by sample (due to laboratory dilution). Detection limits at or less than 10 ug/L were treated as "zero", while detection limits above 10 ug/L were treated as data gaps, with graph lines connecting data before and after the gaps.
- 2. PCE = tetrachloroethene (a.k.a. perchloroethene).
- 3. TCE = trichloroethene.
- 4. Cis-1,2-DCE = cis-1,2-dichloroethene (reported as "1,2-dichloroethene (total)" in reports prior to 2012).
- 5. VC = vinyl chloride.
- 6. Data developed prior to August 21, 2012 was published by prior consultants. Please refer to the report text for a listing of the previous reports by others.



GRAPHS

CONTAMINANT CONCENTRATIONS VS. TIME AS OF AUGUST 2012 2101 Williams Street, San Leandro, CA Anton Geological Project No. 012-003 PLATE 3F

APPENDIX A LABORATORY DATA



PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

30 August 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 08/23/12 08:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samil & Chivy

Daniel Chavez For Wendy Hsiao Project Manager



Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003	Reported:
Elk CA, 95432	Project Manager: Ken Anton	08/30/12 17:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W-1	T121441-01	Water	08/22/12 08:30	08/23/12 08:10
B-1	T121441-02	Water	08/21/12 15:00	08/23/12 08:10
W-3	T121441-03	Water	08/21/12 14:05	08/23/12 08:10
W-4	T121441-04	Water	08/21/12 16:38	08/23/12 08:10
W-5	T121441-05	Water	08/21/12 19:50	08/23/12 08:10
W-6	T121441-06	Water	08/21/12 20:23	08/23/12 08:10
W-7	T121441-07	Water	08/21/12 10:29	08/23/12 08:10
W-8	T121441-08	Water	08/21/12 18:55	08/23/12 08:10
W-9	T121441-09	Water	08/21/12 13:58	08/23/12 08:10
W-10	T121441-10	Water	08/21/12 12:46	08/23/12 08:10
TW-2	T121441-11	Water	08/21/12 09:21	08/23/12 08:10
TW-3	T121441-12	Water	08/21/12 17:37	08/23/12 08:10
CONTAINER#1	T121441-13	Water	08/21/12 20:10	08/23/12 08:10
CONTAINER#2	T121441-14	Water	08/22/12 09:00	08/23/12 08:10
BLANK	T121441-15	Water	08/22/12 00:00	08/23/12 08:10

SunStar Laboratories, Inc.

Samil & Chivy



Anton Geological		Proje	ect: 2101	Williams						
P.O. Box 370	Project Number: 012-003								:	
Elk CA, 95432]	Project Manag	er: Ken A	Anton				08/30/12 17:52		
			W-1							
F		T12144	1-01 (W	ater)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar La	aborato	ries, Inc.						
Volatile Organic Compounds by I	EPA Method 826	0B								
Bromobenzene	ND	1.0	ug/l	1	2082322	08/23/12	08/29/12	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 7.3	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								
	ND ND									
1,1-Dichloropropene	ND	1.0								

SunStar Laboratories, Inc.

Samil & Chivy



Anton Geological		Proje	ct: 2101	Williams						
P.O. Box 370		Project Numb	er: 012-0	003				Reported: 08/30/12 17:52		
Elk CA, 95432		Project Manag	er: Ken A	Anton						
			W-1							
		T12144	1-01 (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	0B								
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2082322	08/23/12	08/29/12	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	"	"	"	"	"	"		
Fetrachloroethene	52	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	"	"			"	"		
Frichloroethene	18	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	1.9	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		96.0 %	83.5	-119	"	"	"	"		
Surrogate: Dibromofluoromethane		86.8 %		136	"	"	"	"		
Surrogate: Toluene-d8		94.8 %		-117	"	"	"	"		

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological		Proje	ct: 2101	Williams						
P.O. Box 370]	Project Numb	er: 012-0	003	Reported:					
Elk CA, 95432	F	roject Manag	er: Ken A	Anton				08/30/12 17:52		
1			B-1							
		T12144		ater)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar La								
Volatile Organic Compounds by I	EPA Method 8260		aboi ato	nes, me.						
Bromobenzene	ND	1.0	ug/l	1	2082322	08/23/12	08/29/12	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									
cis-1,2-Dichloroethene	ND ND	1.0								
		1.0								
trans-1,2-Dichloroethene	ND 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.

Samil & Chivy



Anton Geological		Proje	ct: 2101	Williams						
P.O. Box 370		Project Number: 012-003								
Elk CA, 95432		Project Manag	er: Ken A	Anton				08/30/12 17:52		
			B-1							
		T12144		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	2082322	08/23/12	08/29/12	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	10	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	"				"			
Toluene	ND	0.50	"				"			
Ethylbenzene	ND	0.50	"				"			
m,p-Xylene	ND	1.0		"			"			
p-Xylene	ND	0.50		"	"	"	"			
Surrogate: 4-Bromofluorobenzene		93.5 %	83.5	5-119	"	"	"	"		
Surrogate: Dibromofluoromethane		86.5 %		136	"	"	"	"		
Surrogate: Toluene-d8		95.5 %		8-117	"	"	"	"		

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological		-		Williams						
P.O. Box 370		Project Numb						Reported: 08/30/12 17:52		
Elk CA, 95432	I	Project Manag	er: Ken A	Anton						
			W-3							
		T12144		ater)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
·		SunStar La	aborato	ries, Inc.						
Volatile Organic Compounds by E	CPA Method 8260			,						
Bromobenzene	ND	1.0	ug/l	1	2082322	08/23/12	08/29/12	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	2.2	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.

Samil & Chivy

25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Anton Geological P.O. Box 370 Elk CA, 95432	D. Box 370 Project Number: 012-003									
		T12144	W-3 1-03 (W	ater)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar La	aborato	ries, Inc.						
Volatile Organic Compounds by	EPA Method 826	0B								
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2082322	08/23/12	08/29/12	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	36	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	"	"	"		"			
Toluene	ND	0.50	"	"	"		"			
Ethylbenzene	ND	0.50		"			"			
m,p-Xylene	ND	1.0		"		"	"	"		
o-Xylene	ND	0.50		"	"	"	"	"		
Surrogate: 4-Bromofluorobenzene		95.8 %	83.5	-119	"	"	"	"		
Surrogate: Dibromofluoromethane		88.0 %		136	"	"	"	"		
Surrogate: Toluene-d8		94.2 %		8-117	"	"	"	"		

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological		Proje	ct: 2101	Williams							
P.O. Box 370	Project Number: 012-003								Reported:		
Elk CA, 95432	I	Project Manag	er: Ken A	Anton				08/30/12 17:52			
			W-4								
		T12144		ater)							
		Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note		
		SunStar La	aborato	ries, Inc.							
Volatile Organic Compounds by E											
Bromobenzene	ND	1.0	ug/l	1	2082322	08/23/12	08/29/12	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	5.8	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.

