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Report Title:	**REMEDIATION STATUS REPORT - FIRST QUARTER 2019**
Report Type:	**Remedial Progress Report**
Report Date:	**4/15/2019**
Facility Global ID:	**T0603701609**
Facility Name:	**San Pedro, Fuel Terminal DFSP - DFSP SAN PEDRO TANK FARM AREA**
File Name:	**REMEDIATION STATUS REPORT - FIRST QUARTER 2019.pdf**
Organization Name:	**The Source Group, Inc.**
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IP Address:	**66.214.148.134**
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Confirmation Number:	**8253048837**

SGI environmental THE SOURCE GROUP, INC.

April 15, 2019

Mr. Paul Cho, P.G.
Engineering Geologist
Site Cleanup Unit V
California Regional Water Quality Control Board, Los Angeles Region
320 West Fourth Street, Suite 200
Los Angeles, California 90013

Subject: **REMEDIATION STATUS REPORT - FIRST QUARTER 2019**
Defense Fuel Support Point, San Pedro
Administration Area
3171 Gaffey Street
San Pedro, California

On behalf of The Defense Logistics Agency (DLA) Installation Management for Energy (DM-FEE), The Source Group, Inc. (SGI) presents the subject report. This document summarizes operations of the soil vapor extraction (SVE) and air sparge (AS) systems in the Administration Area of the Defense Fuel Support Point (DFSP) San Pedro facility (hereafter Site), including field measurements, vapor sampling results, and mass removal rates during the first quarter of 2019.

Administration Area

The Administration Area, a portion of the DFSP San Pedro Facility, encompasses approximately 20 acres, and is located along the eastern property line of DFSP, San Pedro, about 2,600 feet north of the Pump House Area (Figures 1 and 2). The Administration Area, located at the eastern terminus of the central ravine, is relatively flat. This area contains several structures, including the administration building (Building 100), maintenance building (Building 103), former butterfly habitat lab (Building 108, currently a vacant warehouse space), pump house control room (Building 113), drum filling plant, jet fuel truck loading rack, and diesel fuel truck loading rack. Adsorbed-, dissolved-, and light liquid-phase hydrocarbons were identified during previous investigations in the Administration Area.

After submittal and regulatory approval of SGI's January 27, 2005 *Remedial Action Plan,* soil and groundwater remediation of petroleum hydrocarbons commenced in the Administration Area in July 2007. SVE and air sparging have since then been conducted in wells located within the vicinities of Building 108 and Building 113 (Figure 3).

A total of 115 wells (groundwater monitoring, vapor extraction [VE], and AS wells) have been installed in the Administration Area, including thirty-eight double-nested or triple-nested wells, fourteen remediation wells (twelve AS wells and two VE wells) installed during February 2016; seven remediation wells (dual-nested vertical AS/VE wells VE-48A, VE-48B and VE-48C, dual-nested slant AS/VE wells TR-2, TR-4, TR-5 and TR-6) installed during March 2018; nine newly installed horizontal VE wells (HVE-1 through HVE-9) installed during November/December 2018; and seventeen newly installed companion groundwater monitoring wells; installed during November/December 2018 due to rising groundwater levels (i.e., screened intervals of existing wells submerged). Details associated with all of the remediation and groundwater monitoring wells installed during the prior reporting period are

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provided in SGI's March 21, 2019 *Assessment and Well Installation - Truck Rack Area,* and March 21, 2019 *Companion Well Installation Report - Administration Area.*

All remediation wells installed during 2018 will be tied into the existing SVE and AS systems as part of expanded remedial action measures per SGI's October 31, 2017 *Site Investigation Work Plan, Truck Rack Area*. Details associated with the installation of these wells are provided as part of a SGI's October 4, 2018 *Truck Rack Area Investigation and Interim Remedial Action Plan* (IRAP). Tabulated summaries of all single, double and triple-nested Administration Area remediation wells are provided herein.

Hydrogeology

Major water-bearing units north and east of the Site reportedly include the Gage, Lynwood, and Silverado Aquifers. The Palos Verdes Fault Zone is interpreted to act as a hydrogeologic barrier separating the northeast and southwest areas near the fault zone. Regional groundwater gradient in the shallow Gage Aquifer is generally toward the northwest, with local gradient variations. Three municipal wells and one industrial-supply well are located within 1.5 miles of the Site. The three municipal wells are located north of Anaheim Street, and the industrial well is located at the ConocoPhillips refinery east of Gaffey Street. All of these wells reportedly produce water from the Silverado Aquifer.

Local hydrogeology may also be complicated by a network of seawater-intrusion barrier wells operated by Los Angeles County, where freshwater is continuously infiltrated. This is an important variable in understanding the groundwater regime beneath the property as the barrier wells consists of a series of groundwater injection and monitoring wells designed to control salt-water intrusion into local freshwater aquifers (project has been ongoing since February 1971). The injection wells extend east-west from the Harbor Freeway to Alameda Street, and northeast-southwest between Anaheim Street and Sepulveda Boulevard (generally located along Anaheim Street and Alameda Street). The nearest injection well is located northeast of the Site, within approximately one mile of the Administration Area.

Groundwater levels beneath the Administration Area are below sea level, attributed to the effect of groundwater pumping at the adjacent refinery. The hydrogeologic influence between the deep groundwater extraction and the shallow groundwater elevations is not clearly documented. During the most recent semiannual groundwater monitoring event (early October 2018), depths to groundwater in the Administration Area (excluding AAP-4 and the shallower casings of nested wells) ranged from 41.44 to 72.99 feet below the tops of the well casings. Groundwater elevations in these wells ranged from 20.17 to 21.23 feet below mean sea level. The local gradient beneath the Administration Area is generally toward the south (southeast to southwest) and is approximately 0.003 feet per foot.

SVE/AS System Operation Summary

The SVE system consists of vapor extraction wells, a knockout vessel, an extraction blower with a maximum flow rate of 250 standard cubic feet per minute (scfm), an electric catalytic oxidizer, a heat exchanger, an exhaust stack, and associated conveyance piping and manifolds. Following notification to South Coast Air Quality Management District (SCAQMD), the SVE system was started for continuous operation on May 23, 2008. Treated soil vapor is being discharged to the atmosphere in accordance with SCAQMD permit to construct/operate No. G43601 (formerly F94906). Operation of the AS system

commenced on April 21, 2009. On September 1, 2011, a Kaeser air compressor (Model SK-15) was installed to replace the original air compressor that had seized. A few years later, the Kaeser unit was rendered irreparable due to an electrical failure, and was replaced with another Kaeser (Model SX-26) and restarted on January 15, 2015.

Building 113 and Truck Rack Area

SVE/AS system operations in the Building 113 Area continued in wells VE-AS-20 through VE-AS-25 until October 30, 2009 when remediation in this area was halted to focus active remediation in other parts of the Site. Three wells (VE-AS-20, VE-AS-23, and VE-AS-24) are dual-nested vertical VE wells, ten wells (VE-AS-21, VE-AS-22, VE-AS-25, TR-2, TR-4, TR-5, TR-6, VE-48A, VE-48B and VE-48C) are single-completion VE wells with AS wells located within each borehole (TR-2, TR-4, TR-5 and TR-6 are slant drilled wells), and nine wells (HVE-1 through HVE-9) are single-completion horizontal VE wells (construction details provided in SGI's March 21, 2019 *Assessment and Well Installation - Truck Rack Area*). As indicated above, Truck Rack Area remediation near Building 113 is anticipated to resume during the next reporting period per SGI's IRAP. The following table summarizes the screened intervals for all SVE and AS wells in the Building 113 and Truck Rack Area.

WELL SCREEN INTERVAL AND DEPTHS SUMMARY (FEET BGS) OF VAPOR EXTRACTION AND AIR SPARGE WELLS IN BUILDING 113 AND TRUCK RACK AREA

Well ID	Vertical Well Screen Interval or Slant/Horizontal Well Depth
SP-02	5-25 (SVE shallow); 30-55 (SVE deep); 71-73 (AS)
VE-03	5-25 (SVE shallow); 28-45 (SVE deep)
VE-04	5-20 (SVE shallow); 26-46 (SVE deep)
VE-05	10-28 (SVE shallow); 28-58 (SVE deep)
VE-AS-20	10-30 (SVE shallow); 35-55 (SVE deep); 60-65 (AS)
VE-AS-21	10-30 (SVE shallow); 58-63 (AS)
VE-AS-22	20-50 (SVE deep); 58-63 (AS)
VE-AS-23 and VE-AS-24	10-30 (SVE shallow); 40-60 (SVE deep); 65-70 (AS)
VE-AS-25	30-60 (SVE deep); 65-70 (AS)
TR-2	38.5-43.0 (SVE deep); 53.0-54.8 (AS)
TR-4	38.5-43.0 (SVE deep); 53.0-54.8 (AS)
TR-5	38.5-43.0 (SVE deep); 53.0-54.8 (AS)
TR-6	38.5-43.0 (SVE deep); 53.0-54.8 (AS)
VE-48A	38-43 (SVE deep); 53-55 (AS)
VE-48B	38-43 (SVE deep); 53-55 (AS)
VE-48C	38-43 (SVE deep); 53-55 (AS)
HVE-1 through HVE-9	15 (SVE shallow; HVE-1 to HVE-4); 40 (SVE deep; HVE-5 to HVE-9)

Building 108 Area

SVE/AS system operations in the Building 108 Area commenced on October 30, 2009, using wells VE-AS-2 through VE-AS-11. All of these wells are single-completion vertical vapor extraction wells except VE-AS-6, which is a dual-nested vertical VE well. AS wells are located within each of the VE well boreholes (i.e., VE-AS-2 through VE-AS-11).

Expanded SVE/AS operations commenced on May 17, 2016 following the installation of VE wells VE-38 and VE-39, and sparge wells AS-26 through AS-37, during February 2016 per SGI's January 15, 2016 *Work Plan to Expand Air Sparge and Soil Vapor Extraction Well Array*. Further details associated with the installation of these wells is provided in SGI's November 30, 2016 *Air Sparge and Soil Vapor Extraction Well Installation Report and Expanded Remediation System Testing Details/Operational Plans.* The following table summarizes the screened intervals for all SVE and AS wells in the Building 108 Area.

WELL SCREEN INTERVAL (FEET BGS) SUMMARY OF VAPOR EXTRACTION AND AIR SPARGE WELLS IN BUILDING 108 AREA

Well ID	Vertical Well Screen Interval
SP-01	14-39 (SVE shallow); 43-68 (SVE deep); 81-83 (AS)
VE-01	25-45 (SVE)
VE-02	20-24 (SVE)
VE-AS-2 and VE-AS-3	30-60 (SVE); 65-70 (AS)
VE-AS-4	30-60 (SVE); 68-73 (AS)
VE-AS-5	30-60 (SVE); 65-70 (AS)
VE-AS-6	10-25 (SVE shallow); 30-60 (SVE deep); 70-75 (AS)
VE-AS-7 to VE-AS-9	30-60 (SVE); 65-70 (AS)
VE-AS-10	27-57 (SVE); 65-70 (AS)
VE-AS-11	30-60 (SVE); 65-70 (AS)
AS-26	65-70 (AS)
AS-27 to AS-29	70-75 (AS)
AS-30	67-72 (AS)
AS-31	70-75 (AS)
AS-32 to AS-37	65-70 (AS)
VE-38	30-55 (SVE)
VE-39	20-50 (SVE)

SVE system operational data, hydrocarbon mass removal estimates, and influent vapor sampling analytical results are summarized in Tables 1, 2, and 3, respectively (effluent sampling results are kept on file in accordance with SCAQMD permit requirements). The SVE system operated for approximately 507 hours from January 1, 2019 through March 31, 2019 (23% operational time) and recovered an estimated 1.4 pounds of hydrocarbons. System operations were limited on purpose throughout the reporting period to allow for more cost-effective treatment since all of the existing connected wells have reached low/asymptotic levels. Thus, system cycling that began at the end of the prior reporting period continued through March 2019 with approximately one week per month of operations.

The negligible mass removal this period again shows that vadose zone cleanup utilizing the existing extraction well network has reached practical/feasible limits. Thus, no further SVE operations are planned until tie-in work associated with the recently installed Truck Rack Area wells is completed (anticipated during mid-May 2019). Since system startup on May 23, 2008, the SVE system has operated for a total of approximately 74,657 hours and recovered an estimated 63,445 pounds of hydrocarbons. Approximately 7,508 pounds of hydrocarbons were recovered in the Building 113 Area, and approximately 55,937 pounds of hydrocarbons have been recovered thus far in the Building 108 Area.

Results for historical individual SVE well field readings are presented on Table 4. Individual SVE well samples were most recently collected for laboratory analysis on June 28, 2018, and the results are included with all of the individual well vapor analytical sampling results summarized in Table 5. Data from wells VE-AS-20S through VE-AS-25 are also included at the end of Table 5. These wells were sampled on December 14, 2017 as part of a recent assessment to potentially expand the vapor extraction well network but the laboratory results showed no impacts to soil in the vicinity of these wells.

Figure 4 provides a graph of the cumulative hydrocarbon mass that has been recovered via SVE system operations since startup. As shown on Tables 4 and 5, SGI routinely collects field measurements of hydrocarbon concentrations via a PID from the various SVE wells along with periodically collecting individual well samples for laboratory analysis to allow for detailed system adjustments, and aid in the elimination of preferential pathways. Based on this data, vapor extraction from wells with the lowest hydrocarbon concentrations have been closed to allow for increased vacuum from the few remaining minimally impacted wells.

The AS system operated for approximately 1,817 hours from January 1, 2019 through March 31, 2019 (84% operational time) with no operations from March 26, 2019 through the end of the reporting period pending the completion of air compressor troubleshooting/repair work. Tables 6A and 6B summarize the AS system flow and pressure measurements associated with the original and expanded sparge well networks, respectively. Historical dissolved oxygen (DO) measurements and analytical hydrocarbon concentration data for both diesel and gasoline range organic compounds, as well as select constituents from groundwater monitoring wells located in the vicinity of an AS well or wells, are provided in Table 7. As the data indicates, sparging has resulted in generally elevated and sustained oxygen concentrations conducive to the aerobic degradation of lighter end analytes such as benzene which has exhibited significant overall declines (currently at or near historically low levels). Similar but generally less significant declining concentration trends are evident for heavier end hydrocarbons such as diesel range organics.

As detailed in SGI's October 12, 2016 *Remediation Status Report - Third Quarter 2016,* a second air compressor (Kaeser Model SX-6) was deployed to the Site on August 31, 2016 for the purpose of running the expanded sparge well network at increased injection rates. Air compressor installation, hookup and testing activities were completed during September 2016 with the simultaneous operation of both compressors beginning during October 2016 following the completion of primary compressor repair work. Increased injection rates have since been applied to allow for effective contaminant mass removal from the saturated zone via volatilization and biodegradation in accordance with the AS influence monitoring results presented in SGI's July 15, 2016 *Remediation Status Report - Second Quarter 2016,* and January 13, 2017 *Remediation Status Report - Fourth Quarter 2016.*

The sparge system will continue to be operated in this manner during the second quarter of 2019 with follow up monitoring planned to verify system effectiveness and allow for any necessary adjustments to injection rates and/or cycling times. Fugitive emissions monitoring will also continue to be conducted regularly to confirm concurrent and/or continual SVE system operations are not required when the AS system is online. It is anticipated that the current configuration will enable site cleanup to be achieved in the near future.

For the original AS well network, sparging will again be conducted by cycling between wells VE-AS-3/VE-AS-6 and VE-AS-9/VE-AS-11 a few weeks at a time based on prior influence monitoring (SGI's October 15, 2015 *Remediation Status Report – Third Quarter 2015).* This will continue to be done to help ensure dynamic stripping of petroleum volatile organic compounds (VOCs) along with establishing effective air distribution patterns. This technique will also continue to be employed for the expanded AS well network at the approximate injection rates applied during the current reporting period to allow for accelerated cleanup of the few remaining residually impacted target treatment zones which are primarily located in the vicinity of monitoring wells GTMW-46 and GTMW-50.

Note that the monitoring data presented in Table 7 for wells GTMW-46 and GTMW-50 is reflective of these efforts as enhanced sparge influence at both of these well locations is clearly evident from the generally low to non-detectable hydrocarbon concentrations that began declining markedly during October 2016. The temporary reversal of this favorable trend during the April/May 2018 groundwater monitoring and sampling event appears to be anomalous as the most recent October 2018 results are at or near historically low levels. As indicated above, full-scale expanded SVE/AS system operations are tentatively scheduled to begin in the Truck Rack Area during the next reporting period following the completion of related tie-in work per SGI's IRAP.

Vapor Sampling and Laboratory Analysis

During this reporting period (January 1, 2019 through March 31, 2019), a total of six vapor samples were collected from the influent (three samples; Table 3) and effluent (three samples) of the treatment system. Each vapor sample was collected using a dedicated Tedlar bag, sample tubing, and a vacuum pump. All of these samples were delivered via a laboratory courier to state-certified American Analytics, Inc. of Chatsworth, California for VOCs analysis, including benzene, toluene, ethyl benzene, total xylenes and oxygenates, and gasoline range organics (GRO).

Influent and effluent vapor samples were collected to evaluate the system performance and for compliance with the SCAQMD permit. All analytical results were in compliance with the permit requirements. The influent laboratory analytical results for samples DES-INF-ADM-126, DES-INF-ADM-127 and DES-INF-ADM-128 collected this period are included in Attachment A along with the associated chain-of-custody documents. As the results indicate, the advent of system cycling activities since late June 2018 resulted in an initial overall increase in concentrations relative to prior recent quarters but this trend has since reversed significantly with historically low to non-detectable levels occurring since November 2018.

As discussed previously, expansion of the SVE/AS well network is scheduled to be completed during the next reporting period with installation and system tie-in details provided in SGI's IRAP. In the meantime, the existing SVE system will be left off-line since the data clearly shows that vadose zone cleanup utilizing the existing extraction well network has reached practical/feasible limits with no further polishing required. Full-scale Truck Rack Area SVE/AS operations will commence as soon as possible via the newly installed expanded well network to focus remedial efforts accordingly so that cleanup of the entire Administration Area can likely be completed within the next couple of years.

Conclusions and Recommendations

Based on treatment system operational data and vapor-phase analytical results, the existing AS system continues to be effective in cleaning up residually impacted hydrocarbon soils beneath the Administration Area. The existing SVE system appears to have reached low/asymptotic levels that no longer exhibit any rebound such that cleanup of the areas associated with the existing extraction well network has been confirmed.

The original and expanded Building 108 Area AS well networks have particularly been proven to increase DO concentrations within the water table (from baseline levels of approximately 1 mg/L to an average of around 3 to 4 mg/L with maximum concentrations as high as 7 to 8 mg/L) and achieve enhanced effectiveness via the application of increased injection rates (i.e., simultaneously utilizing both primary and secondary air compressors) in areas where residual impacts remain. SGI will continue to operate and monitor the AS system accordingly with restart of the SVE system planned upon completion of recently installed Truck Rack Area wells tie-in work which will include expanded sparging operations. AS/SVE expansion work is scheduled for completion during mid-May 2019. The subsequent advent of expanded AS/SVE operations will serve to accelerate remediation of the entire Administration Area.