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25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Anton Geological		-		Williams				Reported		
P.O. Box 370		Project Number: 012-003								
Elk CA, 95432	F	Project Manag	er: Ken /	Anton				08/30/12 17:52		
			W-4							
		T12144	1-04 (W	ater)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
		SunStar La	aborato	ries, Inc.						
Volatile Organic Compounds by	EPA Method 8260	B								
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2082322	08/23/12	08/29/12	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	44	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	18	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	3.6	1.0	"	"	"	"	"	"		
Benzene	ND	0.50	"	"	"	"		"		
Foluene	ND	0.50	"	"	"	"		"		
Ethylbenzene	ND	0.50		"		"	"	"		
n,p-Xylene	ND	1.0		"		"	"	"		
o-Xylene	ND	0.50		"		"		"		
Surrogate: 4-Bromofluorobenzene		94.1 %	83.5	-119	"	"	"	"		
Surrogate: Dibromofluoromethane		88.9 %		136	"	"	"	"		
Surrogate: Toluene-d8		95.0 %		-117	"	"	"	"		

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological		Proje	ct: 2101	Williams							
P.O. Box 370			Reported:								
Elk CA, 95432	F	Project Manag	er: Ken A	Anton				08/30/12 17:52			
			W-5								
		T12144		ater)							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
7 indiye	Kesut				Duten	Trepared	7 mary 2ed	Wiethod	11010.		
	CDA M.41 1 93/(SunStar La	aborato	ries, Inc.							
Volatile Organic Compounds by I Bromobenzene	ND	1.0	ug/l	1	2082322	08/23/12	08/29/12	EPA 8260B			
Bromochloromethane	ND	1.0	" "	"	"	"	"	LI A 8200D			
Bromodichloromethane	ND	1.0		"			"				
Bromoform	ND ND	1.0		"							
Bromomethane	ND	1.0 1.0		"			"				
n-Butylbenzene	ND	1.0 1.0		"			"				
-	ND	1.0									
sec-Butylbenzene tert-Butylbenzene	ND	1.0 1.0									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND ND	0.30 1.0									
Chloroethane	ND	1.0 1.0									
Chloroform	ND	1.0 1.0									
Chloromethane	ND ND	1.0 1.0									
2-Chlorotoluene	ND ND	1.0 1.0									
4-Chlorotoluene											
Dibromochloromethane	ND ND	1.0 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	15	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.

Samil & Chivy

25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Anton Geological		Proje	ct: 2101	Williams						
P.O. Box 370		Reported:								
Elk CA, 95432]	Project Manag	er: Ken A	Anton				08/30/12 17:52		
			W-5							
		T12144	1-05 (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)B								
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2082322	08/23/12	08/29/12	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	430	50	"	50	"	"	"			
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	66	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		93.6 %	83.5	-119	"	"	"	"		
Surrogate: Dibromofluoromethane		90.4 %		136	"	"	"	"		
Surrogate: Toluene-d8		96.0 %		-117	"	"	"	"		

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological		Proje	ct: 2101	Williams								
P.O. Box 370		Project Numb	er: 012-0	003				Reported	:			
Elk CA, 95432	I	Project Manag	er: Ken A	Anton				08/30/12 17:52				
			W-6									
		T12144		(ater)								
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note			
		SunStar La	aborato	ries. Inc.		1	ý					
Volatile Organic Compounds by E	CPA Method 8260											
Bromobenzene	ND	1.0	ug/l	1	2082322	08/23/12	08/29/12	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	1.2	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.

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25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Anton Geological		-		Williams						
P.O. Box 370		Project Numb	er: 012-0	03				Reported:		
Elk CA, 95432]	Project Manag	er: Ken A	Anton				08/30/12 17	:52	
			W-6							
		T12144	1-06 (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	2082322	08/23/12	08/29/12	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	60	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	"	"	"	"	"	"		
Frichloroethene	30	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		96.5 %	83.5	-119	"	"	"	"		
Surrogate: Dibromofluoromethane		91.1 %		136	"	"	"	"		
Surrogate: Toluene-d8		96.6 %		-117	"	"	"	"		

SunStar Laboratories, Inc.

Samily Chivy



nton Geological Project: 2101 Williams .O. Box 370 Project Number: 012-003											
	Project Numb	er: 012-0	003				Reported:				
I	Project Manag	er: Ken A	Anton				08/30/12 17	:52			
		W-7									
			ater)								
	Reporting										
Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note			
	SunStar La	aborato	ries, Inc.								
ND	1.0		1	2082322	08/23/12	08/29/12	EPA 8260B				
ND	1.0		"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"		"	"				
ND	1.0		"	"	"	"					
ND	1.0		"	"	"	"					
ND	1.0	"	"	"	"	"	"				
ND	0.50	"	"	"	"	"	"				
ND	1.0		"	"		"	"				
ND	1.0		"	"		"	"				
ND	1.0		"	"		"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0		"	"	"	"					
	1.0		"	"		"					
	1.0		"	"		"					
	1.0		"	"		"					
			"	"		"					
			"	"		"					
			"	"		"					
			"	"		"					
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			"			"					
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						"					
			"			"					
			"			"					
			"			"					
ND	1.0 1.0					"					
	Result PA Method 826 ND ND	Project Numb Project Manage T12144 Reporting Limit Result Reporting Limit Pa Method 8260B Pathod 8260B ND 1.0 ND 1.0 <td>Project Number: 012-0 Project Manager: Ken A Freisen Manager: Ken A T121441-07 (W Result Reporting Limit Units SurStar Laborator PA Method 8260B ND 1.0 ND</td> <td>Project Nanager: V12-003 Project Manager: Ken AntonFUSTFUSTT121441-07 (Water)T121441-07 (Water)SubstatuteResultPaymetrixResultReporting LimitDilutionSubstatuteDilutionPA Method 8260EImage colspan="2">DilutionPA Method 8260EImage colspan="2">Image colspan="2">Image colspan="2">Image colspan="2">DilutionPA Method 8260EImage colspan="2">Image colspan="2">DilutionPA Method 8260EImage colspan="2">Image colspan="2">DilutionPA Method 8260EImage colspan="2">Image colspan="2">DilutionPA Method 8260EImage colspan="2">Image colspan="2">DilutionND1.0Image colspan="2"ND1.0NDNDNDNDNDNDNDNDND<th colsp<="" td=""><td>Project Nanager: Ken Anton Fyriget Manager: Ken Anton Fyriget Status Fyriget Status TI21441-07 (Water) Subart Laboratories, Inc. Batch Batch Subart Laboratories, Inc. Patter Batch ND 1.0 usits Data Resource ND 1.0 usits usits usits usits ND 1.0 usits usits <thusits< th=""> <thusits< th=""> usits usit</thusits<></thusits<></td><td>Project Number: U12-003 Project Manager: Ken Anton FIL12441-07 (Water) TI212441-07 (Water) SurStar Laboratories, Inc. SurStar Laboratories, Inc. SurStar Laboratories, Inc. PAMethod 8260B ND 1.0 unit n ne ND 1.0 " " " ND</td><td>Project Number: V12-003 Project Manager: Ken AntonFUS-CLANAGEFUS-STACLANAGET12144-07 (Water)ResultDilutionBatchPreparedAnalyzedResultLimitDilutionBatchPreparedAnalyzedAnalyzedBurstarBatchPreparedAnalyzedAnalyzedBatchPreparedAnalyzedMethod 8260BSunStar LawaBatchPreparedAnalyzedND1.00usitPreparedAnalyzedND1.00UsitSunStar LawaBatchPreparedAnalyzedND1.00usitNalyzed08/2012<th col<="" td=""><td>Reported manager: Ken AntonReported 08/30/12 17Droject Manager: Ken Anton08/30/12 17T121441-07 (Water)T121441-07 (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)Batch Prepared Analyze MethodBatch ND10</td></th></td></th></td>	Project Number: 012-0 Project Manager: Ken A Freisen Manager: Ken A T121441-07 (W Result Reporting Limit Units SurStar Laborator PA Method 8260B ND 1.0 ND	Project Nanager: V12-003 Project Manager: Ken AntonFUSTFUSTT121441-07 (Water)T121441-07 (Water)SubstatuteResultPaymetrixResultReporting LimitDilutionSubstatuteDilutionPA Method 8260EImage colspan="2">DilutionPA Method 8260EImage colspan="2">Image colspan="2">Image colspan="2">Image colspan="2">DilutionPA Method 8260EImage colspan="2">Image colspan="2">DilutionPA Method 8260EImage colspan="2">Image colspan="2">DilutionPA Method 8260EImage colspan="2">Image colspan="2">DilutionPA Method 8260EImage colspan="2">Image colspan="2">DilutionND1.0Image colspan="2"ND1.0NDNDNDNDNDNDNDNDND <th colsp<="" td=""><td>Project Nanager: Ken Anton Fyriget Manager: Ken Anton Fyriget Status Fyriget Status TI21441-07 (Water) Subart Laboratories, Inc. Batch Batch Subart Laboratories, Inc. Patter Batch ND 1.0 usits Data Resource ND 1.0 usits usits usits usits ND 1.0 usits usits <thusits< th=""> <thusits< th=""> usits usit</thusits<></thusits<></td><td>Project Number: U12-003 Project Manager: Ken Anton FIL12441-07 (Water) TI212441-07 (Water) SurStar Laboratories, Inc. SurStar Laboratories, Inc. SurStar Laboratories, Inc. PAMethod 8260B ND 1.0 unit n ne ND 1.0 " " " ND</td><td>Project Number: V12-003 Project Manager: Ken AntonFUS-CLANAGEFUS-STACLANAGET12144-07 (Water)ResultDilutionBatchPreparedAnalyzedResultLimitDilutionBatchPreparedAnalyzedAnalyzedBurstarBatchPreparedAnalyzedAnalyzedBatchPreparedAnalyzedMethod 8260BSunStar LawaBatchPreparedAnalyzedND1.00usitPreparedAnalyzedND1.00UsitSunStar LawaBatchPreparedAnalyzedND1.00usitNalyzed08/2012<th col<="" td=""><td>Reported manager: Ken AntonReported 08/30/12 17Droject Manager: Ken Anton08/30/12 17T121441-07 (Water)T121441-07 (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)Batch Prepared Analyze MethodBatch ND10</td></th></td></th>	<td>Project Nanager: Ken Anton Fyriget Manager: Ken Anton Fyriget Status Fyriget Status TI21441-07 (Water) Subart Laboratories, Inc. Batch Batch Subart Laboratories, Inc. Patter Batch ND 1.0 usits Data Resource ND 1.0 usits usits usits usits ND 1.0 usits usits <thusits< th=""> <thusits< th=""> usits usit</thusits<></thusits<></td> <td>Project Number: U12-003 Project Manager: Ken Anton FIL12441-07 (Water) TI212441-07 (Water) SurStar Laboratories, Inc. SurStar Laboratories, Inc. SurStar Laboratories, Inc. PAMethod 8260B ND 1.0 unit n ne ND 1.0 " " " ND</td> <td>Project Number: V12-003 Project Manager: Ken AntonFUS-CLANAGEFUS-STACLANAGET12144-07 (Water)ResultDilutionBatchPreparedAnalyzedResultLimitDilutionBatchPreparedAnalyzedAnalyzedBurstarBatchPreparedAnalyzedAnalyzedBatchPreparedAnalyzedMethod 8260BSunStar LawaBatchPreparedAnalyzedND1.00usitPreparedAnalyzedND1.00UsitSunStar LawaBatchPreparedAnalyzedND1.00usitNalyzed08/2012<th col<="" td=""><td>Reported manager: Ken AntonReported 08/30/12 17Droject Manager: Ken Anton08/30/12 17T121441-07 (Water)T121441-07 (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)Batch Prepared Analyze MethodBatch ND10</td></th></td>	Project Nanager: Ken Anton Fyriget Manager: Ken Anton Fyriget Status Fyriget Status TI21441-07 (Water) Subart Laboratories, Inc. Batch Batch Subart Laboratories, Inc. Patter Batch ND 1.0 usits Data Resource ND 1.0 usits usits usits usits ND 1.0 usits usits <thusits< th=""> <thusits< th=""> usits usit</thusits<></thusits<>	Project Number: U12-003 Project Manager: Ken Anton FIL12441-07 (Water) TI212441-07 (Water) SurStar Laboratories, Inc. SurStar Laboratories, Inc. SurStar Laboratories, Inc. PAMethod 8260B ND 1.0 unit n ne ND 1.0 " " " ND	Project Number: V12-003 Project Manager: Ken AntonFUS-CLANAGEFUS-STACLANAGET12144-07 (Water)ResultDilutionBatchPreparedAnalyzedResultLimitDilutionBatchPreparedAnalyzedAnalyzedBurstarBatchPreparedAnalyzedAnalyzedBatchPreparedAnalyzedMethod 8260BSunStar LawaBatchPreparedAnalyzedND1.00usitPreparedAnalyzedND1.00UsitSunStar LawaBatchPreparedAnalyzedND1.00usitNalyzed08/2012 <th col<="" td=""><td>Reported manager: Ken AntonReported 08/30/12 17Droject Manager: Ken Anton08/30/12 17T121441-07 (Water)T121441-07 (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)Batch Prepared Analyze MethodBatch ND10</td></th>	<td>Reported manager: Ken AntonReported 08/30/12 17Droject Manager: Ken Anton08/30/12 17T121441-07 (Water)T121441-07 (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)Batch Prepared Analyze MethodBatch ND10</td>	Reported manager: Ken AntonReported 08/30/12 17Droject Manager: Ken Anton08/30/12 17T121441-07 (Water)T121441-07 (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)SumStar Labertor (Water)Batch Prepared Analyze MethodBatch ND10	