The existing AS system will continue operating on a full-time basis. SGI will also periodically conduct additional influence monitoring to confirm the system is still functioning effectively. This AS monitoring and measurement work is also planned for the expanded well network after it is brought online during the next reporting period. To help ensure dynamic stripping of petroleum VOCs and effective AS distribution, SGI will further adjust individual sparge well flow rates and/or cycle the operation of individual wells to promote the formation of new and varied air circulation patterns. The programmable sparge control panel that was installed as part of the existing AS system will continue to be utilized to facilitate the implementation of pulsing techniques and allow for greater operational flexibility in order to help achieve increased influence in the few remaining areas where elevated petroleum VOC concentrations remain in groundwater.

Statement of Limitations

This document was prepared for the exclusive use of the Defense Fuel Support Point, San Pedro (DFSP) facility and the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) for the express purpose of complying with a client- or regulatory directive for environmental investigation or restoration. SGI and DFSP must approve any re-use of this work product in whole or in part for a different purpose or by others in writing. If any such unauthorized use occurs, it shall be at the user's sole risk without liability to SGI or DFSP.

To the extent that this report is based on information provided to SGI by third parties, including DFSP, their direct contractors, previous workers, and other stakeholders, SGI cannot guarantee the completeness or accuracy of this information, even where efforts were made to verify third-party information. SGI has exercised professional judgment to collect and present findings and opinions of a scientific and technical nature. The opinions expressed are based on the conditions of the Site existing at the time of the field investigation, current regulatory requirements, and any specified assumptions.

The presented findings and recommendations in this report are intended to be taken in their entirety to assist DFSP and LARWQCB personnel in applying their own professional judgment in making decisions related to the property. SGI cannot provide conclusions on environmental conditions outside the completed scope of work. SGI cannot guarantee that future conditions will not change and affect the validity of the presented conclusions and recommended work. No warranty or guarantee, whether expressed or implied, is made with respect to the data or the reported findings, observations, conclusions, and recommendations.

This report has been prepared under the professional supervision and review of the individual(s) whose name(s) and professional seal(s) appear below.

Please call one of the undersigned at 562-597-1055 if you have any questions.

Sincerely,

Michael Wood, P.E.
Senior Engineer

Walter Morales, P.E.
Principal Engineer

Attachments and Distribution on Next Page.

Attachments:

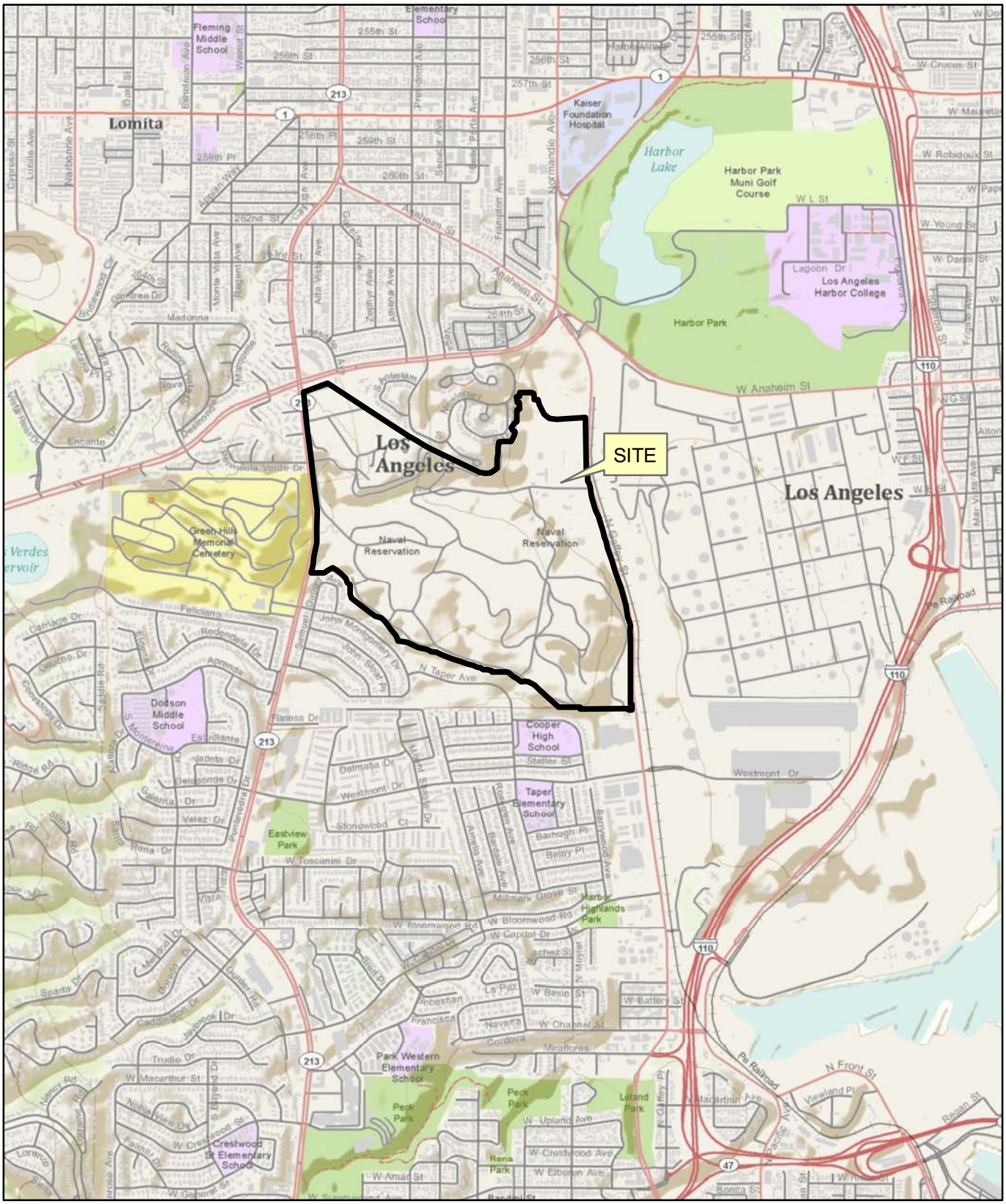
Figure 1 – Site Location Map
Figure 2 – Facility Map
Figure 3 – Administration Area Well Location Map
Figure 4 – Cumulative Hydrocarbon Mass Removed

Table 1 – Historical Summary of Vapor Extraction System Monitoring Results
Table 2 – Cumulative Hydrocarbon Mass Removal Calculations
Table 3 – Historical Summary of Analytical Sampling Results – Influent Vapor
Table 4 – Historical Summary of Field Sampling Readings – Individual Well Vapor
Table 5 – Historical Summary of Analytical Sampling Results – Individual Well Vapor
Table 6A – Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Original Sparge Well Network
Table 6B – Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Expanded Sparge Well Network
Table 7 – Air Sparge - Observation Well Monitoring

Attachment A – Laboratory Analytical Results and Chain-of-Custody Documents

cc: Information Technology Unit, RWQCB
Carol Devier-Henney, DLA

FIGURES



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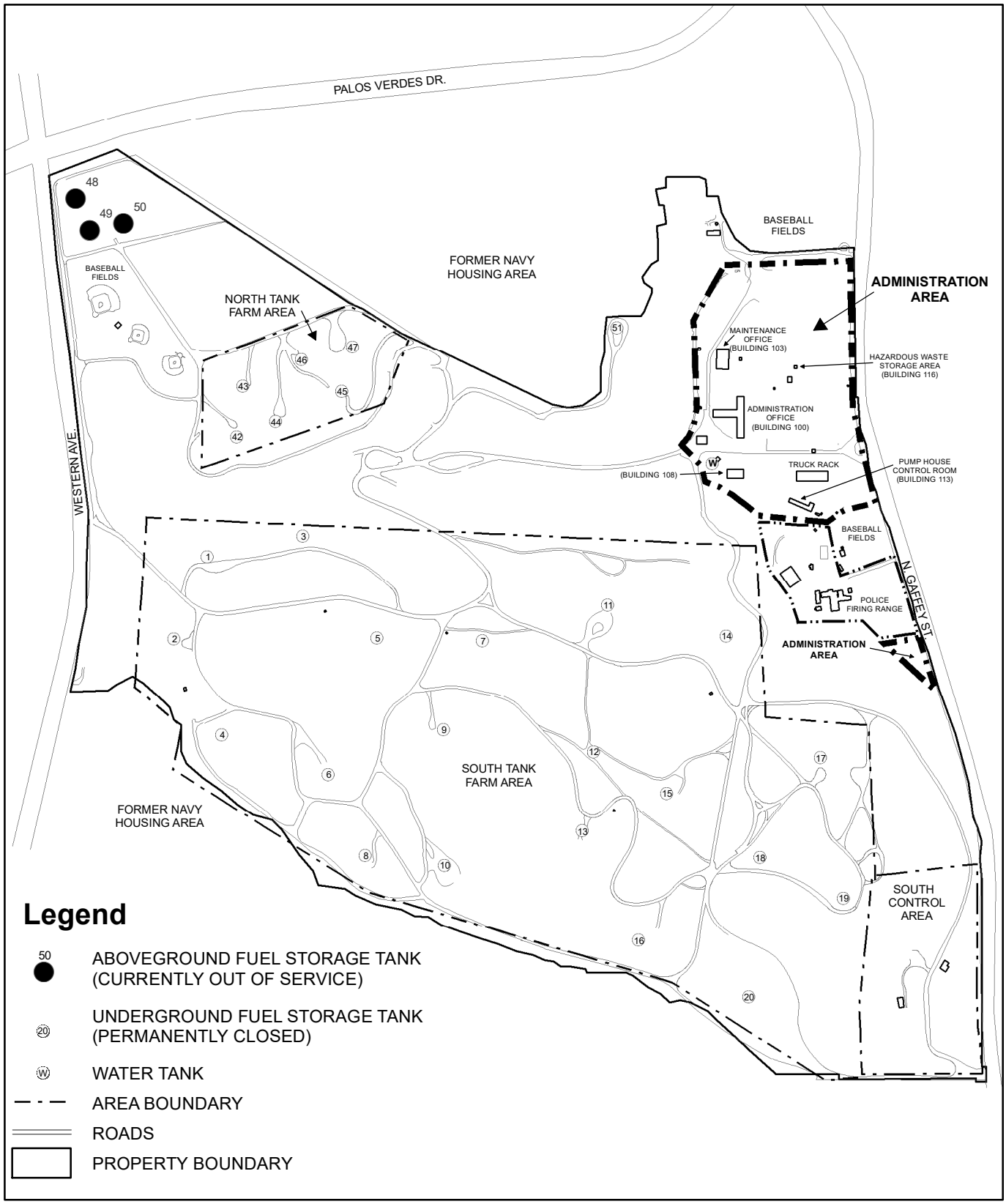
1962 FREEMAN AVE.
SIGNAL HILL, CA 90755

DEFENSE FUEL SUPPORT POINT-SAN PEDRO
3171 NORTH GAFFEY STREET
SAN PEDRO, CALIFORNIA

SITE LOCATION MAP

FIGURE **1**



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SGI environmental THE SOURCE GROUP, INC.
1962 FREEMAN AVENUE
SIGNAL HILL, CA 90755
(562) 597-1055

PROJECT NO.:	DATE:	DR.BY:	APP.BY:
091-SDLA-031	10/12/2018	SM/AC	MW

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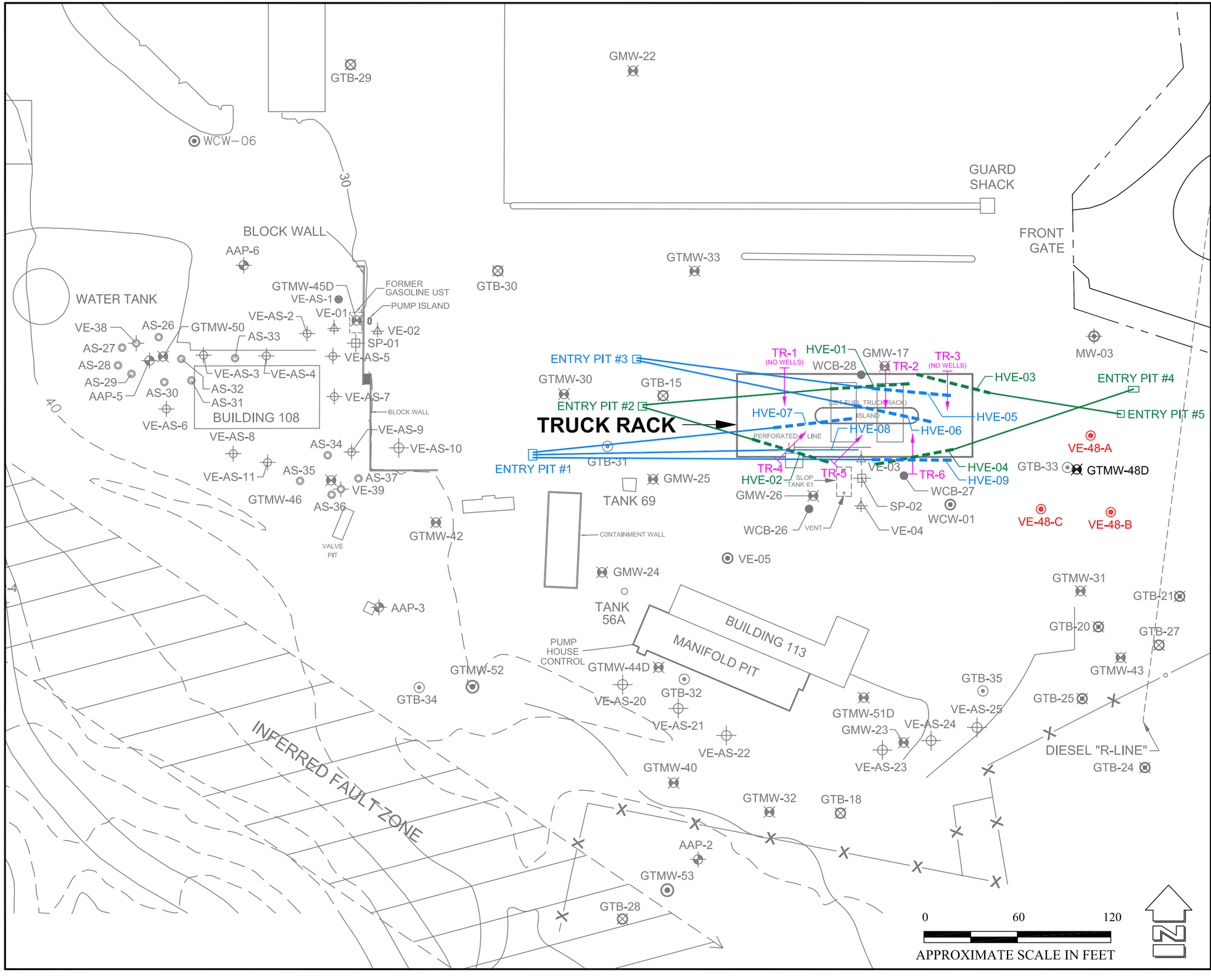
DEFENSE FUEL SUPPORT POINT - SAN PEDRO

3171 NORTH GAFFEY STREET
SAN PEDRO, CALIFORNIA

FACILITY MAP

FIGURE **2**



LEGEND

- FACILITY BOUNDARY
- 40 — GROUND SURFACE ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (MSL)
- FENCELINE
- MW-03 — GROUNDWATER MONITORING WELL (HLA, 1986)
- WCB-28 — SOIL BORING (WCC, 1990)
- WCW-06 — GROUNDWATER MONITORING WELL (WCC, 1990)
- GMW-26 — GROUNDWATER MONITORING WELL (GTI, 1993)
- GTMW-33 — GROUNDWATER MONITORING WELL (GTI, 1994)
- GTB-30 — SOIL BORING (FDGTI, 1996)
- GTMW-51D — GROUNDWATER MONITORING WELL (FDGTI, 1996)
- SP-02 — AIR SPARGE WELL (FDGTI, 1996())
- VE-05 — VAPOR EXTRACTION WELL (FDGTI, 1996)
- GTB-35 — SOIL BORING (FDGTI, 1997)
- GTMW-54D — GROUNDWATER MONITORING WELL (IT, 2001)
- AAP-6 — GROUNDWATER MONITORING WELL (SGI, 2013)
- VE-AS-25 — AIR SPARGE/VAPOR EXTRACTION WELL
- VE-AS-1 — SOIL BORING
- VE-39 — SVE WELL INSTALLED BY SGI IN 2016
- AS-34 — AS WELL INSTALLED BY SGI IN 2016
- VE-48-C — VERTICAL AIR SPARGE / VAPOR EXTRACTION WELL LOCATION (SGI/APEX, 2018)
- TR-6 — SLANT BORING AND/OR AIR SPARGE/ VAPOR EXTRACTION WELL (SGI/APEX, 2018)
- TRUCK RACK SPILL CONTAINMENT
- HVE-04 — SHALLOW (~15 FEET BGS) HORIZONTAL EXTRACTION WELL WITH DASHED SCREENED INTERVAL (SGI, 2018)
- HVE-09 — DEEP (~40 FEET BGS) HORIZONTAL EXTRACTION WELL WITH DASHED SCREENED INTERVAL (SGI, 2018)

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ADMINISTRATION AREA WELL LOCATION MAP

DFSP SAN PEDRO
3171 NORTH GAFFEY STREET
SAN PEDRO, CALIFORNIA

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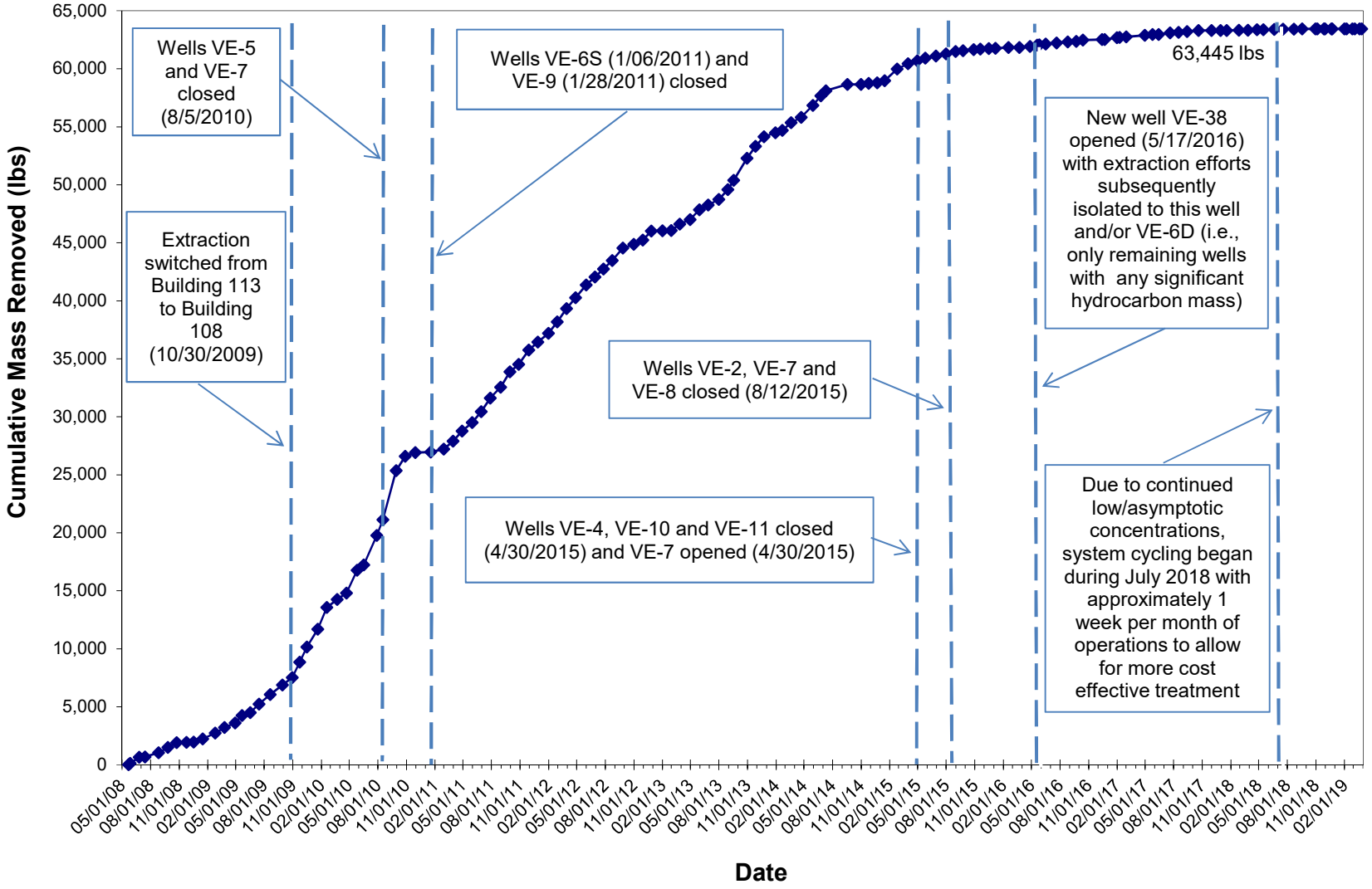
FIGURE 3