SunStar Laboratories, Inc.

Samil & Chivy

25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Anton Geological		Proje	ct: 2101	Williams						
P.O. Box 370		Project Numb						Reported:		
Elk CA, 95432		Project Manag	er: Ken A	Anton				08/30/12 17	:52	
			W-7							
		T12144		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	2082322	08/23/12	08/29/12	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	"	"	"	"	"			
Fetrachloroethene	24	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	"	"	"	"	"			
Frichloroethene	20	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	"	"	"	"	"			
Foluene	ND	0.50	"	"	"	"	"			
Ethylbenzene	ND	0.50	"	"	"	"	"			
n,p-Xylene	ND	1.0		"		"	"			
p-Xylene	ND	0.50		"		"	"			
Surrogate: 4-Bromofluorobenzene		93.5 %	83.5	-119	"	"	"	"		
Surrogate: Dibromofluoromethane		93.2 %		136	"	"	"	"		
Surrogate: Toluene-d8		93.8 %		R-117	"	"	"	"		

SunStar Laboratories, Inc.

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	Proje	ct: 2101	Williams								
	Project Numb	er: 012-0	003				Reported:				
I	Project Manag	er: Ken /	Anton				08/30/12 17	:52			
		W Q									
			ater)								
D l	Reporting	T T .		D . 1	D 1			NT .			
Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note			
		aborato	ries, Inc.								
ND	1.0		"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND		"	"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"	"	"					
ND	0.50	"	"	"	"	"					
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"	"	"	"				
ND	1.0	"	"	"	"	"					
ND	1.0	"	"	"	"	"	"				
		"	"	"		"	"				
		"	"	"	"	"	"				
		"	"	"	"	"	"				
		"	"	"	"	"					
			"	"	"	"	"				
			"	"							
			"	"							
			"	"	"	"					
			"	"	"	"					
			"	"	"	"					
						"					
			"	"	"	"					
			"	"	"	"					
			"	"	"	"					
ND ND	1.0 1.0		"			"					
	Result PA Method 8260 ND ND	Project Numb Project Manage T12144 Result Reporting Limit SunStar La PA Method 8260B ND 1.0 N	Project Number: 012-0 Project Manager: Ken A Project Manager: Ken A International Constructional Construction Prostruction Prostruction Prostruction ND 1.00 Income Construction Income Construction ND 1.00 Income Construction Income Construction Income Construction <	T121441-08 (Water)ResultReporting LimitDilutionSunStar Laboratories, Inc.PA Method 826019	Project Number: CH2-003 Project Manager: Ken Anton Fraguage: Fraguage: Fraguage: Result Bustar Laboratories, Inc. Pattend 8260F Pattend 8260F ND 1.0 outpattente ND 1.0 ug/l 1 2082322 ND 1.0 ug/l 1 2082322 ND 1.0 " " ND 1.0 " " " ND 1.0	Project Number: U12-005 Project Manager: Ken AntonFige StatusStatusT121441-08 (Water)StatusStatusStatusSumStar LawaSumStar LawaSumStar LawaSumStar LawaSumStar LawaSumStar LawaSumStar LawaND1.01.01.01.01.0ND1.01.01.01.0ND1.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.01.01.0ND1.01.01.0	Project Number: 102-003 Project Manager: Ken AntonFarstar State StateT121441-08 (Water)ResultPreparedAnalyzedResultDilutionBatchPreparedAnalyzedAnalyzedDilutionBatchPreparedAnalyzedAnalyzedDilutionBatchPreparedAnalyzedAnalyzedDilutionBatchPreparedAnalyzedAnalyzedDilutionBatchPreparedAnalyzedAnalyzedDilutionBatchPreparedAnalyzedAnalyzedDilutionBatchPreparedAnalyzedND1000ON2000000000000000000000000000000000000	Project Namber:102-003 Project Manager:Reported: 08/30/12 17Base Statute Statu			

SunStar Laboratories, Inc.

Samil & Chivy

25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Anton Geological		Proje	ct: 2101	Williams					
P.O. Box 370		Project Numb	er: 012-0	03				Reported	:
Elk CA, 95432]	Project Manag	er: Ken A	Anton				08/30/12 17	:52
			W-8						
		T12144	1-08 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	borato	ries, Inc.					
Volatile Organic Compounds by I	EPA Method 826	0B							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2082322	08/23/12	08/29/12	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	25	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	21	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	2.1	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"		"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.4 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		91.5 %		136	"	"	"	"	
Surrogate: Toluene-d8		95.6 %		-117	"	"	"	"	

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological	-											
P.O. Box 370		Project Numb						Reported:				
Elk CA, 95432	I	Project Manag	er: Ken A	Anton				08/30/12 17	:52			
			W-9									
		T12144		ater)								
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note			
Analyte	Kesuit				Daten	Trepared	Anaryzeu	Wethod	Note			
		SunStar La	aborato	ries, Inc.								
Volatile Organic Compounds by E Bromobenzene			/1	1	20022222	00/02/12	08/20/12	EDA 02/0D				
	ND	1.0	ug/l "	1	2082322	08/23/12	08/29/12	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.

Samil & Chivy

25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Anton Geological		-		Williams				Deserved		
P.O. Box 370		Project Numb						Reported: 08/30/12 17:52		
Elk CA, 95432	F	roject Manag	er: Ken A	Anton				08/30/12 17	:52	
			W-9							
		T12144	1-09 (W	ater)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar La	aborato	ries, Inc.						
Volatile Organic Compounds by	EPA Method 8260	В								
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2082322	08/23/12	08/29/12	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	1.8	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	9.5	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	"	"	"	"	"	"		
o-Xylene	ND	0.50	"	"	"	"		"		
Surrogate: 4-Bromofluorobenzene		92.2 %	83.5	-119	"	"	"	"		
Surrogate: Dibromofluoromethane		92.8 %		136	"	"	"	"		
Surrogate: Toluene-d8		95.5 %		-117	"	"	"	"		

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological		Proje	ct: 2101	Williams								
P.O. Box 370		roject Numb						Reported:				
Elk CA, 95432	Pr	oject Manag	er: Ken A	Anton				08/30/12 17:52				
		,	W-10									
		T12144		ater)								
Angleta	Result	Reporting Limit	Units	Dilution	Batch	Droporod	Analyzad	Method	Nota			
Analyte					Datch	Prepared	Analyzed	Method	Notes			
		SunStar La	aborato	ries, Inc.								
Volatile Organic Compounds by I Bromobenzene	EPA Method 82601 ND	<u>B</u> 1.0		1	2082222	09/02/12	08/20/12	EPA 8260B				
			ug/l "	1	2082322	08/23/12	08/29/12	EPA 8200B				
Bromochloromethane	ND	1.0										
Bromodichloromethane Bromoform	ND	1.0										
	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	3.1	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.

Samil & Chivy

25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Anton Geological P.O. Box 370 Elk CA, 95432	:	Proje Project Numb Project Manag	er: 012-0					Reported 08/30/12 17	
			W-10	- 4)					
		T12144	1-10 (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	2082322	08/23/12	08/29/12	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	"	"	"	"	"	"	
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	17	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		95.2 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		92.4 %	81-	136	"	"	"	"	
Surrogate: Toluene-d8		95.8 %		-117	"	"	"	"	

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological		Proje	ct: 2101	Williams								
P.O. Box 370]	Project Numb	er: 012-0	003				Reported:				
Elk CA, 95432	F	Project Manag	er: Ken A	Anton				08/30/12 17:52				
		r	ГW-2									
		T12144	1-11 (W	ater)								
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
		SunStar La	aborato	ries, Inc.								
Volatile Organic Compounds by I	EPA Method 8260	B										
Bromobenzene	ND	1.0	ug/l	1	2082322	08/23/12	08/29/12	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	230	100		100	"	"	"					
trans-1,2-Dichloroethene	ND	1.0		1	"	"	"					
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.

Samil & Chivy



Anton Geological		Proje	ct: 2101	Williams					
P.O. Box 370		Project Numb	er: 012-0	003				Reported	:
Elk CA, 95432	1	Project Manag	er: Ken A	Anton				08/30/12 17	:52
		r	FW-2						
		T12144		ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by 1	EPA Method 826			,					
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2082322	08/23/12	08/29/12	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	1100	100		100			"		
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	1.2	1.0		"			"		
Trichloroethene	190	100	"	100			"	"	
Trichlorofluoromethane	ND	1.0	"	1		"	"		
1,2,3-Trichloropropane	ND	1.0	"	"		"	"		
1,3,5-Trimethylbenzene	ND	1.0	"	"			"		
1,2,4-Trimethylbenzene	ND	1.0	"	"		"	"		
Vinyl chloride	5.4	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		92.9 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		95.5 %		136	"	"	"	"	
Surrogate: Toluene-d8		96.8 %		-117	"	"	"	"	

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological		Proje	ct: 2101	Williams					
P.O. Box 370		Project Numb	er: 012-0	003				Reported	:
Elk CA, 95432	I	Project Manag	er: Ken /	Anton				08/30/12 17	:52
		r	ГW-3						
		T12144		ater)					
Angleda	D14	Reporting	T	Dilution	Detah	Durana	A	Madaad	Nete
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by E			2						
Bromobenzene	ND	1.0	ug/l	1	2082322	08/23/12	08/29/12	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	1.5	1.0		"			"		
cis-1,2-Dichloroethene	590	100	"	100		"	"		
trans-1,2-Dichloroethene	2.3	1.0	"	1			"		
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.

Samil & Chivy



Anton Geological P.O. Box 370		Proje Project Numb		Williams 003				Reported	:
Elk CA, 95432		Project Manag						08/30/12 17	
		r	ГW-3						
		T12144	1-12 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by I	EPA Method 826	0B							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2082322	08/23/12	08/29/12	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	1200	100	"	100	"	"	"	"	
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	1.2	1.0	"	"	"	"	"	"	
Trichloroethene	300	100	"	100	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	1	"	"	"	"	
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		94.1 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		127 %		136	"	"	"	"	
Surrogate: Toluene-d8		99.4 %		8-117	"	"	"	"	

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological		Proje	ct: 2101	Williams					
P.O. Box 370	Р	roject Numb	er: 012-0	003				Reported	:
Elk CA, 95432	Pr	oject Manag	er: Ken A	Anton				08/30/12 17	:52
		CON	FAINE	R#1					
		T12144							
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
	:	SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by E									
Bromobenzene	ND	1.0	ug/l	1	2082322	08/23/12	08/29/12	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		"	"		"		
I,2-Dichloroethane	ND	0.50		"					
1.1-Dichloroethene	ND	1.0		"					
cis-1,2-Dichloroethene	10	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.