FIGURE 4
Cumulative Hydrocarbon Mass Removed
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA



TABLES

TABLE 1
Historical Summary Of Vapor Extraction System Monitoring Results
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
05/23/08	2:45 PM	6.0	50	1.50	20.4	177	740	760	34.0	VES startup. Sparge system remains off.
05/24/08	11:15 AM	26.5	50	1.50	20.4	185	725	800	39.5	Routine O&M.
05/25/08	4:30 PM	56.0	50	3.05	41.5	188	722	850	41.0	Routine O&M.
05/26/08	11:40 AM	75.1	50	3.05	41.5	186	718	860	42.5	Routine O&M.
05/27/08	12:30 PM	99.9	40	2.50	34.0	184	715	880	42.5	Collected DES-INF-ADM-01 and DES-EFF-ADM-01.
05/28/08	4:30 PM	128.0	40	2.50	34.0	184	719	900	44.5	Routine O&M.
05/29/08	4:00 PM	151.6	40	2.75	37.4	183	710	900	39.0	Routine O&M.
06/06/08	10:00 AM	337.7	35	3.00	40.8	180	725	875	41.2	Routine O&M.
06/13/08	1:40 PM	385.3	35	3.00	40.8	181	722	860	39.5	VES off on arrival. VES restarted.
06/20/08	3:10 PM	554.8	35	3.00	40.8	180	718	825	37.5	Routine O&M.
06/25/08	9:15 AM	668.9	35	3.50	47.6	204	728	1050	44.5	Collected DES-INF-ADM-02 and DES-EFF-ADM-02.
07/07/08	2:05 PM	--	35	--	--	--	--	--	--	Routine O&M.
07/14/08	3:50 PM	1,131.6	25	3.50	47.6	210	725	825	59.5	Collected DES-EFF-ADM-C-03 (at 725°F) and DES-EFF-ADM-C-04 (at 760°F) confirmation samples due to exceedance in June.
08/04/08	2:45 PM	1,397.7	50	4.00	54.4	219	775	560	47.5	Routine O&M.
08/11/08	3:30 PM	1,566.4	30	3.00	40.8	246	748	900	45.6	Routine O&M.
08/22/08	4:00 PM	1,830.7	50	3.00	40.8	247	765	880	42.5	Routine O&M.
08/26/08	9:30 PM	1,920.4	50	3.00	40.8	230	771	855	42.8	Collected DES-INF-ADM-03 and DES-EFF-ADM-05.
09/05/08	2:00 PM	2,166.2	50	3.00	40.8	243	732	920	41.0	Routine O&M.
09/12/08	12:00 PM	2,332.1	50	3.10	42.1	245	756	895	44.0	Routine O&M.
09/19/08	3:00 AM	2,502.1	50	3.00	40.8	247	751	975	43.5	Routine O&M.
09/24/08	6:20 PM	2,625.4	50	3.00	40.8	245	768	950	41.0	Routine O&M.
09/25/08	8:20 AM	2,639.4	--	--	--	244	--	--	--	Collected DES-INF-ADM-04 and DES-EFF-ADM-06.
09/29/08	2:00 PM	2,741.0	50	3.00	40.8	243	745	930	39.6	Routine O&M.
10/02/08	3:00 PM	2,814.3	50	3.00	40.8	241	737	900	37.6	Routine O&M.
10/11/08	10:00 AM	3,024.8	50	3.00	40.8	243	755	925	39.5	Routine O&M.
10/15/08	4:00 PM	3,126.9	50	3.00	40.8	241	737	945	40.5	Routine O&M.
10/23/08	8:10 AM	3,310.8	50	3.00	40.8	243	745	910	40.9	Collected DES-INF-ADM-05 and DES-EFF-ADM-07.
10/30/08	3:00 PM	3,359.3	50	3.00	40.8	245	741	935	41.7	Routine O&M.
11/04/08	3:00 PM	3,395.0	50	3.00	40.8	246	760	885	36.2	Routine O&M.
11/10/08	4:00 PM	3,540.4	50	3.00	40.8	247	753	865	36.5	Routine O&M.
11/21/08	2:30 PM	3,742.8	50	3.00	40.8	249	745	905	38.9	Routine O&M.
11/24/08	2:45 PM	3,815.0	50	3.00	40.8	249	772	880	38.2	Collected DES-INF-ADM-06 and DES-EFF-ADM-08.
12/01/08	3:30 PM	3,983.5	50	3.25	44.2	249	755	910	39.9	Routine O&M.
12/08/08	3:00 PM	4,013.6	50	3.25	44.2	248	760	930	39.1	Routine O&M.
12/17/08	2:45 PM	4,225.7	50	3.25	44.2	248	763	875	38.5	Collected DES-INF-ADM-07 and DES-EFF-ADM-09.
12/22/08	11:30 AM	4,339.7	50	3.25	44.2	249	761	810	36.7	Routine O&M.
12/29/08	11:00 AM	4,477.2	50	3.00	40.8	249	758	800	22.9	Routine O&M.
01/09/09	2:30 PM	4,651.8	50	3.00	40.8	246	763	835	29.1	Routine O&M.
01/15/09	8:30 AM	4,790.3	50	3.50	47.6	249	761	760	32.6	Collected DES-INF-ADM-08 and DES-EFF-ADM-10.
01/23/09	1:00 PM	4,986.6	50	3.00	40.8	248	755	725	31.5	Routine O&M.
01/23/09	8:00 AM	5,053.5	50	3.00	40.8	250	760	745	33.6	Routine O&M.
02/03/09	2:00 PM	5,198.5	50	3.00	40.8	248	746	750	42.7	Routine O&M.

TABLE 1
Historical Summary Of Vapor Extraction System Monitoring Results
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
02/13/09	3:00 PM	5,364.2	50	3.00	40.8	249	751	733	39.5	Routine O&M.
02/20/09	4:00 PM	5,529.2	50	3.00	40.8	250	747	715	44.9	Routine O&M.
02/24/09	4:15 PM	5,590.8	50	3.50	47.6	249	763	695	44.1	Collected DES-INF-ADM-09 and DES-EFF-ADM-11.
03/05/09	3:00 PM	5,805.7	50	3.00	40.8	250	759	680	39.2	Routine O&M.
03/10/09	4:00 PM	5,926.7	50	3.00	40.8	247	739	770	48.2	Routine O&M.
03/20/09	12:20 PM	6,143.5	50	3.00	40.8	250	756	800	46.5	Routine O&M.
03/26/09	2:00 PM	6,289.1	50	3.00	40.8	249	745	710	41.9	Collected DES-INF-ADM-10 and DES-EFF-ADM-12.
04/02/09	2:00 PM	6,457.0	50	3.00	40.8	250	748	735	43.1	Routine O&M.
04/10/09	3:30 PM	6,612.5	50	3.00	40.8	249	758	720	41.5	Routine O&M.
04/17/09	2:30 PM	6,756.9	50	3.00	40.8	250	764	680	39.7	Routine O&M.
04/21/09	4:00 PM	6,832.5	50	3.25	44.2	247	759	700	42.6	Routine O&M.
04/29/09	2:15 PM	6,912.7	50	3.00	40.8	248	768	650	39.5	Collected DES-INF-ADM-11 and DES-EFF-ADM-13.
05/06/09	9:30 AM	7,072.7	50	3.00	40.8	250	768	625	43.7	Routine O&M.
05/14/09	10:15 AM	7,265.5	50	3.00	40.8	249	762	640	45.1	Routine O&M. Begin ROI test and let system run.
05/21/09	2:00 PM	7,436.4	50	3.00	40.8	249	762	735	46.7	Collected DES-INF-ADM-12 and DES-EFF-ADM-14.
05/27/09	3:00 PM	7,581.3	50	3.00	40.8	250	756	920	48.2	Routine O&M.
06/04/09	3:00 PM	7,773.5	50	3.00	40.8	248	761	1100	47.2	Routine O&M.
06/09/09	3:30 PM	7,893.3	50	3.00	40.8	249	744	1020	45.2	Routine O&M.
06/17/09	12:00 PM	8,082.4	50	3.00	40.8	249	755	1035	49.1	Collected DES-INF-ADM-13 and DES-EFF-ADM-15.
06/24/09	3:00 PM	8,182.1	50	3.00	40.8	248	752	1000	47.8	Routine O&M.
07/01/09	1:00 PM	8,348.1	50	3.00	40.8	249	761	960	48.3	Routine O&M.
07/08/09	4:00 PM	8,519.2	50	3.00	40.8	250	756	990	49.0	Routine O&M.
07/15/09	10:30 AM	8,681.3	50	3.00	40.8	250	748	900	43.9	Collected DES-INF-ADM-14 and DES-EFF-ADM-16.
07/22/09	4:00 PM	8,853.8	50	3.00	40.8	248	762	885	47.3	Routine O&M.
07/29/09	2:00 PM	8,992.8	50	3.00	40.8	250	749	810	42.9	Routine O&M.
08/06/09	3:00 PM	9,065.8	50	3.00	40.8	250	758	850	47.8	Routine O&M.
08/14/09	2:00 PM	9,212.7	50	3.00	40.8	249	760	910	48.7	Routine O&M.
08/20/09	10:00 AM	9,357.8	50	3.00	40.8	250	758	860	46.7	Collected DES-INF-ADM-15 and DES-EFF-ADM-17.
08/28/09	4:00 PM	9,486.8	50	3.00	40.8	248	764	835	46.9	Routine O&M.
09/04/09	3:00 PM	9,654.1	50	3.00	40.8	249	752	855	47.5	Routine O&M.
09/10/09	3:45 PM	9,798.5	50	3.00	40.8	250	758	870	49.1	Routine O&M.
09/18/09	4:00 PM	9,922.0	50	3.00	40.8	250	762	880	48.1	Routine O&M.
09/23/09	2:00 PM	9,987.3	50	3.00	40.8	249	760	895	47.9	Routine O&M.
09/28/09	10:30 AM	10,100.8	50	3.00	40.8	249	752	905	43.1	Collected DES-INF-ADM-16 and DES-EFF-ADM-18.
10/02/09	11:00 AM	10,197.3	50	3.00	40.8	249	765	800	43.9	Routine O&M.
10/06/09	2:00 PM	10,295.4	50	3.00	40.8	250	771	780	44.7	Routine O&M.
10/13/09	4:00 PM	10,465.4	50	3.00	40.8	249	762	790	42.5	Routine O&M.
10/22/09	4:40 PM	10,609.8	50	3.00	40.8	250	765	765	42.9	Routine O&M.
10/30/09	9:30 AM	10,795.6	50	3.00	40.8	250	772	675	42.7	Collected DES-INF-ADM-17 and DES-EFF-ADM-19. Switch over from Building 113 to Building 108.
10/30/09	1:30 PM	10,799.1	50	2.50	34.0	250	772	2,650	NT	Collected DES-INF-ADM-17 and DES-EFF-ADM-19. Switch over from Building 113 to Building 108.
11/03/09	1:30 PM	10,898.0	0				777	1,850	NT	Routine O&M.
11/04/09	1:30 PM	10,920.5	0	1.50	20.4	250	780	1,700	45.0	Routine O&M.

TABLE 1
Historical Summary Of Vapor Extraction System Monitoring Results
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
11/06/09	1:00 PM	10,968.4	0	2.00	27.2	250	751	1,825	48.2	Routine O&M.
11/13/09	2:00 PM	11,137.3	0	1.89	25.7	247	762	1,650	42.7	Routine O&M.
11/19/09	3:00 PM	11,282.4	0	2.01	27.3	248	755	1,700	43.5	Routine O&M.
11/23/09	11:50 AM	11,374.9	0	2.00	27.2	247	768	1,450	45.2	Collected DES-INF-ADM-18 and DES-EFF-ADM-20.
12/04/09	3:00 PM	11,642.2	0	2.00	27.2	249	777	1,775	45.9	Routine O&M.
12/11/09	2:00 PM	11,809.3	0	1.95	26.5	248	772	1,965	47.1	Routine O&M.
12/16/09	3:20 PM	11,930.5	0	2.00	27.2	249	782	1,825	47.9	Collected DES-INF-ADM-19 and DES-EFF-ADM-21.
12/21/09	3:30 PM	12,050.6	0	2.00	27.2	248	775	1,820	41.7	Routine O&M.
12/28/09	2:00 PM	12,217.1	0	2.00	27.2	249	785	1,890	44.9	Routine O&M.
01/07/10	2:00 PM	12,457.0	0	2.00	27.2	249	782	1,615	46.1	Routine O&M.
01/11/10	2:00 PM	12,553.0	0	2.25	30.6	249	775	2,000	48.1	Routine O&M.
01/14/10	2:00 PM	12,619.0	0	2.25	30.6	248	759	2,120	46.2	Routine O&M.
01/20/10	12:00 PM	12,761.0	0	2.25	30.6	249	770	2,075	47.0	Collected DES-INF-ADM-20 and DES-EFF-ADM-22.
01/28/10	1:00 PM	12,954.0	0	2.25	30.6	247	778	2,060	42.8	Routine O&M.
01/29/10	3:00 PM	12,980.2	0	2.25	30.6	249	795	2,100	48.0	Routine O&M.
02/05/10	2:00 PM	13,147.1	0	2.25	30.6	249	786	2,180	45.7	Routine O&M.
02/11/10	1:30 PM	13,290.5	0	2.25	30.6	246	775	1,975	47.2	Routine O&M.
02/18/10	9:15 AM	13,454.4	0	2.25	30.6	249	771	2,350	48.1	Collected DES-INF-ADM-21 and DES-EFF-ADM-23.
02/26/10	3:00 PM	13,652.3	0	2.25	30.6	248	785	2,175	42.9	Routine O&M.
03/05/10	1:00 PM	13,818.4	0	2.25	30.6	249	757	2,210	45.8	Routine O&M.
03/12/10	2:00 PM	13,987.5	0	2.25	30.6	248	779	1,900	48.2	Routine O&M.
03/18/10	3:00 PM	14,132.4	0	2.25	30.6	247	775	1,725	44.9	Routine O&M.
03/23/10	12:00 PM	14,248.4	0	2.25	30.6	247	779	1,480	45.1	Collected DES-INF-ADM-22 and DES-EFF-ADM-24.
03/30/10	4:00 PM	14,420.2	0	2.25	30.6	249	768	1,675	47.8	Routine O&M.
04/01/10	3:00 PM	14,467.3	0	2.25	30.6	249	773	1,720	43.7	Routine O&M.
04/09/10	2:00 PM	14,658.1	0	2.25	30.6	248	777	1,625	45.0	Routine O&M.
04/16/10	3:00 PM	14,827.3	0	2.25	30.6	247	767	1,600	43.9	Routine O&M.
04/22/10	2:30 PM	14,970.6	0	2.25	30.6	249	767	1,450	44.8	Collected DES-INF-ADM-23 and DES-EFF-ADM-25.
04/30/10	4:00 PM	15,164.0	0	2.25	30.6	249	781	1,650	46.2	Routine O&M.
05/07/10	4:00 PM	15,332.2	0	2.25	30.6	249	767	1,585	47.9	Routine O&M.
05/14/10	2:00 PM	15,498.3	0	2.25	30.6	249	769	1,690	48.1	Routine O&M.
05/21/10	3:00 PM	15,667.4	0	2.50	34.0	248	772	1,735	47.8	Routine O&M.
05/26/10	1:00 PM	15,785.1	0	2.50	34.0	248	779	1,800	47.7	Collected DES-INF-ADM-24 and DES-EFF-ADM-26.
06/04/10	3:00 PM	16,003.2	0	2.25	30.6	249	772	1,675	44.5	Routine O&M.
06/11/10	2:00 PM	16,168.1	0	2.25	30.6	248	768	1,750	46.1	Routine O&M.
06/16/10	9:00 AM	16,283.2	0	2.25	30.6	248	772	1,560	46.9	Collected DES-INF-ADM-25 and DES-EFF-ADM-27.
06/23/10	12:00 PM	16,454.2	0	2.50	34.0	247	775	1,440	49.1	Routine O&M.
07/01/10	2:00 PM	16,648.3	0	2.25	30.6	249	776	1,800	47.0	Routine O&M.
07/09/10	2:00 PM	16,840.8	0	2.50	34.0	248	771	1,450	42.9	Routine O&M.
07/14/10	8:00 AM	16,954.8	0	2.50	34.0	249	765	1,580	43.5	Routine O&M.
07/23/10	10:30 AM	17,173.3	0	2.50	34.0	250	765	1,400	45.1	Routine O&M.
07/28/10	1:30 PM	17,296.8	0	2.50	34.0	249	764	1,830	41.1	Collected DES-INF-ADM-26 and DES-EFF-ADM-28.

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Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
08/05/10	8:30 AM	17,484.0	0	2.50	34.0	248	781	1,750	43.7	Routine O&M; -- VE-5 and VE-7
08/13/10	2:00 PM	17,681.0	0	2.50	34.0	249	755	1,920	46.3	Routine O&M.
08/17/10	10:25 AM	17,774.0	0	2.75	37.4	250	769	2,200	42.0	Collected DES-INF-ADM-27 and DES-EFF-ADM-29.
08/26/10	3:00 PM	17,993.8	0	2.75	37.4	249	760	2,045	45.2	Routine O&M.
08/31/10	4:00 PM	18,114.8	0	2.75	37.4	247	774	1,975	44.3	Routine O&M.
09/10/10	12:15 PM	18,351.5	0	3.00	40.8	250	770	2,075	46.2	Routine O&M.
09/17/10	3:00 PM	18,522.3	0	2.75	37.4	249	759	1,910	47.3	Routine O&M.
09/23/10	3:00 PM	18,666.3	0	2.75	37.4	250	762	2,000	44.1	Routine O&M.
09/29/10	4:00 PM	18,811.2	0	2.75	37.4	248	755	1,875	45.5	Collected DES-INF-ADM-28 and DES-EFF-ADM-30.
10/08/10	2:00 PM	19,025.3	0	2.75	37.4	249	761	1,690	42.7	Routine O&M.
10/14/10	3:00 PM	19,170.5	0	2.75	37.4	250	765	1,850	47.3	Routine O&M.
10/21/10	4:00 PM	19,339.5	0	2.75	37.4	248	752	1,775	46.8	Routine O&M.
10/28/10	2:00 PM	19,505.6	0	2.75	37.4	249	770	1,690	44.9	Collected DES-INF-ADM-29 and DES-EFF-ADM-31.
11/05/10	2:00 PM	19,697.8	0	2.75	37.4	248	751	1,485	39.2	Routine O&M.
11/11/10	11:00 AM	19,838.1	0	2.50	34.0	247	763	1,525	42.6	Routine O&M.
11/19/10	12:00 PM	19,860.2	0	3.00	40.8	250	762	1,700	45.9	VES off on arrival. No alarms. VES restarted.
11/24/10	1:00 PM	19,873.7	0	2.50	34.0	248	759	1,300	48.1	VES off on arrival. No alarms. VES restarted.
11/29/10	1:00 PM	19,885.3	0	2.50	34.0	248	749	1,335	47.2	VES off on arrival; restarted; Collected DES-INF-ADM-30 and DES-EFF-ADM-32.
12/09/10	2:00 PM		--	--	--	--	--	--	--	VES off on arrival.
12/28/10	1:00 PM		--	--	--	--	--	--	--	Repaired system electrical wiring.
01/06/11	NT	19,885.3	--	--	--	--	--	--		VES restarted; -- VE-6S
01/13/11	NT	19,912.0	0	3.25	44.2	248	767	1200	46.5	Routine O&M.
01/18/11	4:00 PM	19,913.3	0	3.00	40.8	249	775	NT	47.8	VES off arrival; restarted; Collected DES-INF-ADM-31 and DES-EFF-ADM-33.
01/24/11	3:30 PM	20,018.3	0	3.25	44.2	247	739	750	40.7	VES off on arrival. No alarms. VES restarted.
01/28/11	4:00 PM	20,114.8	0	3.25	44.2	246	766	1,175	47.5	Routine O&M; -- VE-9 and AS-9
02/07/11	12:00 PM	20,269.6	0	3.00	40.8	247	750	1,450	43.9	VES off on arrival. No alarms. VES restarted.
02/14/11	1:20 PM	20,385.3	0	3.00	40.8	250	749	1,200	45.6	VES off on arrival. No alarms. VES restarted.
02/21/11	3:00 PM	20,553.9	0	3.00	40.8	249	759	1,300	42.6	Routine O&M.
02/28/11	12:00 PM	20,646.9	0	3.00	40.8	248	765	850	41.6	VES off on arrival; restarted; Collected DES-INF-ADM-32 and DES-EFF-ADM-34.
03/11/11	1:00 PM	20,791.9	0	3.00	40.8	249	762	1,100	46.3	VES off on arrival. No alarms. VES restarted.
03/18/11	2:00 PM	20,890.1	0	3.25	44.2	247	759	645	45.3	VES off on arrival. No alarms. VES restarted.
03/24/11	1:00 PM	20,935.4	0	3.00	40.8	248	772	750	41.0	VES off on arrival. No alarms. VES restarted.
03/30/11	1:00 PM	21,102.4	0	3.25	44.2	250	782	1,600	47.1	Collected DES-INF-ADM-33 and DES-EFF-ADM-35.
04/08/11	2:00 PM	21,318.6	0	3.00	40.8	247	770	1,380	34.1	Routine O&M.
04/15/11	3:00 PM	21,439.9	0	3.00	40.8	248	757	1,475	35.0	Routine O&M; water removed from conveyance lines on 4/12/2011.
04/22/11	2:00 PM	21,582.9	0	3.00	40.8	249	762	1,850	37.3	Routine O&M.
04/28/11	11:15 AM	21,729.8	0	3.00	40.8	249	778	1,650	38.5	Collected DES-INF-ADM-34 and DES-EFF-ADM-36; Vapor survey of individual wells around building 108.
05/06/11	12:00 PM	21,922.8	0	3.00	40.8	250	758	1,700	36.3	Routine O&M.
05/13/11	1:30 PM	22,092.7	0	3.00	40.8	246	742	1,540	37.8	Routine O&M.
05/20/11	3:00 PM	22,261.8	0	3.00	40.8	249	752	1,785	36.1	Routine O&M.
05/27/11	9:00 AM	22,424.1	0	3.00	40.8	247	728	1,810	32.6	Routine O&M.
05/31/11	10:00 AM	22,521.2	0	3.00	40.8	249	760	1,960	44.4	Collected DES-INF-ADM-35 and DES-EFF-ADM-37.

TABLE 1
Historical Summary Of Vapor Extraction System Monitoring Results
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
06/10/11	4:00 PM	22,724.2	0	3.00	40.8	248	746	1,775	38.4	VES off on arrival. No alarms. VES restarted.
06/16/11	3:00 PM	22,832.4	0	3.00	40.8	249	751	1,870	37.9	VES off on arrival. No alarms. VES restarted.
06/24/11	2:00 PM	NT	0	3.00	40.8	249	746	1,835	37.8	Routine O&M.
06/29/11	2:45 PM	23,140.5	0	3.00	40.8	248	776	NT	47.5	Collected DES-INF-ADM-36 and DES-EFF-ADM-38.
07/06/11	3:00 PM	23,308.8	0	3.00	40.8	249	759	1,710	47.2	Routine O&M; Air Sparge unit down and restarted.
07/15/11	1:00 PM	23,522.6	0	3.00	40.8	246	760	1,800	48.2	Routine O&M; Air Sparge unit down.
07/21/11	10:00 AM	23,663.7	0	3.00	40.8	247	765	1,635	46.9	Routine O&M.
07/28/11	1:00 PM	23,834.7	0	3.00	40.8	250	772	1,575	48.5	Collected DES-INF-ADM-37 and DES-EFF-ADM-39.
08/04/11	12:00 PM	24,001.7	0	3.00	40.8	246	765	1,600	39.7	Routine O&M.
08/12/11	3:00 PM	24,195.8	0	3.00	40.8	248	772	1,475	42.6	Routine O&M.
08/19/11	2:00 PM	24,362.9	0	2.75	37.4	249	770	1,310	45.0	Routine O&M.
08/26/11	3:00 PM	24,532.2	0	3.00	40.8	249	769	1,680	44.1	Routine O&M.
08/30/11	2:30 PM	24,627.5	0	3.00	40.8	248	752	1,765	43.5	Collected DES-INF-ADM-38 and DES-EFF-ADM-40.
09/09/11	3:08 PM	24,868.3	0	3.25	44.2	249	761	1,700	45.7	New air sprage unit (Kaeser) installed and started on September 1, 2011.
09/16/11	2:00 PM	25,025.3	0	3.00	40.8	250	755	1,850	44.4	Routine O&M.
09/23/11	4:00 PM	25,195.4	0	3.00	40.8	248	768	1,925	45.3	Routine O&M.
09/29/11	9:00 AM	25,332.7	0	3.00	40.8	249	759	1,825	40.1	Collected DES-INF-ADM-39 and DES-EFF-ADM-41.
10/07/11	1:00 PM	25,528.0	0	3.00	40.8	247	751	1,740	37.9	Routine O&M.
10/11/11	3:00 PM	25,626.0	0	3.00	40.8	248	765	1,675	40.1	Routine O&M.
10/20/11	3:00 PM	25,842.1	0	3.00	40.8	249	760	1,790	48.0	Routine O&M.
10/27/11	4:00 PM	26,011.1	0	3.00	40.8	249	765	1,850	42.5	Collected DES-INF-ADM-40 and DES-EFF-ADM-42.
11/04/11	2:00 PM	26,201.1	0	3.00	40.8	248	772	1,890	45.1	Routine O&M.
11/07/11	3:00 PM	26,274.2	0	3.00	40.8	246	759	1,710	41.0	Routine O&M.
11/11/11	1:00 PM	26,368.3	0	3.00	40.8	248	751	1,875	42.6	Routine O&M.
11/17/11	10:00 AM	26,509.1	0	3.25	44.2	247	767	1,665	45.3	Routine O&M.
11/23/11	2:00 PM	26,657.4	0	3.25	44.2	246	724	1,540	39.3	Routine O&M.
11/29/11	8:00 AM	26,795.3	0	3.25	44.2	248	760	1,765	43.7	Collected DES-INF-ADM-41 and DES-EFF-ADM-43.
12/08/11	3:00 PM	27,018.5	0	3.25	44.2	249	759	1,970	41.9	Routine O&M.
12/15/11	11:00 AM	27,182.5	0	3.25	44.2	249	762	1,885	45.0	Routine O&M.
12/21/11	1:00 PM	27,329.7	0	3.25	44.2	248	760	1,750	41.9	Routine O&M.
12/28/11	1:00 PM	27,426.1	0	3.25	44.2	248	760	1,765	43.7	Collected DES-INF-ADM-42 and DES-EFF-ADM-44.
01/06/12	3:00 PM	27,536.8	0	3.00	40.8	249	762	1,695	39.9	Routine O&M.
01/12/12	11:00 AM	27,662.9	0	3.00	40.8	247	758	1,760	40.7	Routine O&M.
01/20/12	1:00 PM	27,833.1	0	2.75	37.4	245	765	1,855	38.4	Routine O&M.
01/25/12	3:00 PM	27,952.9	0	2.75	37.4	247	761	1,740	36.7	Routine O&M.
01/31/12	10:00 AM	28,091.7	0	3.00	40.8	249	759	1,910	41.6	Collected DES-INF-ADM-43 and DES-EFF-ADM-45.
02/02/12	2:00 PM	28,143.8	0	3.00	40.8	250	765	1,865	39.4	Routine O&M.
02/09/12	12:00 PM	28,285.9	0	3.00	40.8	248	760	1,800	37.7	Routine O&M.
02/17/12	2:00 PM	28,479.2	0	3.00	40.8	247	757	1,785	36.1	Routine O&M.
02/24/12	1:00 PM	28,623.7	0	3.00	40.8	247	761	1,730	37.3	Routine O&M.
02/28/12	2:00 PM	28,720.8	0	3.00	40.8	248	766	1,810	39.4	Collected DES-INF-ADM-44 and DES-EFF-ADM-46.
03/05/12	3:00 PM	28,866.1	0	3.00	40.8	249	758	1,710	34.9	Routine O&M.

TABLE 1
Historical Summary Of Vapor Extraction System Monitoring Results
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
03/15/12	3:00 PM	29,106.4	0	3.00	40.8	250	756	1,675	36.1	Routine O&M.
03/22/12	12:00 PM	29,271.6	0	3.00	40.8	248	764	1,700	37.5	Routine O&M.
03/29/12	11:00 AM	29,358.6	0	3.00	40.8	249	760	1,675	34.8	Collected DES-INF-ADM-45 and DES-EFF-ADM-47.
04/06/12	2:00 PM	29,553.7	0	2.75	37.4	248	766	1,520	36.2	Routine O&M.
04/13/12	12:00 PM	29,719.9	0	2.75	37.4	247	762	1,740	38.9	Routine O&M.
04/19/12	3:00 PM	29,867.0	0	3.00	40.8	249	769	1,655	38.4	Routine O&M.
04/27/12	4:00 PM	30,036.1	0	3.00	40.8	248	768	1,785	40.3	Collected DES-INF-ADM-46 and DES-EFF-ADM-48. Soil vapor extraction well samples taken April 23, 2012.
05/04/12	11:00 AM	30,175.1	0	2.75	37.4	246	761	1,565	38.4	Routine O&M.
05/10/12	1:00 PM	30,297.3	0	2.75	37.4	249	764	1,370	33.4	Routine O&M.
05/18/12	11:00 AM	30,439.5	0	2.75	37.4	248	754	1,590	36.9	Routine O&M.
05/23/12	2:00 PM	30,562.6	0	2.75	37.4	249	758	1,685	39.2	Routine O&M.
05/31/12	9:00 AM	30,725.4	0	2.75	37.4	249	760	1,880	40.1	Collected DES-INF-ADM-47 and DES-EFF-ADM-49.
06/05/12	10:00 AM	30,774.8	0	3.00	40.8	247	767	1,765	43.6	Routine O&M.
06/13/12	12:00 PM	30,932.9	0	3.00	40.8	248	762	1,672	44.7	Routine O&M.
06/20/12	3:00 PM	31,104.1	0	3.00	40.8	248	767	1,780	45.1	Routine O&M.
06/28/12	9:00 AM	31,290.4	0	3.00	40.8	249	771	2,000	46.7	Collected DES-INF-ADM-48 and DES-EFF-ADM-50.
07/06/12	10:00 AM	31,483.7	0	3.00	40.8	248	770	1,875	43.5	Routine O&M.
07/13/12	12:00 PM	31,653.8	0	3.00	40.8	248	768	1,930	46.9	Routine O&M.
07/19/12	11:00 AM	31,796.9	0	3.00	40.8	248	762	1,810	42.9	Routine O&M.
07/26/12	1:00 PM	31,968.1	0	3.00	40.8	249	764	1,860	44.1	Collected DES-INF-ADM-49 and DES-EFF-ADM-51.
07/31/12	8:00 AM	32,082.9	0	3.00	40.8	250	770	1,710	42.6	Routine O&M.
08/08/12	12:00 PM	32,255.1	0	3.00	40.8	248	769	1,560	41.7	Routine O&M.
08/17/12	3:00 PM	32,402.1	0	3.00	40.8	248	762	1,480	40.7	Routine O&M.
08/23/12	12:00 PM	32,543.1	0	2.75	37.4	247	765	1,675	39.6	Collected DES-INF-ADM-50 and DES-EFF-ADM-52.
08/29/12	10:00 AM	32,637.9	0	2.75	37.4	249	760	1,725	43.6	Routine O&M.
09/05/12	1:00 PM	32,761.1	0	2.75	37.4	248	767	1,622	39.4	Routine O&M.
09/13/12	3:00 PM	32,955.4	0	3.00	40.8	247	757	1,580	38.7	Routine O&M.
09/20/12	12:00 PM	33,120.3	0	2.75	37.4	246	771	1,680	39.9	Routine O&M.
09/26/12	8:00 AM	33,212.3	0	3.00	40.8	248	762	1,740	40.6	Collected DES-INF-ADM-51 and DES-EFF-ADM-53. Soil Vapor samples taken September 30, 2012.
10/04/12	10:00 AM	33,358.5	0	2.75	37.4	249	759	1,580	38.2	VES off on arrival. No alarms. VES restarted.
10/12/12	11:00 AM	33,527.7	0	3.00	40.8	250	760	1,660	39.2	Routine O&M.
10/16/12	3:00 PM	33,627.9	0	2.75	37.4	248	761	1,375	36.2	Routine O&M.
10/25/12	1:00 PM	33,793.7	0	3.00	40.8	248	767	1,750	43.6	Routine O&M.
10/31/12	8:15 AM	33,932.2	0	2.75	37.4	247	771	1,785	41.7	Collected DES-INF-ADM-52 and DES-EFF-ADM-54.
11/09/12	3:00 PM	34,057.6	0	3.00	40.8	250	760	1,800	44.7	Routine O&M.
11/14/12	10:00 AM	34,131.2	0	3.00	40.8	249	765	1,560	37.3	Routine O&M.
11/21/12	10:00 AM	34,177.2	0	3.00	40.8	247	759	1,610	38.3	VES off on arrival. No alarms. VES restarted.
11/29/12	11:20 AM	34,298.5	0	3.00	40.8	248	768	1,485	36.9	Collected DES-INF-ADM-53 and DES-EFF-ADM-55.
12/07/12	12:00 PM	34,443.2	0	3.00	40.8	250	762	1,735	38.4	VES off on arrival. No alarms. VES restarted.
12/12/12	3:20 PM	34,518.5	0	2.75	37.4	247	759	1,670	37.3	VES off on arrival. No alarms. VES restarted.
12/19/12	10:00 AM	34,636.5	0	3.00	40.8	248	760	1,630	39.4	Routine O&M.
12/26/12	4:30 PM	34,739.3	0	3.00	40.8	249	767	1,590	43.2	Collected DES-INF-ADM-54 and DES-EFF-ADM-56.

TABLE 1
Historical Summary Of Vapor Extraction System Monitoring Results
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
01/04/13	10:00 AM	34,812.4	0	3.00	40.8	249	755	1,300	39.0	VES off on arrival. No alarms. VES restarted.
01/10/13	2:00 PM	34,866.0	0	3.00	40.8	247	751	1,375	37.3	VES off on arrival. No alarms. VES restarted.
01/17/13	1:00 PM	34,986.7	0	3.00	40.8	248	753	1,295	37.3	VES off on arrival. No alarms. VES restarted.
01/24/13	3:00 PM	35,061.1	0	3.00	40.8	248	753	1,425	38.7	VES off on arrival. No alarms. VES restarted.
01/31/13	9:00 AM	35,153.7	0	3.00	40.8	249	752	1,100	35.6	Collected DES-INF-ADM-55 and DES-EFF-ADM-57.
02/06/13	1:00 PM	35,190.0	0	3.00	40.8	249	755	1,275	34.9	VES off on arrival. No alarms. VES restarted.
02/15/13	10:00 AM	35,403.0	0	3.00	40.8	247	762	1,360	38.4	VES off on arrival. No alarms. VES restarted.
02/21/13	11:00 AM	35,499.8	0	3.00	40.8	248	758	1,510	41.3	Routine O&M.
02/28/13	12:00 PM	35,576.1	0	3.00	40.8	249	722	780	31.3	Collected DES-INF-ADM-56 and DES-EFF-ADM-58.
03/07/13	2:00 PM	35,697.9	0	3.25	44.2	246	722	1,240	36.3	Routine O&M.
03/14/13	3:15 PM	35,795.1	0	3.50	47.6	247	720	1,175	31.6	VES off on arrival. No alarms. VES restarted.
03/21/13	2:00 PM	35,937.9	0	3.50	47.6	247	724	1,450	33.4	Routine O&M.
03/28/13	12:00 PM	36,103.9	0	3.50	47.6	249	703	1,630	48.3	Collected DES-INF-ADM-57 and DES-EFF-ADM-59.
04/10/13	12:00 PM	36,103.9	0	3.50	47.6	249	703	1,630	48.3	VES off on arrival. No alarms. VES restarted.
04/11/13	2:00 PM	36,129.9	0	3.25	44.2	248	720	1,670	39.6	Routine O&M.
04/16/13	10:00 AM	36,245.9	0	3.50	47.6	247	718	1,410	34.8	Routine O&M.
04/24/13	12:00 PM	36,367.7	0	3.25	44.2	248	719	1,475	33.0	Routine O&M.
04/30/13	12:00 PM	36,491.1	0	3.50	47.6	248	705	1,680	32.4	Collected DES-INF-ADM-58 and DES-EFF-ADM-60.
05/08/13	2:15 PM	36,685.3	0	3.00	40.8	246	745	1,310	32.6	Routine O&M.
05/15/13	11:00 AM	36,850.3	0	3.00	40.8	245	753	1,420	35.3	Routine O&M.
05/21/13	4:00 PM	36,999.1	0	3.25	44.2	225	751	1,295	34.9	Routine O&M.
05/30/13	9:00 AM	37,208.1	0	3.00	40.8	224	755	1,285	34.1	Collected DES-INF-ADM-59 and DES-EFF-ADM-61.
06/05/13	11:30 AM	37,354.6	0	3.00	40.8	222	757	1,360	34.9	Routine O&M.
06/11/13	12:54 PM	37,500.0	0	2.75	37.4	221	756	1,275	32.7	Routine O&M.
06/14/13	3:00 PM	37,500.1	0	3.00	40.8	224	759	1,310	32.8	VES off on arrival. No alarms. VES restarted.
06/19/13	12:55 PM	37,618.2	0	3.00	40.8	224	752	1,055	31.6	Routine O&M.
06/27/13	8:00 AM	37,781.3	0	2.75	37.4	223	751	1,190	36.7	On 6/24/13, VES off on arrival and restarted. Collected DES-INF-ADM-60 and DES-EFF-ADM-62.
07/05/13	11:00 AM	37,952.6	0	3.25	44.2	224	759	1,345	38.7	VES off on arrival. No alarms. VES restarted.
07/11/13	2:00 PM	38,051.7	0	3.25	44.2	221	759	1,410	38.5	Routine O&M.
07/15/13	1:00 PM	38,082.9	0	3.50	47.6	218	751	1,290	39.9	VES off on arrival. No alarms. VES restarted.
07/19/13	9:30 AM	38,175.4	0	3.50	47.6	218	751	1,290	39.9	Routine O&M.
07/25/13	11:00 AM	38,200.9	0	3.00	40.8	218	751	1,475	42.6	VES off on arrival. No alarms. VES restarted.
07/31/13	9:30 AM	38,272.2	0	4.00	54.4	207	757	1,085	43.6	Collected DES-INF-ADM-61 and DES-EFF-ADM-63.
08/08/13	12:45 PM	38,467.5	0	4.50	61.2	180	751	305	30.1	Measured IW concentrations.
08/16/13	3:00 PM	38,661.8	0	4.50	61.2	185	767	535	32.3	Routine O&M.
08/20/13	8:15 AM	38,751.0	0	4.50	61.2	181	760	600	31.7	Routine O&M.
08/29/13	10:00 AM	38,968.3	0	4.00	54.4	193	758	885	39.9	Collected DES-INF-ADM-62 and DES-EFF-ADM-64.
09/04/13	12:15 PM	39,114.5	0	3.50	47.6	191	755	1,045	36.3	Routine O&M.
09/05/13	4:00 PM	39,142.3	0	3.50	47.6	191	755	1,045	36.3	VES shut down.
09/09/13	10:00 AM	39,142.3	0	3.50	47.6	197	758	1,200	41.6	VES restarted.
09/10/13	11:00 AM	39,167.2	0	3.50	47.6	197	758	1,200	41.6	Routine O&M.
09/17/13	3:00 PM	39,339.7	0	3.50	47.6	196	755	1,585	39.7	Collected DES-INF-ADM-63 and DES-EFF-ADM-65.