Samil & Chivy



Anton Geological P.O. Box 370 Elk CA, 95432		Proje Project Numb Project Manag	er: 012-0					Reported 08/30/12 17	
		CON7 T12144	ΓΑΙΝΕ 1-13 (W						
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	2082322	08/23/12	08/29/12	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	21	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	7.4	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	"	"	"	"	"		
o-Xylene	ND	0.50		"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.2 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		94.5 %		136	"	"	"	"	
Surrogate: Toluene-d8		97.5 %		-117	"	"	"	"	

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological		Proje	ct: 2101	Williams					
P.O. Box 370	Р	roject Numb	er: 012-0	003				Reported	:
Elk CA, 95432	Pr	oject Manag	er: Ken A	Anton				08/30/12 17	:52
		CON	FAINE	R#2					
		T12144							
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by F	EPA Method 8260								
Bromobenzene	ND	1.0	ug/l	1	2082322	08/23/12	08/29/12	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	16	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.

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Anton Geological P.O. Box 370 Elk CA, 95432		Proje Project Numb Project Manag	er: 012-0					Reported 08/30/12 17	
		CON7 T12144	ΓΑΙΝΕ 1-14 (W						
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	2082322	08/23/12	08/29/12	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	37	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	15	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	"	"	"	"	"		
o-Xylene	ND	0.50		"	"	"	"		
Surrogate: 4-Bromofluorobenzene		93.0 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		89.8 %		136	"	"	"	"	
Surrogate: Toluene-d8		99.2 %		-117	"	"	"	"	

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological	n	-		Williams				Deces 7	_
P.O. Box 370		roject Numb						Reported	
Elk CA, 95432	Pr	oject Manag	er: Ken	Anton				08/30/12 17	:52
		B	LANK						
		T12144	1-15 (W	'ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborato	ries, Inc.		Ĩ	,		
Volatile Organic Compounds by E				,					
Bromobenzene	ND	1.0	ug/l	1	2082322	08/23/12	08/29/12	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	15	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 1,1-Dichloropropene	ND ND	1.0 1.0							

SunStar Laboratories, Inc.

Samily Chivy



Anton Geological P.O. Box 370 Elk CA, 95432		Proje Project Numb Project Manag	er: 012-0					Reported 08/30/12 17	
		B T12144	LANK 1-15 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by	EPA Method 826	0B							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2082322	08/23/12	08/29/12	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	"	"		"	"	"	
Toluene	ND	0.50	"	"	"	"	"		
Ethylbenzene	ND	0.50	"	"		"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"		
o-Xylene	ND	0.50	"	"	"	"	"		
Surrogate: 4-Bromofluorobenzene		92.8 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		92.6 %	81-	136	"	"	"	"	
Surrogate: Toluene-d8		100 %	88.8	8-117	"	"	"	"	

SunStar Laboratories, Inc.

Samily Chivy

25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax

Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003	Reported:
Elk CA, 95432	Project Manager: Ken Anton	08/30/12 17:52

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 2082322 - EPA 5030 GCMS										
Blank (2082322-BLK1)				Prepared:	08/23/12	Analyze	d: 08/28/12			
cis-1,2-Dichloroethene	ND	1.0	ug/l	1		2				
Tetrachloroethene	ND	1.0	"							
Trichloroethene	ND	1.0								
Benzene	ND	0.50								
Toluene	ND	0.50								
Ethylbenzene	ND	0.50								
m,p-Xylene	ND	1.0								
o-Xylene	ND	0.50								
Methyl tert-butyl ether	ND	1.0								
Surrogate: 4-Bromofluorobenzene	7.72		"	8.00		96.5	83.5-119			
Surrogate: Dibromofluoromethane	6.18		"	8.00		77.2	81-136			S-GC
Surrogate: Toluene-d8	7.31		"	8.00		91.4	88.8-117			
LCS (2082322-BS1)				Prepared:	08/23/12	Analyze	d: 08/29/12			
Trichloroethene	16.7	1.0	ug/l	20.0		83.6	75-125			
Benzene	16.5	0.50		20.0		82.3	75-125			
Toluene	17.6	0.50		20.0		88.0	75-125			
Surrogate: 4-Bromofluorobenzene	7.51		"	8.00		93.9	83.5-119			
Surrogate: Dibromofluoromethane	8.93		"	8.00		112	81-136			
Surrogate: Toluene-d8	8.27		"	8.00		103	88.8-117			
LCS Dup (2082322-BSD1)				Prepared:	08/23/12	Analyze	d: 08/29/12			
Trichloroethene	17.0	1.0	ug/l	20.0		84.8	75-125	1.37	20	
Benzene	17.6	0.50	"	20.0		88.2	75-125	6.86	20	
Toluene	19.2	0.50	"	20.0		96.0	75-125	8.75	20	
Surrogate: 4-Bromofluorobenzene	7.40		"	8.00		92.5	83.5-119			
Surrogate: Dibromofluoromethane	8.82		"	8.00		110	81-136			
Surrogate: Toluene-d8	8.57		"	8.00		107	88.8-117			

SunStar Laboratories, Inc.

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Anton Geological	Project: 2101 Williams	
P.O. Box 370	Project Number: 012-003	Reported:
Elk CA, 95432	Project Manager: Ken Anton	08/30/12 17:52

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.

Samil & Chivy

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.

Daniel Chavez For 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 Phone: 707-877- Project Manager: / E	370,1	FIL		5432		Col	llecto	or:	Ke	1/5 ZI EN 1214	-	Z W Vii	Z ILL ON	<u> </u>	$\frac{7}{Page}$ $\frac{1}{M}$ $\frac{1}{M}$ Clien EDF	t Projec	/	_of_ 0/2	-00	23	
Sample ID W - [B -] W - 3 W - 4 W - 5 W - 5 W - 6 W - 5 W - 6 W - 7 W - 8 W - 9 W - 7 W - 7 W - 8 W - 9 W - 8 W - 9 W - 10 W - 8 W - 10 W - 10	Date Sampled 8/22/12 8/21/12 8/21/12 5/22/12 Date / Ti 8/22/12 Date / Ti 8/22/12 Date / Ti	8:30 14:05 14:05 14:55 20:23 10:25 12:46 9:26 12:46 9:20 12:46 9:20 12:55 12:46 9:20 12:55 12:46 9:20 12:55 12:57 20:70 12:57 20:70 12:55 12:57 20:70 12:55 12:57 20:70 12:55 1	A ENO	Container Type VOA	8-2	8520 e/Ti 2-{	ime		t	8015M Ext./Car	Custod Seals	y sea	ls Y/N	J/NA	9/ 51 II 01 00 00 00 00 10 #		ST	Notes			N Containers
Relinquished by: (signature)	Date / Ti	ne		(: (signature)	Dat	e / Ti	ime ; <i>10</i>			ceive	d good	l cond	dition/	/cold	$\overline{}$	-	8.2	3.72	1	B	C
Sample disposal Instructions: Dis	sposal @ \$2.00 e	each X	Return	to client	Pickup			4				_				· · · ·					

COC 101577

Chain of Custody Record

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

Address: <u>POBO</u> Phone: <u>707877</u> -	/			95436	2			Col	te: oject llecto ch #	or:	ne: Ki			1/1/2610	2	j/	J	Pag Clier EDF	nt Project	#:	_0f	7 -α	27	
Sample ID TAP	Date Sampled	Time M	Sample Type WATE(Container Type 124517C	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	X (at Mn only 20				で Laboratory ID #	Con	nment	s/Preserv	vative		√Total # of containers
										-										·····				
										-							· · · · · · · · · · · · · · · · · · ·					, 	· · · · · · · · · · · · · · · · · · ·	
Relinguished by: (signature)	2 Date/Ti 81212	me 4:47	Received b	y: (signature)			Date	e / Ti	ime	<u>4</u> ;	Ú Cha) l			t of co			1			Notes			
Relinquished by: (signature) Relinquished by: (signature) Sample disposal Instructions: D		me	Received b	y: (signature) y: (signature)			Date 55.25	e / Ti e / Ti ?-/2	ime <i>8; ,</i>	0	R	eceiv	Se ved g	eals ii good	ntacť	? Y/N lition/	I/NA /cold	2.3	5 8/2	ID. ₹ <u>/n</u>	TAT	[BC	

COC 101578

SunStar Laboratories, Inc.