TABLE 1
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DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
09/27/13	10:00 AM	39,574.5	0	3.75	51.0	219	759	1,160	36.7	Routine O&M.
10/02/13	12:00 PM	39,696.8	0	3.50	47.6	220	748	1,300	41.7	Routine O&M.
10/09/13	9:30 AM	39,862.9	0	3.75	51.0	217	752	1,145	35.3	Routine O&M.
10/17/13	1:00 PM	40,058.1	0	4.00	54.4	220	754	1,295	37.8	Routine O&M.
10/24/13	9:00 AM	40,221.8	0	4.00	54.4	218	751	1,275	37.3	Routine O&M.
10/30/13	8:30 AM	40,365.3	0	4.00	54.4	216	750	1,235	36.4	Collected DES-INF-ADM-64 and DES-EFF-ADM-66. Measured individual well vapor concentrations with PID.
11/08/13	11:00 AM	40,583.8	0	3.50	47.6	218	751	1,190	36.4	Routine O&M.
11/15/13	9:00 AM	40,749.9	0	3.50	47.6	216	753	1,270	36.3	Routine O&M.
11/21/13	3:00 PM	40,900.1	0	3.00	40.8	221	755	1,320	38.4	Routine O&M.
11/26/13	9:30 AM	41,014.7	0	3.00	40.8	225	749	1,470	39.2	Collected DES-INF-ADM-65 and DES-EFF-ADM-67.
12/03/13	11:00 AM	41,184.1	0	3.50	47.6	221	752	1,250	37.5	Routine O&M.
12/10/13	3:00 PM	41,355.9	0	3.50	47.6	220	751	1,365	38.1	Routine O&M.
12/16/13	1:05 PM	41,498.0	0	3.00	40.8	210	746	1,100	34.4	Routine O&M.
12/23/13	9:00 AM	41,661.8	0	3.25	44.2	201	751	980	31.6	Collected DES-INF-ADM-66 and DES-EFF-ADM-68. Measured individual well vapor concentrations with PID.
01/03/14	10:00 AM	41,926.9	0	3.00	40.8	226	749	1,075	35.3	Routine O&M.
01/08/14	1:00 PM	42,050.0	0	3.50	47.6	222	752	985	32.6	Routine O&M.
01/16/14	3:00 PM	42,244.2	0	3.00	40.8	218	750	1,015	33.4	Routine O&M.
01/23/14	3:00 PM	42,412.6	0	3.00	40.8	219	749	970	31.9	Routine O&M.
01/29/14	9:00 AM	42,550.1	0	3.00	40.8	221	747	965	32.6	Collected DES-INF-ADM-67 and DES-EFF-ADM-69.
02/06/14	10:00 AM	42,694.9	0	3.00	40.8	223	749	872	31.9	VES off on arrival. Adjust/tighten belts. VES restarted.
02/13/14	2:30 PM	42,817.2	0	3.00	40.8	220	750	840	30.2	VES off on arrival. VES restarted.
02/20/14	8:00 AM	42,933.7	0	3.25	44.2	224	748	895	32.3	VES off on arrival. Replace belts and restart system. Collected DES-INF-ADM-68 and DES-EFF-ADM-70.
02/28/14	10:15 AM	43,104.0	0	3.25	44.2	223	751	865	33.1	Routine O&M.
03/06/14	2:00 PM	43,251.8	0	3.25	44.2	221	752	795	33.9	Routine O&M.
03/12/14	3:00 PM	43,306.8	0	3.25	44.2	219	747	715	32.1	VES off on arrival. VES restarted.
03/18/14	4:00 PM	43,359.8	0	3.50	47.6	223	750	755	31.9	VES off on arrival. VES restarted.
03/20/14	8:00 AM	43,399.8	0	3.50	47.6	223	750	755	31.9	Collected DES-INF-ADM-69 and DES-EFF-ADM-71.
03/25/14	11:00 AM	43,457.7	0	3.50	47.6	224	752	815	33.6	VES off on arrival. VES restarted.
03/27/14	2:00 PM	43,508.7	0	3.25	44.2	216	705	705	36.7	Routine O&M.
04/04/14	10:00 AM	43,696.7	0	3.25	44.2	211	733	810	33.8	Routine O&M.
04/11/14	10:00 AM	43,864.7	0	3.50	47.6	206	723	765	38.7	Routine O&M.
04/16/14	10:00 AM	43,984.7	0	3.25	44.2	199	720	789	37.2	Routine O&M.
04/22/14	10:00 AM	44,128.7	0	3.25	44.2	213	725	1,370	43.0	VES off on arrival. VES restarted. Collected DES-INF-ADM-70 and DES-EFF-ADM-72.
04/29/14	10:00 AM	44,296.7	0	3.25	44.2	204	722	1,085	39.7	Routine O&M.
05/19/14	1:00 PM	44,440.7	0	3.25	44.2	191	758	1,310	41.2	Complete VES repairs. VES restarted.
05/22/14	2:00 PM	44,513.8	0	3.25	44.2	189	761	1,270	36.7	Routine O&M.
05/29/14	9:15 AM	44,677.2	0	3.50	47.6	192	776	1,400	38.2	Collected DES-INF-ADM-71 and DES-EFF-ADM-73.
06/03/14	11:00 AM	44,797.5	0	3.25	44.2	194	773	1,210	35.5	Routine O&M.
06/10/14	8:10 AM	44,883.6	0	3.25	44.2	191	762	1,150	38.0	VES off on arrival. VES restarted.
06/12/14	10:00 AM	44,933.4	0	3.25	44.2	191	762	1,150	38.0	Routine O&M.
06/18/14	12:30 PM	45,079.4	0	3.25	44.2	192	765	1,185	34.3	Routine O&M.
06/23/14	9:00 AM	45,195.9	0	3.25	44.2	195	769	1,060	35.9	Routine O&M.

TABLE 1
Historical Summary Of Vapor Extraction System Monitoring Results
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
06/24/14	8:00 AM	45,218.9	0	3.25	44.2	195	769	1,060	35.9	Collected DES-INF-ADM-72 and DES-EFF-ADM-74.
06/30/14	11:30 AM	45,366.3	0	3.50	47.6	193	761	1,015	33.1	Routine O&M.
07/10/14	12:30 PM	45,607.5	0	3.25	44.2	192	757	1,130	32.6	Collected DES-INF-ADM-73 and DES-EFF-ADM-75.
07/18/14	9:00 AM	45,796.0	0	3.50	47.6	190	760	1,250	36.5	Routine O&M.
07/24/14	10:00 AM	45,862.8	0	3.50	47.6	193	755	1,080	35.1	VES off on arrival. VES restarted.
07/30/14	1:00 PM	45,924.3	0	3.50	47.6	191	754	1,050	32.9	VES off on arrival. VES restarted.
08/04/14	9:00 AM	45,926.3	0	NA	NA	NA	NA	NA	NA	VES off on arrival and remained off line pending repairs.
08/07/14	9:00 AM	45,926.3	0	NA	NA	NA	NA	NA	NA	VES off line pending repairs.
08/15/14	9:00 AM	45,926.3	0	NA	NA	NA	NA	NA	NA	VES off line pending repairs.
08/22/14	9:00 AM	45,926.3	0	NA	NA	NA	NA	NA	NA	VES off line pending repairs.
08/29/14	9:00 AM	45,926.3	0	NA	NA	NA	NA	NA	NA	VES off line pending repairs.
09/05/14	11:11 AM	45,926.3	0	3.50	47.6	191	772	935	32.6	Completed VES repairs and restarted system.
09/12/14	9:00 AM	46,092.5	0	3.50	47.6	192	774	1,065	33.2	Routine O&M.
09/17/14	12:30 PM	46,215.9	0	3.50	47.6	198	750	979	36.3	Collected DES-INF-ADM-74 and DES-EFF-ADM-76.
09/25/14	9:00 AM	46,403.5	0	3.25	44.2	197	752	970	32.4	VES shut down for repairs to air compressor.
10/31/14	8:00 AM	46,566.9	0	3.25	44.2	190	755	575	33.6	Collected DES-INF-ADM-75, DES-EFF-ADM-77, and ind. well vapor for PID screening and laboratory analysis.
11/06/14	9:00 AM	46,608.1	0	3.00	40.8	195	765	795	31.8	VES off on arrival. VES restarted.
11/07/14	8:00 AM	46,631.1	0	3.00	40.8	195	765	795	31.8	Routine O&M.
11/13/14	10:00 AM	46,705.3	0	3.00	40.8	198	757	810	33.1	VES off on arrival. VES restarted.
11/20/14	9:00 AM	46,768.6	0	3.25	44.2	190	768	775	31.7	VES off on arrival. VES restarted.
11/25/14	10:00 AM	46,889.6	0	3.00	40.8	191	759	1,040	36.3	Collected DES-INF-ADM-76, DES-EFF-ADM-78.
12/05/14	9:00 AM	46,932.1	0	3.25	44.2	195	751	920	39.4	VES off on arrival. VES restarted.
12/12/14	10:00 AM	46,977.8	0	NA	NA	NA	NA	NA	NA	VES off on arrival. Left off line pending electrical modifications.
12/19/14	10:00 AM	46,977.8	0	NA	NA	NA	NA	NA	NA	VES off during completion of electrical modifications.
12/22/14	8:00 AM	46,977.8	0	3.50	47.6	196	748	1,180	39.6	Collected DES-INF-ADM-77, DES-EFF-ADM-79.
12/30/14	10:00 AM	47,170.6	0	3.50	47.6	198	759	1,225	38.2	Routine O&M.
01/08/15	9:00 AM	47,385.6	0	3.50	47.6	196	754	1,310	36.1	Measured IW concentrations.
01/15/15	9:00 AM	47,483.4	0	3.50	47.6	188	762	1,650	29.5	Restarted AS system. Measured IW concentrations. Collected DES-INF-ADM-78, DES-EFF-ADM-80.
01/22/15	11:00 AM	47,653.6	0	3.75	51.0	192	758	1,285	30.8	AS system off on arrival. AS system restarted.
01/29/15	12:00 PM	47,822.4	0	3.75	51.0	191	755	1,245	32.1	Routine O&M.
02/05/15	10:00 AM	47,988.6	0	3.75	51.0	186	749	1,065	28.9	AS system off on arrival. AS system restarted.
02/09/15	2:00 PM	48,088.6	0	3.75	51.0	186	749	1,065	28.9	Measured IW concentrations. Rotate online/offline AS wells.
02/10/15	2:00 PM	48,112.6	0	3.75	51.0	186	749	1,065	28.9	Rotate online/offline AS wells.
02/11/15	3:00 PM	48,137.6	0	3.75	51.0	186	749	1,065	28.9	Rotate online/offline AS wells.
02/12/15	3:00 PM	48,161.6	0	3.75	51.0	186	749	1,065	28.9	Rotate online/offline AS wells.
02/13/15	1:00 PM	48,183.6	0	3.75	51.0	186	749	1,065	28.9	Measured IW concentrations. Rotate online/offline AS wells.
02/16/15	12:00 PM	48,254.6	0	3.75	51.0	186	749	1,065	28.9	Rotate online/offline AS wells.
02/18/15	12:00 PM	48,302.6	0	3.75	51.0	186	749	1,065	28.9	Rotate online/offline AS wells.
02/20/15	12:00 PM	48,350.6	0	3.75	51.0	184	748	1,240	31.6	Rotate online/offline AS wells.
02/24/15	11:00 AM	48,445.6	0	3.75	51.0	187	742	1,100	36.1	Rotate online/offline AS wells. Collected DES-INF-ADM-79, DES-EFF-ADM-81.
02/27/15	12:00 PM	48,518.6	0	3.75	51.0	187	750	1,100	36.1	Rotate online/offline AS wells.
03/02/15	3:00 PM	48,541.8	0	3.75	51.0	190	755	1,170	36.8	VES off on arrival. VES restarted. Rotate online/offline AS wells.

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3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
03/05/15	5:00 PM	48,615.9	0	3.75	51.0	188	747	1,060	35.8	Rotate online/offline AS wells.
03/09/15	4:30 PM	48,711.4	0	3.75	51.0	189	752	1,190	37.3	Rotate online/offline AS wells.
03/11/15	5:00 PM	48,759.9	0	3.75	51.0	190	751	1,093	37.1	Rotate online/offline AS wells.
03/13/15	4:00 PM	48,806.9	0	3.75	51.0	191	756	1,220	37.9	Rotate online/offline AS wells.
03/18/15	7:00 PM	48,929.9	0	3.75	51.0	190	754	1,100	37.5	Rotate online/offline AS wells.
03/21/15	10:00 AM	48,993.0	0	3.75	51.0	190	754	1,215	38.3	Measured IW concentrations. Rotate online/offline AS wells.
03/23/15	9:38 AM	49,040.7	0	3.75	51.0	190	753	980	31.6	Rotate online/offline AS wells.
03/31/15	11:30 AM	49,234.5	0	4.00	54.4	188	755	910	33.5	Rotate online/offline AS wells. Measured IW concentrations. Collected DES-INF-ADM-80, DES-EFF-ADM-82.
04/01/15	10:00 AM	49,256.7	0	1.60	21.8	200	760	125	10.0	Measured well gas and dilution air flows, and checked flow transmitter calibration.
04/08/15	9:00 AM	49,423.7	0	1.90	25.8	182	760	139	4.3	Turned off AS system in advance of Troll deployment next week. Fully closed dilution valves.
04/15/15	11:10 AM	49,593.9	0	2.75	37.4	165	766	140	8.5	Deployed Trolls in wells GTMW-46 and GTMW-50.
04/20/15	3:00 PM	49,718.3	0	2.75	37.4	165	766	140	4.8	Shutdown AS system for Troll observation.
04/22/15	2:15 PM	49,765.5	0	3.00	40.8	160	780	140	8.5	Measured IW concentrations. Restarted AS system.
04/23/15	11:00 AM	49,774.0	0	3.00	40.8	160	761	160	9.8	Routine O&M.
04/29/15	9:40 AM	49,916.7	0	3.00	40.8	156	790	150	10.7	Routine O&M.
04/30/15	9:00 AM	49,940.0	0	3.25	44.2	152	744	178	9.8	Isolated extraction to wells VE-3, VE-6D, VE-7 and VE-8. Collected DES-INF-ADM-81, DES-EFF-ADM-83.
05/07/15	9:00 AM	50,108.0	0	3.25	44.2	150	759	178	10.7	Routine O&M.
05/14/15	10:00 AM	50,277.0	0	3.50	47.6	142	757	172	10.8	Routine O&M.
05/20/15	12:00 PM	50,423.0	0	3.50	47.6	146	761	172	10.2	Routine O&M.
05/26/15	1:30 PM	50,568.5	0	3.75	51.0	140	752	165	11.4	Measured IW concentrations. Collected DES-INF-ADM-82, DES-EFF-ADM-84.
06/01/15	9:00 AM	50,708.0	0	3.25	44.2	148	755	156	11.7	Routine O&M.
06/11/15	12:00 PM	50,950.9	0	2.50	34.0	152	763	168	12.1	Major air compressor service performed.
06/18/15	10:00 AM	51,117.0	0	2.50	34.0	154	766	170	12.7	Routine O&M.
06/25/15	8:30 AM	51,283.5	0	2.50	34.0	154	768	160	13.7	Measured IW concentrations.
06/29/15	8:30 AM	51,379.5	0	3.25	44.2	148	770	120	9.5	Isolated extraction to wells VE-3 and VE-6D as test. Collected DES-INF-ADM-83, DES-EFF-ADM-85 on 06/29/15.
07/09/15	10:00 AM	51,581.5	0	2.50	34.0	141	771	173	10.9	Restarted VES and AS system. Measured IW concentrations. Collected DES-INF-ADM-84, DES-EFF-ADM-86.
07/15/15	11:00 AM	51,726.5	0	2.50	34.0	142	762	169	11.4	Routine O&M.
07/23/15	9:00 AM	51,916.6	0	2.50	34.0	144	765	154	10.5	Routine O&M.
07/31/15	10:30 AM	52,110.1	0	2.50	34.0	141	763	143	10.6	Routine O&M.
08/05/15	8:15 AM	52,227.6	0	2.50	34.0	142	761	135	10.2	Routine O&M.
08/12/15	10:15 AM	52,397.4	0	2.75	37.4	123	805	181	10.0	Measured IW concentrations. Isolated extraction to wells VE-3 and VE-6D. Collected DES-INF-ADM-85, DES-EFF-ADM-87.
08/21/15	11:00 AM	52,614.1	0	2.50	34.0	122	771	148	10.0	Collected background AS well DO data and isolated injection to wells AS-3 and AS-6 on 08/20/15.
08/27/15	10:00 AM	52,757.1	0	2.50	34.0	121	761	170	10.9	Routine O&M.
08/31/15	8:30 AM	52,817.7	0	2.50	34.0	118	770	125	9.0	Restarted VES and AS system. Opened wells AS-9 and AS-11, and closed wells AS-3 and AS-6. Serviced air compressor.
09/02/15	9:00 AM	52,902.1	0	2.50	34.0	122	774	159	10.7	Measured IW concentrations. Collected DES-INF-ADM-86, DES-EFF-ADM-88.
09/08/15	12:00 PM	52,949.6	0	2.50	34.0	120	771	151	10.3	Opened wells AS-3 and AS-6, and closed wells AS-9 and AS-11. Restarted VES and AS system.
09/15/15	9:00 AM	52,991.6	0	2.50	34.0	119	773	143	10.4	Restarted VES and AS system.
09/18/15	9:00 AM	53,063.6	0	2.50	34.0	119	777	135	10.5	Routine O&M.
09/24/15	11:00 AM	53,209.6	0	2.50	34.0	120	770	142	10.3	Routine O&M.
10/02/15	9:00 AM	53,399.5	0	4.50	61.2	73	772	110	3.9	Measured IW concentrations and optimized system.
10/08/15	8:00 AM	53,542.5	0	4.50	61.2	72	771	112	4.6	Routine O&M. Collected DES-INF-ADM-87, DES-EFF-ADM-89 on 10/07/15.
10/15/15	8:00 AM	53,710.5	0	4.25	57.8	73	777	101	4.2	Routine O&M. Collected DES-INF-ADM-87 on 10/14/15.