SAMPLE RECEIVING REVIEW SHEET

BATCH #					
Client Name: <u>ANTON GEOLOGICAL</u>	Project:	2101 W	LLIANS		
Received by: Brian I	Date/Time Rec	ceived:	9.23.12	/ 8:10	
Delivered by : Client SunStar Courier 🛛 GSO	FedEx	Other		, 	
Total number of coolers received Temp cr	iteria = 6°C :	> 0°C (no j	f <u>rozen</u> con	tainers)	1 1
Temperature: cooler #1 <u>3.0</u> °C +/- the CF (- 0.2°C) = <u>2</u>	.8 °C correc	ted temperatu	re		
cooler #2°C +/- the CF (- 0.2° C) =	°C correc	ted temperatu	ire		
cooler #3°C +/- the CF (- 0.2° C) =	°C correc	ted temperatu	ire		
Samples outside temp. but received on ice, w/in 6 hours of fina	l 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 ten preservatives and within method specified holding times. \boxed{X}	•		ibels, volu	mes	
* Complete Non-Conformance Receiving Sheet if checked Co	oler/Sample Re	eview - Initia	ils and date	St 1	8-23-12
Comments:					
· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·	
	<u> </u>	<u> </u>			
•					

APPENDIX B

FIELD DATA SHEETS MONITOR WELL PURGING AND SAMPLING

	MONITORING WELL PURING DATA												
Date: 08			ame: 2101 \		reet	Project Number: 012-003							
Well	Number:	Well Diam	eter (INCHES)	:	4	Calculated One Well Volume**:							
) - [Depth from T	•	38.9	18.3							
	- •		epth to Water		10.68 \$	98/22							
	r	Length of v	vater Column	(FEET):	28.22	48155							
Actual Time	Cumulative Volume Purged (GAL)	Temp (°C)	Specific Cond.	рН	Water Appearance CL=CLEAR CO= CLOUDY TU=TURBID	Remarks (Odor, Color, Etc.)							
7:30	STMIT				CC	METER WONT STIPTET							
7:52	25	18.1	2877	821	a	METER WONT STATES FIXED METER > COOSE BATTERY CONNETTION							
8:58	30	18.1	2920	7.91	Ce Ce	> COOSE BATTERY CONCETTER							
8:01	35	18.3	2980	784	cc								
8:10	40	18.3	3028	7.79	er								
8:15	43	18.3	2984	766	Ci								
8:20	50	18.4	2995	765	CL								
				·									
Depth to Wa	ter After Purging	(NC = No Cha	nge):	(FEET)	Filtered Sample:	Yes X No							
NOTES:		<u>,</u>		<u>,, cc , j</u>	Sample Time:	8:30							
					Sample Identifica								
	foot of water - 0	-		1	Sampler: KA								

One foot of water = 0.05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia. pipe, and 1.5 gal in a 6" dia. pipe ~ 18.5

			MONITO		PURING DA	ΓΔ				
Date: 08/	/21/2012	Project Na	me: 2101 V			Project Number: 012-003				
Well N	Number:		eter (INCHES)		4	Calculated One Well Volume**:				
R	-/		Depth from T		48.30	2\$,5				
	1		pth to Water		10.65					
		Length of w	vater Column	(FEET):	37.65					
Actual Time	Cumulative Volume Purged (GAL)	Temp (°C)	Specific Cond.	рН	Water Appearance CL=CLEAR CO= CLOUDY TU=TURBID	Remarks (Odor, Color, Etc.)				
2:20	SCHOK	21.1	1437	7.71	CL					
2:25	5	20,0	1469	7.43	CL					
2:30	10	19.5	1487	7,37	Ci					
2:35	15	19.3	1519	7.38	CC					
2:40	20	19.2	1517	7.39	CC					
2:45	25	19.2	1522	7.39	CL					
2:49	30	19.2	15:36	7,38	CL					
2:54	35	19.2	1537	7.41	CL					
		· :								
Depth to Wa NOTES:	ter After Purging	(NC =/No Cha	nge): 10.6	S (FEET)						
INUTES:					Sample Time: 3:00					
					Sample Identification: or same as Monitor Well					
** •		OF 14 4#	l 0 47 - 1		Sampler: KA	a. pipe, and 1.5 gal in a 6" dia. pipe				

** One foot of water = 0.05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia. pipe, and 1.5 gal in a 6" dia. pipe $\sim l 4$ $\sqrt{3}$

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			MONITO	RING WEL	L PURING DA	ΤΔ
Date: 08	/21/2012	Project Na	me: 2101 V			Project Number: 012-003
Well	Number:	Well Diame	eter (INCHES)	:	4	Calculated One Well Volume**:
$ \Lambda\rangle$	-3		Depth from T	. ,	31.30	745-13,29
			pth to Water		10,86	
			ater Column	(FEET):	20.44	
Actual Time	Cumulative Volume Purged (GAL)	Temp (°C)	Specific Cond.	pН	Water Appearance CL=CLEAR CO= CLOUDY TU=TURBID	Remarks (Odor, Color, Etc.)
133	STANT	21.8	1618	7.29	CL .	
1:38	5	20.2	1632	7,19	CL	
1:43	10	19.5	1630	7,24	CC	
1:48	15	19.3	16.32	7.22	CL	
1:52	20	19.3	6.31	7.Z5	CL	
1:57	25	19.3	1640	7.25	CL	
		-				· · · · · · · · · · · · · · · · · · ·
Depth to Wa	ter After Purging	(NC = No Chan	ige): 11,14	(FEET)	Filtered Sample:	Yes M No
NOTES:				· · · · · · · · · · · · · · · · · · ·	Sample Time:	7:05
					Sample Identifica	
					Sampler: KA	a. pipe, and 1.5 gal in a 6″ dla. pipe

One foot of water = 0.05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia. pipe, and 1.5 gal in a 6" dla. pipe $\sqrt{3}$

	<u></u>		MONITOR		PURING DA	ТА
Date: 08/	21/2012	Project Na	me: 2101 V			Project Number: 012-003
Well N	lumber:	Well Diame	eter (INCHES)		4	Calculated One Well Volume**:
$\left \cdot \right\rangle$	_4		Depth from T		38.68	18
\sim	- 1		pth to Water		11.05	
			/ater Column	(FEET):	27.63	
Actual Time	Cumulative Volume Purged (GAL)	Temp (°C)	Specific Cond.	рН	Water Appearance CL=CLEAR CO= CLOUDY TU=TURBID	Remarks (Odor, Color, Etc.)
3:47	STAAT	20.9	1977	7,67	Cc	
3:51	5	20.3	1958	7.41	CL	
9:55	10	19.7	1984	7.39	CL	
4:00	15	19.5	2004	7.38	CC	
4:05	20	19.4	2017	7.40	CL	
4:10	25	F1.5	1454	740	CC	
4:15	30	19,4	1068	139	ũ.	
4:21	35	193	2072	739	ĊĿ	
4:29	40	19.4	2031	7.41	CL	
	ter After Purging	g (NC = No Cha	nge): //.7/	(FEET)		: 🗖 Yes 🖾 No
NOTES:					Sample Time:	4:38
					Sample Identifi	/
					Sampler: KA	· · · · · · · · · · · · · · · · · · ·

** One foot of water = 0.05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia. pipe, and 1.5 gal in a 6" dia. pipe

~18.5

			MONITO	RING WEL	L PURING DA	ТА
Date: 08			ame: 2101 V		reet	Project Number: 012-003
Well	Number:		eter (INCHES)		2	Calculated One Well Volume**:
	5	Total Well	Depth from 1	FOC (FEET):	35.25	9
	-5	Starting De	pth to Water	r (FEET):	11.63	
		Length of v	vater Columr	n (FEET):	23.62	
Actual Time	Cumulative Volume Purged (GAL)	Temp (°C)	Specific Cond.	рН	Water Appearance CL=CLEAR CO= CLOUDY TU=TURBID	Remarks (Odor, Color, Etc.)
7:31	START				CL	Meter world not pover
7.42	12					
····	23	WELL	laune	8		
		:				
		:				
Depth to Wa NOTES:	iter After Purging	(NC = No Cha	nge):	(FEET)	Filtered Sample: Sample Time:	Yes No
					Sample Identifier	1:50
					Sample Identification Sampler: KA	ation: or same as Monitor Well

** One foot of water = 0.05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia. pipe, and 1.5 gal in a 6" dia. pipe ~ 4.2 ~ 4.2

					PURING DAT				
Date: 08,			me: 2101 V		reet	Project Number: 012-003			
Well I	Number:	Well Diame	eter (INCHES)	:	2	Calculated One Well Volume**:			
1.)	-6	1	Depth from T	. ,	37.95	4,6			
\mathcal{W}	-6	Starting De	pth to Water	(FEET):	11.00				
		Length of w	vater Column	(FEET):	26.95				
Actual Time	Cumulative Volume Purged (GAL)	Temp (°C)	Specific Cond.	рН	Water Appearance CL=CLEAR CO= CLOUDY TU=TURBID	Remarks (Odor, Color, Etc.)			
7:58	Start				a	METER WONT TURN			
8.15	15	-							
	P								
		3 41	EU VO	IIAA	ES.	·····			
		· · · • • • • • • • • • • • • • • • • •							
	· · · ·								
· · · ·									
				-					
NOTEC.	ater After Purging		•		Filtered Sample: Sample Time:				
CASIN	K-IS BEN BETWEEN BOTTOM FIZ TO SW	T AT DE	PTH CLATSFA	F	0.23				
C	BATTOM FR	om VERTIC	M-BEND	ĸ	Sample Identification: or same as Monitor Well				
	TO SW	~1507			Sampler: KA				

05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia へく

	MONITORING WELL PURING DATA												
Date: 08		Project Na	ame: 2101 V	Williams St	reet	Project Number: 012-003							
Well I	Number:	Well Diame	eter (INCHES)):	4	Calculated One Well Volume**:							
}	-7		Depth from 1		36.40	16.5							
	1	Starting De	pth to Wate	r (FEET):	10.95								
		Length of v	vater Columr	n (FEET):	25.45								
Actual Time	Cumulative Volume Purged (GAL)	Temp (°C)	Specific Cond.	рН	Water Appearance CL=CLEAR CO= CLOUDY TU=TURBID	Remarks (Odor, Color, Etc.)							
9:35	START	18.8	946	9.63	CL								
9:40	6	18.9	9.59	10.50	CL								
9:46	12	18.6	944	1044	CL								
9.51	18	18.6	949	849	CL								
9:56	22	18.4	952	1022	CL								
j005	28	17.8	1295	9.36	CC	Differ Ity wprose switched seriors							
1007	32	18.2	1286	8.91	CC								
1011	37	(8.(1280	8.62	CC								
1015	41	18.2	1278	8.97	OC								
10:20	48	18.2	1282	8.25	CC								
10:22	50	18.2	1278	8.08	CL								
		:			<u>\</u>								
		: • • • • • • • • • • • • • • • • • • •											
	ter After Purging	(NC = No Cha	nge): <i>/い.9</i>	8 (FEET)	Filtered Sample:	Yes 🗶 No							
NOTES:	$ \rightarrow $				Sample Time:	1079							
DISTINCK	KI) ANT N	est in v	AUCI		Sample Identification: or same as Monitor Well								
	Some,	INTS ON	SBACE	R	Sampler: KA								

** One foot of water = 0.05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia. pipe, and 1.5 gal in a 6" dia. pipe へ にんど

	MONITORING WELL PURING DATA												
Date: 08/	/21/2012	Project Na	me: 2101 V	Villiams Str	reet	Project Number: 012-003							
Well N	Number:	Well Diame	ter (INCHES)		4	Calculated One Well Volume**:							
	\sim	Total Well [Depth from T	OC (FEET):	35.75	16.5							
W-	-8	Starting De	pth to Water	(FEET):	10.45								
		Length of w	ater Column	(FEET):	25.30								
Actual Time	Cumulative Volume Purged (GAL)	Temp (°C)	Specific Cond.	рН	Water Appearance CL=CLEAR CO= CLOUDY TU=TURBID	Remarks (Odor, Color, Etc.)							
5:52	Sima					METER Want TURN ON							
6:10	15					l(
6:23	25					11							
6:32	35					17							
6:42	45					11							
6.48	50					17							
	U.	23 UO	INTE	8									
	:												
· · · · · · · · · · · · · · · · · · ·													
Depth to Wa	nter After Purging	(NC = No Cha	nge): (1)	(FEET)	Filtered Sample	: 🗔 Yes 🗖 No							
					Sample Time:	6:55							
- (454) 11	WANS TO /	44VL D/	YULEN (*		Sample Identific								
	- APFARS TO HAVE BARENT FROPING IN WELL?												

** One foot of water = 0.05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia. pipe, and 1.5 gal in a 6" dia. pipe

~16.5

MONITORING WELL PURING DATA												
Date: 08/	/21/2012	Project Na	me: 2101 V	Villiams Str	eet	Project Number: 012-003						
Well I	Number:	Well Diame	ter (INCHES)		4	Calculated One Well Volume**:						
	-9	Total Well [Depth from T	OC (FEET):	31.30	13.6						
) — \	Starting Dep	oth to Water	(FEET):	10,45							
		Length of w	ater Column	(FEET):	10.45							
Actual · Time	Cumulative Volume Purged (GAL)	Temp (°C)	Specific Cond.	pН	Water Appearance CL=CLEAR CO= CLOUDY TU=TURBID	Remarks (Odor, Color, Etc.)						
11:25	START	21.4	1233	7:36	COPCL	SWEAT OFF COUNT AT FIRST						
11:30	5	20.3	1205	7.34	C C							
1134	10	19.9	1194	7.24	CL							
11:38	15	19.8	1161	7.3 B	CC							
11:43	20	19.8	1164	7.26	ec							
1148	25	19.8	1163	7.97	ec							
Depth to Wa	ater After Purgin	g (NC = No Cha	nge): 101	56 (FEET)	· · · · ·	: 🗖 Yes 🔀 No						
NOTES:		- - -	/		Sample Time: 1.58							
					Sample Identification: or same as Monitor Well							
				Sampler: KA	7							

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** One foot of water = 0.05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia. pipe, and 1.5 gal in a 6" dia. pipe 13^{-6}

			MONITOR	PURING DATA					
Date: 08/	/21/2012	Project Na	me: 2101 V	Villiams Str	eet	Project Number: 012-003			
Well Number:		Well Diame	ter (INCHES)		4	Calculated One Well Volume**:			
W -/0			Depth from T		16.88	3,7			
			pth to Water		11.22				
		_	vater Column	(FEET):	5.66				
Actual Time	Cumulative Volume Purged (GAL)	(°C)	Specific Cond.	pН	Water Appearance CL=CLEAR CO= CLOUDY TU=TURBID	Remarks (Odor, Color, Etc.)			
12:19	Simut	21.5	1053	6.94	CL				
1224	5	20,6	1095	6.86	CL				
12:30	10	20.3	1072	6.92	CL				
12:35	15	20,1	10.63	6.88	CL				
					7				
				1 - M ₁	und T				
	ater After Purgin	g (NC = No Cha	inge): //.7	(FEET)		: 🗌 Yes 🔽 No			
NOTES:	Manual	ALD (LIAT E.h	Sample Time:	12:46				
) LOCICING FAMALEE		T	Sample Identification: or same as Monitor Well					
	VIVNUE		~ ノ		Sampler: KA				

** One foot of water = 0.05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia. pipe, and 1.5 gal in a 6" dia. pipe \sim 4.2