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Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
10/28/15	8:00 AM	54,023.0	0	4.25	57.8	74	776	113	4.0	Routine O&M. Collected DES-INF-ADM-88. AS system shut down to conduct sampling activities.
11/04/15	9:00 AM	54,191.6	0	4.50	61.2	72	770	106	3.8	Routine O&M. Restarted AS system following completion of sampling activities.
11/11/15	11:00 AM	54,361.5	0	4.75	64.6	73	773	104	3.8	Measured IW concentrations.
11/18/15	9:30 AM	54,529.1	0	4.75	64.6	75	770	105	4.5	Routine O&M. Collected DES-INF-ADM-89, DES-EFF-ADM-90. Air compressor serviced on 11/15/15.
11/24/15	10:00 AM	54,674.6	0	4.75	64.6	71	781	90	3.5	Routine O&M.
11/30/15	12:00 PM	54,767.6	0	4.75	64.6	73	778	88	3.6	Restarted VES and AS system.
12/08/15	10:00 AM	54,957.6	0	4.75	64.6	73	785	81	3.8	Measured IW concentrations.
12/16/15	9:05 AM	55,148.5	0	4.75	64.6	74	795	74	2.9	Opened wells AS-3 and AS-6, and closed wells AS-9 and AS-11. Collected DES-INF-ADM-90, DES-EFF-ADM-91.
12/23/15	11:00 AM	55,318.3	0	4.75	64.6	71	781	75	3.3	Routine O&M.
12/30/15	10:00 AM	55,485.3	0	4.75	64.6	70	785	68	3.3	Routine O&M.
01/06/16	7:30 AM	55,591.6	0	4.75	64.6	70	790	92	3.6	Collected DES-INF-ADM-91, DES-EFF-ADM-92. Measured IW concentrations and collected samples from wells VE-3 and VE-6D.
01/14/16	8:45 AM	55,784.6	0	4.75	64.6	72	782	85	3.5	Routine O&M.
01/20/16	12:30 PM	55,932.7	0	4.75	64.6	71	769	82	3.1	Routine O&M.
01/27/16	10:00 AM	56,097.7	0	4.50	61.2	71	774	84	3.4	Routine O&M.
02/02/16	3:30 PM	56,247.2	0	4.50	61.2	73	780	87	3.7	Routine O&M.
02/17/16	1:00 PM	56,604.7	0	4.75	64.6	73	758	62	3.4	Collected DES-INF-ADM-92, DES-EFF-ADM-93. Opened wells AS-9 and AS-11, and closed wells AS-3 and AS-6.
02/25/16	10:00 AM	56,793.8	0	4.75	64.6	74	761	65	3.1	Routine O&M.
03/04/16	12:00 PM	56,987.9	0	4.50	61.2	74	762	81	3.0	Routine O&M.
03/11/16	8:00 AM	57,148.0	0	4.75	64.6	74	771	70	3.3	Routine O&M.
03/16/16	2:00 PM	57,274.0	0	4.75	64.6	74	775	65	3.2	Routine O&M.
03/23/16	9:00 AM	57,437.0	0	4.75	64.6	73	765	73	2.9	Collected DES-INF-ADM-93, DES-EFF-ADM-94. Opened wells AS-3 and AS-6, and closed wells AS-9 and AS-11.
03/31/16	9:00 AM	57,629.0	0	4.75	64.6	74	776	83	2.8	Routine O&M.
04/07/16	11:00 AM	57,799.1	0	4.50	61.2	73	751	114	3.4	Routine O&M.
04/13/16	11:30 AM	57,944.1	0	4.50	61.2	74	762	112	3.6	Routine O&M.
04/20/16	9:00 AM	58,109.1	0	4.50	61.2	74	745	113	3.0	Routine O&M.
04/26/16	9:00 AM	58,252.5	0	4.75	64.6	75	748	118	3.3	Collected DES-INF-ADM-94, DES-EFF-ADM-95. Measured IW concentrations.
05/05/16	11:00 AM	58,472.4	0	4.50	61.2	72	750	121	3.6	Routine O&M.
05/12/16	10:00 AM	58,639.3	0	4.75	64.6	73	763	120	3.4	Routine O&M.
05/17/16	9:00 AM	58,757.4	0	4.25	57.8	82	771	168	3.9	Started expanded AS/VES operations. Opened wells AS-9 and AS-11, and closed wells AS-3 and AS-6.
05/19/16	12:00 PM	58,808.4	0	4.25	57.8	82	774	200	4.2	Collected DES-INF-ADM-95. Extraction isolated to wells VE-6D and VE-38 since expanded system startup based on field and lab data.
05/26/16	10:00 AM	58,974.4	0	4.25	57.8	83	772	133	3.2	Collected DES-INF-ADM-96. DES-EFF-ADM-96. Measured IW concentrations.
06/03/16	10:00 AM	59,168.5	0	4.25	57.8	83	731	140	2.6	Increased injection rates to new sparge wells based on recent influence monitoring data.
06/10/16	9:00 AM	59,333.5	0	4.25	57.8	82	720	152	2.3	Air compressor serviced. Opened wells AS-3 and AS-6, and closed wells AS-9 and AS-11.
06/15/16	11:00 AM	59,491.3	0	4.50	61.2	79	743	141	3.4	Collected DES-INF-ADM-97. DES-EFF-ADM-97. Measured IW concentrations.
06/24/16	1:00 PM	59,709.3	0	4.50	61.2	78	747	143	2.4	Routine O&M.
06/28/16	8:00 AM	59,801.4	0	4.50	61.2	78	718	142	3.6	Routine O&M.
07/06/16	11:00 AM	59,994.5	0	4.50	61.2	80	731	187	3.8	Routine O&M.
07/13/16	8:00 AM	60,111.5	0	4.50	61.2	85	728	155	3.6	Routine O&M.
07/20/16	11:00 AM	60,210.5	0	4.50	61.2	82	745	130	2.8	Collected DES-INF-ADM-98. DES-EFF-ADM-98. Measured IW concentrations.
07/29/16	9:00 AM	60,376.5	0	4.75	64.6	80	742	115	3.1	Restarted VES and AS system.
08/03/16	10:00 AM	60,448.5	0	4.75	64.6	78	747	118	3.2	Routine O&M.
08/10/16	10:10 AM	60,598.5	0	4.75	64.6	78	758	125	2.6	Opened wells AS-9 and AS-11, and closed wells AS-3 and AS-6.

TABLE 1
Historical Summary Of Vapor Extraction System Monitoring Results
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
08/18/16	11:00 AM	60,781.9	0	4.75	64.6	79	738	120	3.4	Routine O&M.
08/25/16	9:50 AM	60,949.0	0	4.75	64.6	79	730	134	3.5	Collected DES-INF-ADM-99. DES-EFF-ADM-99. Measured IW concentrations.
08/31/16	9:00 AM	61,068.5	0	NA	NA	NA	NA	NA	NA	Deployed secondary air compressor to run new sparge well network. Both systems left off-line.
09/01/16	10:15 AM	61,068.5	0	4.75	64.6	74	745	142	4.0	Restarted VES. AS system left off-line to conduct primary air compressor troubleshooting work.
09/07/16	3:45 PM	61,193.5	0	4.75	64.6	82	750	116	3.6	Completed installation and hookup of secondary air compressor and tested unit overnight to confirm functionality.
09/08/16	1:45 PM	61,215.6	0	4.75	64.6	76	755	122	2.4	Manually shutdown VES since manifold needed to be disassembled to allow for primary air compressor removal for repair.
09/13/16	9:15 AM	61,215.6	0	NA	NA	NA	NA	NA	NA	Primary air compressor removed from compound for off-site repair. VES left off-line pending reassembly of manifold.
09/19/16	2:00 PM	61,215.6	0	4.75	64.6	75	749	140	2.8	Reassembled VES manifold and restarted system. Secondary air compressor left off-line due to low receiver tank pressure.
09/22/16	10:00 AM	61,283.6	0	4.75	64.6	78	745	120	3.8	Collected DES-INF-ADM-100. DES-EFF-ADM-100. Measured IW concentrations.
09/30/16	9:00 AM	61,474.5	0	4.75	64.6	77	741	110	2.2	Routine VES O&M.
10/07/16	1:00 PM	61,642.5	0	5.50	74.8	71	744	180	14.0	Primary air compressor re-deployed and hooked up followed by AS system restart. VES tempoarily off-line during re-installation work.
10/10/16	3:00 PM	61,716.5	0	5.50	74.8	70	742	175	23.5	Measured IW concentrations and collected samples from wells VE-6D and VE-38 for laboratory analysis.
10/13/16	11:00 AM	61,784.5	0	6.50	88.4	65	746	240	34.0	Valved down VE-6D. Collected DES-INF-ADM-101. DES-EFF-ADM-101. Removed Trolls from wells GTMW-46 and GTMW-50.
10/20/16	10:00 AM	61,951.5	0	6.50	88.4	66	747	220	41.0	Routine O&M.
10/26/16	5:00 AM	62,090.5	0	6.50	88.4	64	740	200	44.0	Automatic VES and AS system shutdown with both systems being left off-line pending oxidizer troubleshooting and repair work.
12/13/16	10:00 AM	62,092.5	0	NA	NA	NA	NA	NA	NA	Completed oxidizer repair work and temporarily restarted VES to collect DES-INF-ADM-102 and DES-EFF-ADM-102.
12/15/16	4:00 PM	62,092.5	0	NA	NA	NA	NA	NA	NA	AS system restarted in advance of upcoming VES restart.
12/22/16	7:00 AM	62,092.5	0	6.75	91.8	79	738	190	3.9	VES restarted following analytical confirmation of effective removal efficiency.
12/28/16	3:00 PM	62,244.5	0	6.75	91.8	79	730	180	4.1	Routine O&M.
01/04/17	10:00 AM	62,407.5	0	7.00	95.2	74	740	215	3.0	Routine O&M.
01/12/17	11:00 AM	62,600.5	0	7.00	95.2	72	747	194	2.8	Routine O&M.
01/18/17	1:00 PM	62,746.5	0	7.25	98.6	76	739	205	2.5	VES manually shutdown for oxidizer repair work.
01/24/17	2:00 PM	62,746.5	0	NA	NA	NA	NA	NA	NA	VES off-line pending completion of oxidizer repair work.
01/27/17	10:00 AM	62,746.5	0	7.00	95.2	73	745	200	2.9	VES restarted following completion of oxidizer repair work.
01/30/17	2:00 PM	62,822.5	0	7.25	98.6	70	748	172	3.4	Measured IW concentrations. Collected DES-INF-ADM-103 and DES-EFF-ADM-103.
02/08/17	4:00 PM	62,992.5	0	7.00	95.2	72	753	190	3.6	Collected DES-INF-ADM-104 and DES-EFF-ADM-104. Air compressor receiver tank piping determined to require repairs.
02/15/17	2:30 PM	63,030.5	0	NA	NA	NA	NA	NA	NA	VES off-line upon arrival and departure. Knockout (KO) control repair work required.
02/22/17	3:30 PM	63,030.5	0	7.00	95.2	74	740	220	4.0	VES restarted following completion of KO control repair work. AS system also restarted after completing receiver tank piping repair work.
03/01/17	2:30 PM	63,176.5	0	7.25	98.6	71	738	210	5.1	Measured IW concentrations. Collected DES-INF-ADM-105 and DES-EFF-ADM-105.
03/09/17	1:00 PM	63,353.5	0	7.00	95.2	75	752	204	3.2	Routine O&M.
03/16/17	11:00 AM	63,471.4	0	7.25	98.6	72	745	205	4.6	AS system temporarily off-line to conduct routine air compressor service/maintenance.
03/21/17	10:00 AM	63,540.5	0	7.50	102.0	70	750	195	4.3	Routine O&M.
03/31/17	9:00 AM	63,755.5	0	7.50	102.0	69	745	175	4.8	Routine O&M.
04/06/17	12:00 PM	63,830.5	0	7.75	105.4	66	735	184	4.3	Measured IW concentrations. VES restarted following automatic system shutdown.
04/13/17	10:30 AM	63,925.5	0	8.00	108.8	64	731	173	3.7	VES restarted following automatic system shutdown.
04/21/17	10:00 AM	64,044.5	0	7.75	105.4	65	736	177	3.9	VES restarted following automatic system shutdown.
04/30/17	9:00 AM	64,228.5	0	7.50	102.0	69	742	165	3.5	Collected DES-INF-ADM-106 and DES-EFF-ADM-106.
05/05/17	11:30 AM	64,351.0	0	7.75	105.4	67	747	170	3.6	Routine O&M.
05/10/17	1:00 PM	64,425.3	0	7.75	105.4	66	743	168	4.6	Measured IW concentrations. VES restarted following automatic system shutdown.
05/18/17	9:00 AM	64,557.6	0	7.50	102.0	68	744	172	5.2	VES restarted following automatic system shutdown.
05/25/17	2:00 PM	64,730.6	0	7.50	102.0	70	744	175	5.9	VES restarted following automatic system shutdown.
06/01/17	11:00 AM	64,895.6	0	7.50	102.0	72	741	180	5.0	Routine O&M.
06/06/17	12:00 PM	65,016.6	0	7.75	105.4	65	752	155	3.1	Routine O&M.

TABLE 1
Historical Summary Of Vapor Extraction System Monitoring Results
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
06/13/17	8:20 AM	65,181.1	0	7.50	102.0	69	743	142	4.0	Measured IW concentrations. Collected DES-INF-ADM-107 and DES-EFF-ADM-107.
06/22/17	10:50 AM	65,399.5	0	8.00	108.8	65	715	137	4.1	Routine O&M.
06/26/17	10:00 AM	65,494.5	0	7.75	105.4	67	742	130	4.1	Routine O&M.
07/07/17	11:00 AM	65,759.5	0	8.00	108.8	65	721	140	2.1	Routine O&M.
07/14/17	9:00 AM	65,925.5	0	7.75	105.4	67	732	150	4.1	Routine O&M.
07/20/17	12:30 PM	66,073.5	0	7.75	105.4	68	730	180	4.3	Measured IW concentrations. Collected DES-INF-ADM-108 and DES-EFF-ADM-108.
07/26/17	9:00 AM	66,214.0	0	8.00	108.8	66	724	185	3.6	Routine O&M.
08/01/17	1:00 PM	66,362.5	0	8.00	108.8	65	727	140	3.7	Routine O&M.
08/11/17	10:00 AM	66,598.5	0	7.50	102.0	70	738	120	3.4	Routine O&M.
08/16/17	11:00 AM	66,720.5	0	8.00	108.8	64	744	110	2.9	Measured IW concentrations. Collected DES-INF-ADM-109 and DES-EFF-ADM-109.
08/25/17	9:00 AM	66,934.5	0	8.00	108.8	64	749	137	3.8	Routine O&M.
08/31/17	12:00 PM	67,081.5	0	7.75	105.4	69	741	125	3.9	Routine O&M.
09/08/17	2:00 PM	67,275.5	0	7.75	105.4	67	751	118	4.8	Routine O&M.
09/13/17	9:00 AM	67,389.5	0	7.75	105.4	68	740	132	4.2	Measured IW concentrations. Collected DES-INF-ADM-110 and DES-EFF-ADM-110.
09/21/17	9:00 AM	67,581.5	0	7.75	105.4	70	749	145	4.0	Routine O&M.
09/28/17	10:00 AM	67,750.5	0	8.00	108.8	66	743	135	3.5	Routine O&M.
10/06/17	2:00 PM	67,946.4	0	7.75	105.4	68	747	100	2.2	Routine O&M.
10/19/17	12:25 PM	68,252.4	0	7.50	102.0	71	749	60	2.6	Measured IW concentrations. Collected DES-INF-ADM-110 and DES-EFF-ADM-110.
10/24/17	3:00 PM	68,329.4	0	7.75	105.4	67	746	65	2.1	Collected samples from wells VE-6D and VE-38 for laboratory analysis on 10/19/17. Compressor serviced 10/23/17.
10/31/17	9:00 AM	68,541.5	0	7.75	105.4	68	751	72	1.9	Routine O&M.
11/03/17	2:00 AM	68,606.5	0	7.75	105.4	68	751	72	1.9	Automatic AS system and VES shutdown due to damage to nearby electrical service line from automobile accident.
11/30/17	10:00 AM	68,606.5	0	7.50	102.0	70	742	40	1.3	AS system restarted and VES restarted/sampled following completion of regional electrical service line repair work.
12/04/17	10:00 AM	68,726.5	0	7.50	102.0	72	746	50	0.9	Routine O&M.
12/12/17	9:05 AM	68,918.0	0	7.50	102.0	70	749	45	1.1	Routine O&M.
12/18/17	12:00 PM	69,065.0	0	7.50	102.0	71	750	55	0.6	Conducted testing and collected samples from wells VE-AS-20 through VE-AS-25 on 12/14/17.
12/29/17	3:30 PM	69,332.5	0	7.50	102.0	70	754	40	0.8	Routine O&M.
01/03/18	1:00 PM	69,414.7	0	NA	NA	0	NA	NA	NA	VES briefly operated for testing and to collect DES-INF-ADM-113 and DES-EFF-ADM-113 but otherwise left off-line for maintenance.
01/05/18	9:00 AM	69,414.7	0	NA	NA	0	NA	NA	NA	Both systems left off-line pending the completion of maintenance work following automatic shutdown on 1/2/18.
01/09/18	8:30 AM	69,414.7	0	7.25	98.6	72	747	49	1.9	VES and AS system restarted.
01/18/18	10:30 AM	69,632.7	0	7.00	95.2	73	757	41	0.8	Collected DES-INF-ADM-114 and DES-EFF-ADM-114.
01/24/18	8:40 AM	69,774.9	0	7.00	95.2	75	742	39	1.8	Measured IW concentrations.
02/01/18	1:00 PM	69,971.0	0	6.75	91.8	76	744	38	1.1	Routine O&M.
02/08/18	12:00 PM	70,138.1	0	7.50	102.0	70	743	35	1.2	Routine O&M.
02/15/18	2:00 AM	70,179.3	0	7.25	98.6	72	755	42	0.7	VES restarted following automatic shutdown on 2/10/18.
02/23/18	12:00 PM	70,369.2	0	7.25	98.6	73	751	50	1.7	Routine O&M.
02/26/18	1:30 PM	70,442.7	0	7.75	105.4	67	757	38	1.4	Measured IW concentrations. Collected DES-INF-ADM-115 and DES-EFF-ADM-115.
03/07/18	9:30 AM	70,654.7	0	7.50	102.0	69	753	34	1.0	Routine O&M.
03/15/18	12:50 PM	70,850.1	0	7.25	98.6	71	750	36	1.3	Routine O&M.
03/21/18	10:00 AM	70,991.0	0	7.50	102.0	70	748	41	0.6	Routine O&M.
03/27/18	11:00 AM	71,136.2	0	7.00	95.2	75	745	45	0.9	Measured IW concentrations. Collected DES-INF-ADM-116 and DES-EFF-ADM-116.
04/05/18	10:00 AM	71,351.2	0	6.50	88.4	78	758	39	1.5	Routine O&M.
04/12/18	9:30 AM	71,518.0	0	6.50	88.4	79	753	42	1.1	Routine O&M.
04/20/18	8:00 AM	71,708.9	0	6.25	85.0	82	751	40	1.3	Routine O&M.

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Historical Summary Of Vapor Extraction System Monitoring Results
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Time	Hour Meter Reading	Dilution % Open	Field Vacuum (in. Hg)	Calculated Vacuum (in. w.c.)	Flow (scfm)	Temp. (°F)	PID (ppmv)		Comments
								Inlet	Outlet	
04/25/18	9:00 AM	71,829.7	0	6.25	85.0	81	755	49	1.9	Measured IW concentrations. Collected DES-INF-ADM-117 and DES-EFF-ADM-117.
05/04/18	11:00 AM	72,047.3	0	6.50	88.4	77	762	34	1.7	Routine O&M.
05/11/18	9:15 AM	72,213.2	0	6.25	85.0	83	753	29	1.4	AS system temporarily off-line to conduct routine air compressor service/maintenance.
05/16/18	9:00 AM	72,333.0	0	6.25	85.0	84	757	31	0.9	Measured IW concentrations. Collected DES-INF-ADM-118 and DES-EFF-ADM-118.
05/23/18	9:30 AM	72,501.5	0	6.50	88.4	80	755	28	1.5	Routine O&M.
05/31/18	2:30 PM	72,696.5	0	6.00	81.6	85	761	26	0.7	Routine O&M.
06/06/18	3:00 PM	72,771.5	0	6.50	88.4	77	760	25	1.6	VES restarted following automatic shutdown on 6/3/18.
06/15/18	12:00 PM	72,912.5	0	6.50	88.4	79	763	23	0.9	VES restarted following automatic shutdown on 6/12/18.
06/20/18	9:00 AM	73,029.5	0	6.50	88.4	78	756	22	0.5	Measured IW concentrations. Collected DES-INF-ADM-119 and DES-EFF-ADM-119.
06/29/18	9:30 AM	73,246.0	0	6.25	85.0	82	752	19	0.8	VES manually shutdown for cycling due to low/asymptotic concentrations.
07/09/18	10:00 AM	73,246.0	0	5.50	74.8	86	759	123	5.3	VES restarted. Measured IW concentrations.
07/18/18	10:00 AM	73,461.5	0	6.00	81.6	81	750	66	1.6	AS system off-line upon arrival and departure. Collected DES-INF-ADM-120 and DES-EFF-ADM-120.
07/19/18	3:00 PM	73,490.7	0	6.00	81.6	82	750	56	1.6	Performed AS system troubleshooting. VES manually shutdown for cycling.
07/31/18	9:00 AM	73,490.7	0	6.00	81.6	80	761	141	6.8	VES restarted. AS system compressor disconnected in advance of removal from site next week for manufacturer repair.
08/06/18	8:00 AM	73,632.7	0	6.25	85.0	78	755	20	0.8	VES manually shutdown for cycling. Air compressor removed from site for manufacturer repair.
08/22/18	12:00 PM	73,632.7	0	6.00	81.6	83	763	38	1.7	VES restarted. Measured IW concentrations. Collected DES-INF-ADM-121 and DES-EFF-ADM-121.
08/24/18	8:30 AM	73,678.3	0	6.00	81.6	81	758	24	0.9	VES manually shutdown for cycling.
09/04/18	7:30 AM	73,678.3	0	6.25	85.0	77	760	60	1.3	VES restarted. Measured IW concentrations.
09/10/18	2:30 PM	73,829.5	0	6.00	81.6	82	760	27	2.2	VES manually shutdown for cycling.
09/17/18	8:30 AM	73,830.5	0	5.50	74.8	85	759	50	1.9	VES temporarily restarted to collected DES-INF-ADM-122 and DES-EFF-ADM-122.
10/30/18	9:15 AM	73,830.5	0	5.75	78.2	86	753	40	1.4	VES restarted. Measured IW concentrations. Collected DES-INF-ADM-123 and DES-EFF-ADM-123.
11/05/18	8:00 AM	73,973.5	0	5.50	74.8	89	742	28	0.8	VES manually shutdown for cycling.
11/26/18	9:45 AM	73,973.5	0	5.50	74.8	88	760	18	0.6	VES restarted. Measured IW concentrations. Collected DES-INF-ADM-124 and DES-EFF-ADM-124.
11/30/18	3:30 PM	74,075.0	0	5.50	74.8	87	766	15	0.3	VES manually shutdown for cycling.
12/20/18	9:30 AM	74,075.0	0	5.50	74.8	87	761	10	0.2	VES restarted. Measured IW concentrations. Collected DES-INF-ADM-125 and DES-EFF-ADM-125.
12/23/18	12:30 PM	74,150.0	0	5.50	74.8	87	761	10	0.2	Automatic VES shutdown. System left off-line through remainder of reporting period for cycling.
01/31/19	8:00 AM	74,150.0	0	5.75	78.2	84	745	16	0.3	VES restarted. Measured IW concentrations. Collected DES-INF-ADM-126 and DES-EFF-ADM-126.
02/07/19	11:30 AM	74,321.5	0	5.75	78.2	84	745	16	0.3	VES manually shutdown for cycling.
02/26/19	8:45 AM	74,321.5	0	7.25	98.6	71	751	14	0.2	VES restarted. Measured IW concentrations. Collected DES-INF-ADM-127 and DES-EFF-ADM-127.
03/05/19	8:00 AM	74,489.0	0	7.25	98.6	71	751	14	0.2	VES manually shutdown for cycling.
03/21/19	8:45 AM	74,489.0	0	7.50	102.0	69	741	13	0.2	VES restarted. Measured IW concentrations. Collected DES-INF-ADM-128 and DES-EFF-ADM-128.
03/28/19	9:00 AM	74,657.5	0	7.50	102.0	69	741	13	0.2	VES manually shutdown and scheduled to remain off-line until expanded system operations commence.

***Legend*:**

in. Hg = inches of mercury
in. w.c. = inches of water
scfm = standard cubic feet per minute
°F = degrees Fahrenheit
PID = photoionization detector
ppmv = parts per million by volume
VES = vapor extraction system
AS = air sparge
IW = individual well

Highlighted rows indicate monitoring date when system effluent and/or influent sample(s) were collected for laboratory analysis.

TABLE 2
Cumulative Hydrocarbon Mass Removal Calculations
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Cumulative Run Time (hours)	Period Run Time (hours)	Lab Result GRO (µg/L)	Lab Result GRO If ND, 1/2 DL (µg/L)	Flowrate (scfm)	GRO Mass Removed (lbs)	GRO Mass Removed (lbs/hr)	Cumulative GRO Mass Removed [A,B] (lbs)	Comments
5/22/08	0	0	--	--	184	0	0	0	System startup.
5/27/08	100	100	1,900	1,900	184	131	1.3	131	
6/25/08	669	569	1,200	1,200	204	522	0.9	653	
7/14/08	1,132	463	46	46	210	17	0.0	669	
8/26/08	1,920	789	540	540	230	367	0.5	1,037	
9/25/08	2,639	719	690	690	244	454	0.6	1,490	
10/23/08	3,311	671	680	680	243	416	0.6	1,906	
11/24/08	3,815	504	47	47	249	22	0.0	1,928	
12/17/08	4,226	411	55	55	248	21	0.1	1,949	
1/15/09	4,790	565	530	530	249	279	0.5	2,228	
2/24/09	5,591	801	660	660	249	493	0.6	2,721	
3/26/09	6,289	698	750	750	249	489	0.7	3,210	
4/29/09	6,913	624	680	680	248	394	0.6	3,604	
5/21/09	7,436	524	1,300	1,300	249	635	1.2	4,239	
6/17/09	8,082	646	420	420	249	253	0.4	4,492	
7/15/09	8,681	599	1,300	1,300	250	729	1.2	5,221	
8/20/09	9,358	677	1,300	1,300	250	824	1.2	6,045	
9/28/09	10,101	743	1,200	1,200	249	832	1.1	6,877	
10/30/09	10,796	695	970	970	250	631	0.9	7,508	Closed Building 113 extraction wells. Extracting from Building 108.
11/23/09	11,375	579	2,500	2,500	247	1340	2.3	8,848	
12/16/09	11,931	556	2,500	2,500	249	1296	2.3	10,144	
1/20/10	12,761	831	2,000	2,000	249	1550	1.9	11,694	
2/18/10	13,454	693	2,900	2,900	249	1876	2.7	13,570	
3/23/10	14,248	794	920	920	247	676	0.9	14,246	
4/22/10	14,971	722	830	830	249	559	0.8	14,805	
5/26/10	15,785	815	2,600	2,600	248	1968	2.4	16,773	
6/16/10	16,283	498	970	970	248	449	0.9	17,222	
7/28/10	17,297	1,014	2,700	2,700	249	2553	2.5	19,775	
8/17/10	17,774	477	3,000	3,000	250	1341	2.8	21,116	
9/29/10	18,811	1,037	4,400	4,400	248	4241	4.1	25,356	
10/28/10	19,506	694	1,900	1,900	249	1231	1.8	26,587	
11/29/10	19,885	380	940	940	248	332	0.9	26,919	No extraction during the month of December 2010.
1/18/11	19,913	28	1,800	1,800	249	47	1.7	26,966	
2/28/11	20,647	734	360	360	248	245	0.3	27,211	
3/30/11	21,102	456	1,600	1,600	250	683	1.5	27,894	
4/28/11	21,730	627	1,500	1,500	249	878	1.4	28,772	
5/31/11	22,521	791	1,000	1,000	249	738	0.9	29,510	
6/29/11	23,141	619	1,600	1,600	248	921	1.5	30,431	
7/28/11	23,835	694	1,800	1,800	250	1170	1.7	31,601	
8/30/11	24,628	793	1,300	1,300	248	958	1.2	32,559	
9/29/11	25,333	705	2,000	2,000	249	1316	1.9	33,875	
10/27/11	26,011	678	1,000	1,000	249	633	0.9	34,508	
11/29/11	26,795	784	1,700	1,700	248	1239	1.6	35,747	
12/28/11	27,426	631	1,200	1,200	248	703	1.1	36,450	
1/31/12	28,092	666	1,200	1,200	249	745	1.1	37,195	
2/28/12	28,721	629	1,700	1,700	248	994	1.6	38,189	
3/29/12	29,359	638	1,900	1,900	249	1131	1.8	39,319	
4/27/12	30,036	678	1,500	1,500	248	944	1.4	40,264	
5/31/12	30,725	689	1,700	1,700	249	1093	1.6	41,357	
6/28/12	31,290	565	1,300	1,300	249	685	1.2	42,042	
7/26/12	31,968	678	1,100	1,100	249	695	1.0	42,738	
8/23/12	32,543	575	1,400	1,400	247	745	1.3	43,483	
9/26/12	33,212	669	1,700	1,700	248	1057	1.6	44,540	
10/31/12	33,932	720	490	490	247	326	0.5	44,866	
11/29/12	34,299	366	1,100	1,100	248	374	1.0	45,240	
12/26/12	34,739	441	1,900	1,900	249	781	1.8	46,022	
1/31/13	35,154	414	20	20	249	8	0.0	46,030	
2/28/13	35,576	422	70	70	249	28	0.1	46,057	

TABLE 2
Cumulative Hydrocarbon Mass Removal Calculations
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Cumulative Run Time (hours)	Period Run Time (hours)	Lab Result GRO (µg/L)	Lab Result GRO If ND, 1/2 DL (µg/L)	Flowrate (scfm)	GRO Mass Removed (lbs)	GRO Mass Removed (lbs/hr)	Cumulative GRO Mass Removed [A,B] (lbs)	Comments
3/28/13	36,104	528	1,100	1,100	249	542	1.0	46,599	
4/30/13	36,491	387	1,100	1,100	248	396	1.0	46,994	
5/30/13	37,208	717	1,400	1,400	224	842	1.2	47,837	
6/27/13	37,781	573	860	860	223	411	0.7	48,248	
7/31/13	38,272	491	1,300	1,300	207	494	1.0	48,742	
8/29/13	38,968	696	1,700	1,700	193	854	1.2	49,595	
9/17/13	39,340	371	2,900	2,900	196	789	2.1	50,384	
10/30/13	40,365	1,026	2,300	2,300	216	1905	1.9	52,289	
11/26/13	41,015	649	1,900	1,900	225	1038	1.6	53,327	
12/23/13	41,662	647	1,700	1,700	201	827	1.3	54,154	
1/29/14	42,550	888	440	440	221	323	0.4	54,476	
2/20/14	42,934	384	660	660	224	212	0.6	54,688	
3/20/14	43,400	466	1,700	1,700	223	661	1.4	55,349	
4/22/14	44,129	729	800	800	213	464	0.6	55,813	
5/29/14	44,677	549	2,600	2,600	192	1024	1.9	56,837	
6/24/14	45,219	542	2,100	2,100	195	829	1.5	57,666	
7/10/14	45,607	389	1,600	1,600	192	446	1.1	58,112	
9/17/14	46,216	608	1,200	1,200	198	540	0.9	58,653	No extraction during the month of August 2014.
10/31/14	46,567	351	<20	10	190	2	0.0	58,655	
11/25/14	46,890	323	400	400	191	92	0.3	58,747	
12/22/14	46,978	88	670	670	196	43	0.5	58,791	
1/15/15	47,483	506	490	490	188	174	0.3	58,965	
2/24/15	48,446	962	1,500	1,500	187	1009	1.0	59,974	
3/31/15	49,234	789	840	840	188	466	0.6	60,440	
4/30/15	49,940	706	640	640	152	257	0.4	60,696	
5/26/15	50,568	629	680	680	140	224	0.4	60,920	
6/29/15	51,379	811	390	390	148	175	0.2	61,095	Temporarily isolated extraction to wells VE-3 and VE-6D for testing.
7/31/15	52,110	731	510	510	141	196	0.3	61,291	Mass removed during July/August 2015 corrected for calculation error.
8/31/15	52,818	708	620	620	118	194	0.3	61,485	Extraction isolated to wells VE-3 and VE-6D since 08/12/15.
9/24/15	53,210	392	480	480	120	84	0.2	61,569	
10/28/15	54,023	813	360	360	74	81	0.1	61,650	
11/18/15	54,529	506	360	360	75	51	0.1	61,701	
12/16/15	55,148	619	210	210	74	36	0.1	61,737	
1/6/16	55,592	443	330	330	70	38	0.1	61,775	
2/17/16	56,605	1,013	200	200	73	55	0.1	61,831	Changed extraction well configuration based on IW PID data.
3/23/16	57,437	832	<20	10	73	2	0.0	61,833	System optimized by isolating extraction to wells VE-3 and VE-6D.
4/26/16	58,252	816	430	430	75	98	0.1	61,931	Expanded sparge and vapor extraction system started on 5/17/16.
5/19/16	58,808	556	640	640	82	109	0.2	62,040	System optimized by isolating extraction to wells VE-6D and VE-38.
5/26/16	58,974	166	430	430	83	22	0.1	62,062	
6/15/16	59,491	517	520	520	79	79	0.2	62,142	
7/20/16	60,210	719	420	420	82	93	0.1	62,234	
8/25/16	60,949	739	420	420	79	92	0.1	62,326	No sparging except for limited testing from 8/26/16 through 9/30/16.
9/22/16	61,284	335	390	390	78	38	0.1	62,364	No extraction from 9/08/16 to 9/19/16.
10/13/16	61,784	501	870	870	65	106	0.2	62,470	No extraction from 10/26/16 to 12/22/16 pending completion of repair work.
12/13/16	62,092	308	610	610	79	55	0.2	62,525	System only briefly operated to collect confirmation performance samples.
12/22/16	62,092	0	--	--	79	0	0.0	62,525	System restarted after analytically verifying effective removal efficiency.
1/30/17	62,822	730	620	620	70	151	0.2	62,676	No extraction from 1/18/17 to 1/27/17 pending completion of repair work.
2/8/17	62,992	170	750	750	72	34	0.2	62,710	
3/1/17	63,176	184	780	780	71	38	0.2	62,748	No extraction from 2/10/17 to 2/22/17 pending completion of repair work.
4/30/17	64,228	1,052	490	490	69	133	0.1	62,881	
5/25/17	64,731	502	520	520	70	68	0.1	62,950	
6/13/17	65,181	451	140	140	69	16	0.0	62,966	
7/20/17	66,073	892	570	570	68	129	0.1	63,095	
8/16/17	66,720	647	260	260	64	40	0.1	63,136	
9/13/17	67,389	669	410	410	68	70	0.1	63,205	
10/19/17	68,252	863	110	110	71	25	0.03	63,294	
11/30/17	68,606	354	48	48	70	4	0.01	63,298	No extraction from 11/3/17 to 11/30/17 due to regional electrical line issue.