			MONITOR	PURING DATA				
Date: 08/			me: 2101 V		eet	Project Number: 012-003		
Well Number: TW-2		Well Diame	ter (INCHES)	:	4	Calculated One Well Volume**:		
		Total Well (Depth from T	OC (FEET):	19,50	3.6		
		Starting De	pth to Water	(FEET):	13.91			
		Length of w	vater Column	(FEET):	5,59			
Actual Time	Cumulative Volume Purged (GAL)	Temp (°C)	Specific Cond.	pН	Water Appearance CL=CLEAR CO= CLOUDY TU=TURBID	Remarks (Odor, Color, Etc.)		
8:48	STANT	17.7	1205	7.15	CL			
8:54	5	17.9	845	6.90	CL			
9:00	10	17.9	860	7,03	CL			
9:05	15	17.9	866	7.01	CL			
		-						
Depth to Wa	ater After Purgin	g (NC = No Cha	inge): 14.1	(FEET)	Filtered Sample	: 🛄 Yes 🕱 No		
NOTES:				Sample Time:	9:2/			
					Sample Identifi	cation: or same as Monitor Well 🕎		
					Sampler: KA			

** One foot of water = 0.05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia. pipe, and 1.5 gal in a 6" dia. pipe

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Date: $08/21/2012$ Project Name: 2101 Williams StreetProject Number: 012-003Well Number:Well Diameter (INCHES): 4 Calculated One Well Volume**Total Well Depth from TOC (FEET):19.50 $4/5$ Total Well Depth from TOC (FEET):19.50Starting Depth to Water (FEET):12.7ZLength of water Column (FEET): $6/7$ TimeVolume Purged (GAL)Temp (°C)Starting Depth to Water Column (FEET): $6/7$ Volume Purged (GAL)Temp (°C)Starting Depth to Water Column (FEET): $6/7$ Actual Cond.Cumulative Cond.Remarks (Odor, Color, Etc.)Starting Depth to Water Column (FEET): $6/7$ Volume Purged (GAL)Temp Cond.Specific Cond.Starting Depth to Water Column (FEET): $6/7$ Volume Purged (GAL)Temp Cond.Starting Depth to Water Column (FEET): $1/7$ U $6/7$ Starting Depth to Water Column (FEET): $1/7$ U $1/6$ Starting Depth to Water Column (FEET): $1/7$ Starting Depth to Water Column	MONITORING WELL PURING DATA										
$TW-3 \qquad \begin{array}{c} Total Well Depth from TOC (FEET): 19.50 \\ \hline Total Well Depth from TOC (FEET): 19.50 \\ \hline Starting Depth to Water (FEET): 12.72 \\ \hline Length of water Column (FEET): 12.72 \\ \hline Cond. PH Water \\ Appearance \\ Cl=CLEAR \\ CO= CLOUDY \\ TU=TURBID \\ \hline S:15 StAAAT 219 1681 7.83 CL \\ \hline 5:20 5 21.6 1848 7.47 CL \\ \hline 5:25 10 21.1 1908 7.44 CL \\ \hline \end{tabular}$											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $											
TimeVolume Purged (GAL)(°C)Cond.Appearance CL=CLEAR CO= CLOUDY TU=TURBID(Odor, Color, Etc.) $5:15$ $5+AAT$ 769 7.83 CL $5:20$ 5 21.6 1848 7.47 CL $5:25$ 10 21.1 1908 7.44 CL											
5:20 5 21,6 1848 7.47 CL 5-25 10 21.1 1908 7.44 CL											
5-25 10 ZI.1 1908 7.44 CC											
5:30 15 20.8 1883 7.45 CC											
Depth to Water After Purging (NC = No Change): 13.12 (FEET) Filtered Sample: Yes X No											
NOTES: 1 FOALMENT OF Sample Time:											
STMNG CAME OUT ON THOP DEOTH SONDER Sample Identification: or same as Monitor Well	X										
FDOES NOT HAVE COCICILO CAP Sampler: KA											
** One foot of water = 0.05 gal in a 1" dia. pipe, 0.17 gal in a 2" dia. pipe, 0.65 gal in a 4" dia. pipe, and 1.5 gal in a 6" dia. pipe (NOT ENOUGH ROOM IN VANT)											

APPENDIX C

SUMMARY OF MONITOR WELL CONSTRUCTION DETAILS

		Mo	Former	Printpac	on Survey - k Flexible P eet, San Le	ackaging F	acility		
Monitor Well Number	Date of Well Construction / Consultant	Well Diameter	Top of Casing (feet)	Depth to Water in 1996 (feet)	Completed Well Depth (feet) From Logs	Measured Depth in 1994 (feet)	Screened Interval (feet) / Aquifer Zone Designation	Evidence of Dedicated bailer? / Free Product (Hydraulic fluid) In Past?	Security
W-1	August 1984 / unknown	4"	24.34	10.19	unknown	38.9	unknown/ A Zone	Yes / no	Locking /sealing mechanism does not work
W-2	August 1984 / unknown	Formally d	estroyed (se	aled) by licer	nsed drilling cor	ntractor in Ma	y 1992 due to obstr	uction in the well	casing
W-3	August 1984 / unknown	4"	24.49	10.45	unknown	37	unknown/ A Zone	No / no	Locking /sealing mechanism does not work
W-4	August 1984 / unknown	4"	24.62	10.6	unknown	37.5	unknown/ A Zone	No / no	Locking /sealing mechanism does not work
W-5	January 1985 / unknown	2″	25.39	11.24	unknown	33	unknown/ A Zone	No / no	Locking /sealing mechanism does not work
W-6	January 1985 / unknown	2"	24.72	10.56	unknown	36	unknown/ A Zone	No / no	Unknown (covered with water – did not attempt to remove plug)
B-1	January 1986 / Harding Lawson	4"	24.25	10.25	52.5	48	44 to 52/ B Zone	Possible (piece of string found outside of well casing) / no	Unlocked / broken – did not attempt to remove plug
W-7	January 1986 / Harding Lawson	4"	24.04	10.77	37.5	31	17 to 37 / A Zone	Yes / no	Locking /sealing mechanism does not work
W-8	January 1986 / Harding Lawson	4"	23.83	10.13	37	34	22 to 37 / A Zone	Yes / no	Unknown (covered with water – did not attempt to remove plug)

	Table I (continued) Monitor Well Wellhead Condition Survey – June 21, 2012 Former Printpack Flexible Packaging Facility 2101 Williams Street, San Leandro, California									
Monitor Well Number	Date of Well Construction / Consultant	Well Diameter	Top of Casing (feet)	Depth to Water in 1996 (feet)	Completed Well Depth (feet) From Logs	Measured Depth in 1994 (feet)	Screened Interval (feet) / Aquifer Zone Designation	Evidence of Dedicated bailer? / Free Product (Hydraulic fluid) In Past?	Security	
W-9	January 1986 / Harding Lawson	4"	unknown	10.4	32	31	20 to 32 / A Zone	No / no	Locking mechanism does not work / no sealing mechanism	
W-10	1987 – 1996? / unknown	4"	24.77	10.78	unknown	17	unknown/ Shallow A Zone	No / no	Unlocked /sealing mechanism does not work	
TW-1*	December 1995 / ESE	6"	28.61	15.71	25	N/A	5 to 25 / A Zone	Unknown / Yes (removed in 1990s by passive skimmer)	Unknown (well could not be located)	
TW-2	December 1995 / ESE	4"	25.79	14.99	20	N/A	5 to 20 / A Zone	No / no	Locking /sealing mechanism does not work	
TW-3	December 1995 / ESE	4"	25.29	13.25	20	N/A	5 to 20 / A Zone	Yes (appears to be lost in well) / no	Unlocked /sealing mechanism does not work	

*TW-1 is missing as of June 21, 2012 and may be inaccessible due to tenant improvements inside the building (this is the only indoor well)

Notes:

- 1. No written reports with well construction logs were identified with dates prior to 1986.
- 2. Tidal study performed by others in 1989 found no significant measurable tidal action on groundwater levels at the subject property.
- 3. At least one or two wells may have bailers lost in the casing as noted.
- 4. N/A = not applicable as this well had not been constructed yet (when the depth measurements of other wells were made).