TABLE 2
Cumulative Hydrocarbon Mass Removal Calculations
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Cumulative Run Time (hours)	Period Run Time (hours)	Lab Result GRO (µg/L)	Lab Result GRO If ND, 1/2 DL (µg/L)	Flowrate (scfm)	GRO Mass Removed (lbs)	GRO Mass Removed (lbs/hr)	Cumulative GRO Mass Removed [A,B] (lbs)	Comments
12/29/17	69,332	726	47	47	70	9	0.01	63,307	
1/18/18	69,633	300	60	60	73	5	0.02	63,312	No extraction from 1/2/18 to 1/9/18 to conduct system maintenance.
2/26/18	70,443	810	50	50	67	10	0.01	63,322	
3/27/18	71,136	694	70	70	75	14	0.02	63,336	
4/25/18	71,830	694	150	150	81	31	0.05	63,368	System optimized by isolating extraction efforts exclusively to well VE-6D.
5/16/18	72,333	503	72	72	84	11	0.02	63,379	
6/20/18	73,029	697	50	50	78	10	0.01	63,389	
7/18/18	73,461	432	260	260	81	34	0.08	63,423	System cycling began during July 2018 due to low/asymptotic concentrations.
8/22/18	73,633	171	69	69	83	4	0.02	63,427	
9/17/18	73,830	198	140	140	85	9	0.04	63,436	System temporarily operated but left off-line upon departure for cycling.
10/30/18	73,830	0	140	140	86	--	--	63,436	System restarted.
11/5/18	73,973	143	--	--	89	6	0.04	63,442	System manually shutdown for cycling.
11/26/18	73,973	0	39	39	88	--	--	63,442	System restarted.
11/30/18	74,075	101	--	--	87	2	0.02	63,444	System manually shutdown for cycling.
12/20/18	74,075	0	ND <20	10	87	--	--	63,444	System restarted.
12/23/18	74,150	75	--	--	87	0.2	<0.01	63,444	System automatically shutdown and left off-line for cycling.
1/31/19	74,150	0	ND <20	10	84	--	--	63,444	System restarted.
2/7/19	74,321	171	--	--	84	0.5	<0.01	63,444	System manually shutdown for cycling.
2/26/19	74,321	0	ND <20	10	71	--	--	63,444	System restarted.
3/5/19	74,489	167	--	--	71	0.4	<0.01	63,445	System manually shutdown for cycling.
3/21/19	74,489	0	ND <20	10	69	--	--	63,445	System restarted.
3/28/19	74,657	168	--	--	69	0.4	<0.01	63,445	System manually shutdown for cycling. *

Legend / Notes :

GRO = gasoline range organics
DL = detection limit
µg/L = micrograms per liter
scfm = standard cubic feet per minute
lbs = pounds
lbs/hr = pounds per hour
IW = individual well
PID = photoionization detector

A = Additional mass remediated by in-situ biodegradation of hydrocarbons by air sparging is not listed on this table.
B = Emissions based on treatment system influent laboratory analytical results for GRO. For non-detect results, half the detection limit used.

* Scheduled to remain off-line until expanded system operations commence which is estimated to occur during mid-May 2019.

TABLE 3
Historical Summary of Analytical Sampling Results - Influent Vapor
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Sample ID	Date Sampled	Notes	TAME (µg/L)	Benzene (µg/L)	TBA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)	Ethylbenzene (µg/L)	ETBE (µg/L)	MTBE (µg/L)	Toluene (µg/L)	o-Xylene (µg/L)	m,p-Xylenes (µg/L)	GRO as Hexane (µg/L)	GRO as Hexane (ppmv)	GRO Field PID Reading [A] (ppmv)
CHHSL - Industrial, Shallow Soil Gas (µg/L)			--	0.122	--	--	--	3.6	--		378	887	879	--	--	--
DES-INF-ADM-17	10/30/09		<5.0	**3.4**	<30	<5.0	<200	**0.99**	<5.0	<2.0	**0.83**	<0.50	**1.6**	**970**	**275.77**	**2,650**
DES-INF-ADM-18	11/23/09		<5.0	**28**	<30	<5.0	<200	**8.8**	<5.0	<2.0	**35**	**7.7**	**30**	**2,500**	**710.76**	--
DES-INF-ADM-19	12/16/09		<5.0	**24**	<30	<5.0	<200	**12**	<5.0	<2.0	**50**	**9.8**	**43**	**2,500**	**710.76**	**1,825**
DES-INF-ADM-20	1/20/10		<5.0	**20**	<30	<5.0	<200	**7.3**	<5.0	<2.0	**44**	**4.6**	**25**	**2,000**	**568.60**	**2,075**
DES-INF-ADM-21	2/18/10		<5.0	**14**	<30	<5.0	<200	**18**	<5.0	<2.0	**73**	**19**	**71**	**2,900**	**824.48**	**2,350**
DES-INF-ADM-22	3/23/10		<5.0	**5.2**	<30	<5.0	<200	**6.4**	<5.0	<2.0	**27**	**7.4**	**27**	**920**	**261.56**	**1,480**
DES-INF-ADM-23	4/22/10		<5.0	**3.5**	<30	<5.0	<200	**5.4**	<5.0	<2.0	**19**	**7.1**	**25**	**830**	**235.97**	**1,450**
DES-INF-ADM-24	5/26/10		<5.0	**2.2**	<30	<5.0	<200	**19**	<5.0	<2.0	**30**	**19**	**85**	**2,600**	**739.19**	**1,800**
DES-INF-ADM-25	6/16/10		<5.0	**2.3**	<30	<5.0	<200	**13**	<5.0	<2.0	**27**	**11**	**56**	**970**	**275.77**	**1,560**
DES-INF-ADM-26	7/28/10		<5.0	**15**	<30	<5.0	<200	**17**	<5.0	<2.0	**96**	**26**	**85**	**2,700**	**767.62**	**1,830**
DES-INF-ADM-27	8/17/10		<5.0	**2.4**	<30	<5.0	<200	**31**	<5.0	<2.0	**42**	**30**	**120**	**3,000**	**852.91**	**2,200**
DES-INF-ADM-28	9/29/10		<5.0	**2.0**	<30	<5.0	<200	**33**	<5.0	<2.0	**40**	**31**	**140**	**4,400**	**1,250.93**	**1,875**
DES-INF-ADM-29	10/28/10		<5.0	**1.2**	<30	<5.0	<200	**14**	<5.0	<2.0	**19**	**16**	**66**	**1,900**	**540.17**	**1,690**
DES-INF-ADM-30	11/29/10		<5.0	<0.50	<30	<5.0	<200	**2.0**	<5.0	<2.0	<0.50	**1.5**	**20**	**940**	**267.24**	**1,335**
DES-INF-ADM-31	1/18/11		<5.0	**1.2**	<30	<5.0	<200	**9.1**	<5.0	<2.0	**10**	**8.2**	**48**	**1,800**	**511.74**	--
DES-INF-ADM-32	2/28/11		<5.0	<0.50	<30	<5.0	<200	**2.8**	<5.0	<2.0	**1.0**	**1.3**	**15**	**360**	**102.35**	**850**
DES-INF-ADM-33	3/30/11		<5.0	**1.7**	<30	<5.0	<200	**15**	<5.0	<2.0	**21**	**15**	**79**	**1,600**	**454.88**	**1,600**
DES-INF-ADM-34	4/28/11		<5.0	**1.0**	<30	<5.0	<200	**13**	<5.0	<2.0	**17**	**15**	**72**	**1,500**	**430**	**1,650**
DES-INF-ADM-35	5/31/11		<5.0	<0.50	<30	<5.0	<200	**6.7**	<5.0	<2.0	**9.5**	**6.7**	**32**	**1,000**	**280**	**1,960**
DES-INF-ADM-36	6/29/11		<5.0	**1.3**	<30	<5.0	<200	**12**	<5.0	<2.0	**17**	**12**	**55**	**1,600**	**450**	--
DES-INF-ADM-37	7/28/11		<5.0	**1.1**	<30	<5.0	<200	**17**	<5.0	<2.0	**24**	**16**	**77**	**1,800**	**510**	**1,575**
DES-INF-ADM-38	8/30/11		<5.0	<0.50	<30	<5.0	<200	**12**	<5.0	<2.0	**8.6**	**11**	**54**	**1,300**	**370**	**1,765**
DES-INF-ADM-39	9/29/11		<5.0	<0.50	<30	<5.0	<200	**9.9**	<5.0	<2.0	**2.5**	**8.4**	**49**	**2,000**	**570**	**1,825**
DES-INF-ADM-40	10/27/11		<5.0	<0.50	<30	<5.0	<200	**6.7**	<5.0	<2.0	**1.9**	**6.4**	**37**	**1,000**	**280**	**1,850**
DES-INF-ADM-41	11/29/11		<5.0	<0.50	<30	<5.0	<200	**5.3**	<5.0	<2.0	**1.2**	**3.6**	**30**	**1,700**	**480**	**1,765**
DES-INF-ADM-42	12/29/11		<5.0	<0.50	<30	<5.0	<200	**5.7**	<5.0	<2.0	**1.4**	**5.5**	**36**	**1,200**	**340**	--
DES-INF-ADM-43	1/31/12		<5.0	<0.50	<30	<5.0	<200	**7.9**	<5.0	<2.0	**1.6**	**6.5**	**47**	**1,200**	**340**	**1,910**
DES-INF-ADM-44	2/29/12		<5.0	<0.50	<30	<5.0	<200	**10**	<5.0	<2.0	**1.7**	**8.2**	**59**	**1,700**	**480**	--
DES-INF-ADM-45	3/29/12		<5.0	<0.50	<30	<5.0	<200	**11**	<5.0	<2.0	**2.2**	**8.2**	**67**	**1,900**	**540**	**1,675**
DES-INF-ADM-46	4/23/12		<5.0	<0.50	<30	<5.0	<200	**9.4**	<5.0	<2.0	**0.99**	**6.4**	**59**	**1,500**	**430**	--
DES-INF-ADM-47	5/31/12		<5.0	<0.50	<30	<5.0	<200	**3.8**	<5.0	<2.0	<0.50	**2.6**	**40**	**1,700**	**480**	**1,880**
DES-INF-ADM-48	6/28/12		<5.0	<0.50	<30	<5.0	<200	**4.7**	<5.0	<2.0	<0.50	**2.6**	**33**	**1,300**	**370**	**2,000**
DES-INF-ADM-49	7/26/12		<5.0	<0.50	<30	<5.0	<200	**4.0**	<5.0	<2.0	<0.50	**2.1**	**27**	**1,100**	**310**	**1,860**
DES-INF-ADM-50	8/23/12		<5.0	<0.50	<30	<5.0	<200	**5.1**	<5.0	<2.0	<0.50	**3.5**	**36**	**1,400**	**400**	**1,675**
DES-INF-ADM-51	9/30/12		<5.0	<0.50	<30	<5.0	<200	**5.1**	<5.0	<2.0	**0.51**	**4.1**	**39**	**1,700**	**480**	--
DES-INF-ADM-52	10/31/12		<5.0	<0.50	<30	<5.0	<200	**3.1**	<5.0	<2.0	<0.50	**4.0**	**15**	**490**	**140**	**1,785**
DES-INF-ADM-53	11/29/12		<5.0	<0.50	<30	<5.0	<200	**0.6**	<5.0	<2.0	<0.50	<0.50	**4.8**	**1,100**	**310**	**1,485**
DES-INF-ADM-54	12/26/12		<5.0	<0.50	<30	<5.0	<200	**2.2**	<5.0	<2.0	<0.50	<0.50	**11**	**1,900**	**540**	**1,590**
DES-INF-ADM-55	1/31/13		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**1,100**
DES-INF-ADM-56	2/28/13		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**70**	**20**	**780**
DES-INF-ADM-57	3/28/13		<5.0	<0.50	<30	<5.0	<200	**4.0**	<5.0	<2.0	<0.50	**0.96**	**20**	**1,100**	**310**	**1,630**
DES-INF-ADM-58	4/30/13		<5.0	<0.50	<30	<5.0	<200	**4.1**	<5.0	<2.0	<0.50	**1.4**	**24**	**1,100**	**310**	**1,680**
DES-INF-ADM-59	5/30/13		<5.0	<0.50	<30	<5.0	<200	**4.1**	<5.0	<2.0	<0.50	**2.8**	**25**	**1,400**	**400**	**1,285**
DES-INF-ADM-60	6/27/13		<5.0	<0.50	<30	<5.0	<200	**1.9**	<5.0	<2.0	<0.50	**1.1**	**12**	**860**	**240**	**1,190**
DES-INF-ADM-61	7/31/13		<5.0	<0.50	<30	<5.0	<200	**2.5**	<5.0	<2.0	<0.50	**1.5**	**15**	**1,300**	**365.49**	**1,085**

TABLE 3
Historical Summary of Analytical Sampling Results - Influent Vapor
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Sample ID	Date Sampled	Notes	TAME (µg/L)	Benzene (µg/L)	TBA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)	Ethylbenzene (µg/L)	ETBE (µg/L)	MTBE (µg/L)	Toluene (µg/L)	o-Xylene (µg/L)	m,p-Xylenes (µg/L)	GRO as Hexane (µg/L)	GRO as Hexane (ppmv)	GRO Field PID Reading [A] (ppmv)
CHHSL - Industrial, Shallow Soil Gas (µg/L)			--	0.122	--	--	--	3.6	--		378	887	879	--	--	--
DES-INF-ADM-62	8/29/13		<5.0	<0.50	<30	<5.0	<200	**0.96**	<5.0	<2.0	<0.50	**4.0**	**6.2**	**1,700**	**477.95**	**885**
DES-INF-ADM-63	9/17/13		<5.0	**1.0**	<30	<5.0	<200	**16**	<5.0	<2.0	**27**	**26**	**110**	**2,900**	**815.33**	**1,585**
DES-INF-ADM-64	10/30/13		<5.0	**0.64**	<30	<5.0	<200	**14**	<5.0	<2.0	**21**	**25**	**110**	**2,300**	**646.64**	**1,235**
DES-INF-ADM-65	11/26/13		<5.0	**1.3**	<30	<5.0	<200	**12**	<5.0	<2.0	**19**	**22**	**110**	**1,900**	**534.18**	**1,470**
DES-INF-ADM-66	12/23/13		<5.0	**0.92**	<30	<5.0	<200	**13**	<5.0	<2.0	**20**	**21**	**120**	**1,700**	**477.95**	**980**
DES-INF-ADM-67	1/29/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**0.78**	**440**	**123.71**	**965**
DES-INF-ADM-68	2/20/14		<5.0	<0.50	<30	<5.0	<200	**0.83**	<5.0	<2.0	<0.50	<0.50	**6.1**	**660**	**185.56**	**895**
DES-INF-ADM-69	3/20/14		<5.0	<0.50	<30	<5.0	<200	**6.4**	<5.0	<2.0	**10**	**10**	**49**	**1,700**	**477.95**	**755**
DES-INF-ADM-70	4/22/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**0.56**	**800**	**224.92**	**1,370**
DES-INF-ADM-71	5/29/14		<5.0	**0.50**	<30	<5.0	<200	**8.9**	<5.0	<2.0	**11**	**16**	**79**	**2,600**	**730.99**	**1,400**
DES-INF-ADM-72	6/24/14		<5.0	<0.50	<30	<5.0	<200	**6.5**	<5.0	<2.0	**9.0**	**12**	**59**	**2,100**	**590.41**	**1,060**
DES-INF-ADM-73	7/10/14		<5.0	<0.50	<30	<5.0	<200	**8.2**	<5.0	<2.0	**10**	**14**	**73**	**1,600**	**449.84**	**1,130**
DES-INF-ADM-74	9/17/14	1	<5.0	<0.50	<30	<5.0	<200	**8.7**	<5.0	<2.0	**9.6**	**15**	**69**	**1,200**	**337.38**	**979**
DES-INF-ADM-75	10/31/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.6	**575**
DES-INF-ADM-76	11/25/14		<5.0	<0.50	<30	<5.0	<200	**1.4**	<5.0	<2.0	**1.0**	**2.2**	**16**	**400**	**112.46**	**1,040**
DES-INF-ADM-77	12/22/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**3.6**	**670**	**188.37**	**1,180**
DES-INF-ADM-78	1/15/15		<5.0	<0.50	<30	<5.0	<200	**3.9**	<5.0	<2.0	**3.3**	**6.0**	**30**	**490**	**137.76**	**1,650**
DES-INF-ADM-79	2/24/15		<5.0	<0.50	<30	<5.0	<200	**6.7**	<5.0	<2.0	**4.8**	**12**	**63**	**1,500**	**421.72**	**1,100**
DES-INF-ADM-80	3/31/15		<5.0	<0.50	<30	<5.0	<200	**1.1**	<5.0	<2.0	**1.7**	**2.0**	**9.9**	**840**	**236.17**	**910**
DES-INF-ADM-81	4/30/15		<5.0	<0.50	<30	<5.0	<200	**2.6**	<5.0	<2.0	**2.4**	**4.6**	**21**	**640**	**180**	**178**
DES-INF-ADM-82	5/26/15		<5.0	<0.50	<30	<5.0	<200	**2.2**	<5.0	<2.0	**1.9**	**3.9**	**20**	**680**	**190**	**165**
DES-INF-ADM-83	6/29/15		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**5.6**	**390**	**110**	**120**
DES-INF-ADM-84	7/9/15		<5.0	<0.50	<30	<5.0	<200	**1.6**	<5.0	<2.0	**1.1**	**2.2**	**14**	**510**	**140**	**173**
DES-INF-ADM-85	8/12/15	2	<5.0	<0.50	<30	<5.0	<200	**2.5**	<5.0	<2.0	**1.4**	**3.9**	**22**	**620**	**180**	**181**
DES-INF-ADM-86	9/2/15		<5.0	<0.50	<30	<5.0	<200	**2.4**	<5.0	<2.0	**1.3**	**4.0**	**20**	**480**	**140**	**159**
DES-INF-ADM-87	10/14/15	3	<5.0	<0.50	<30	<5.0	<200	**1.2**	<5.0	<2.0	**0.70**	**1.5**	**8.2**	**200**	**57**	--
DES-INF-ADM-88	10/28/15		<5.0	<0.50	<30	<5.0	<200	**2.0**	<5.0	<2.0	**1.5**	**2.6**	**14**	**360**	**100**	**113**
DES-INF-ADM-89	11/18/15		<5.0	<0.50	<30	<5.0	<200	**1.9**	<5.0	<2.0	**1.2**	**2.6**	**14**	**360**	**100**	**105**
DES-INF-ADM-90	12/16/15		<5.0	<0.50	<30	<5.0	<200	**1.0**	<5.0	<2.0	**0.68**	**1.4**	**7.5**	**210**	**60**	**74**
DES-INF-ADM-91	1/6/16		<5.0	<0.50	<30	<5.0	<200	**0.99**	<5.0	<2.0	**0.73**	**1.3**	**7.8**	**330**	**94**	**92**
DES-INF-ADM-92	2/17/16	4,5	<5.0	<0.50	<30	<5.0	<200	**0.98**	<5.0	<2.0	**0.60**	**1.1**	**7.0**	**200**	**57**	**62**
DES-INF-ADM-93	3/23/16	2,6	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**73**
DES-INF-ADM-94	4/26/16		<5.0	<0.50	<30	<5.0	<200	**2.3**	<5.0	<2.0	**0.92**	**2.8**	**16**	**430**	**120**	**118**
DES-INF-ADM-95	5/19/16	7,8	<5.0	<0.50	<30	<5.0	<200	**3.4**	<5.0	<2.0	**2.2**	**3.6**	**26**	**640**	**180**	**200**
DES-INF-ADM-96	5/26/16	9	<5.0	<0.50	<30	<5.0	<200	**3.3**	<5.0	<2.0	**1.4**	**4.8**	**24**	**430**	**120**	**133**
DES-INF-ADM-97	6/15/16		<5.0	<0.50	<30	<5.0	<200	**4.0**	<5.0	<2.0	**1.5**	**5.6**	**26**	**520**	**150**	**141**
DES-INF-ADM-98	7/20/16		<5.0	**2.4**	<30	<5.0	<200	**2.7**	<5.0	<2.0	**1.5**	**4.5**	**19**	**420**	**120**	**130**
DES-INF-ADM-99	8/25/16		<5.0	<0.50	<30	<5.0	<200	**3.9**	<5.0	<2.0	**2.6**	**6.3**	**28**	**420**	**120**	**134**
DES-INF-ADM-100	9/22/16		<5.0	<0.50	<30	<5.0	<200	**2.3**	<5.0	<2.0	**0.93**	**3.3**	**17**	**390**	**110**	**120**
DES-INF-ADM-101	10/13/16	10	<5.0	<0.50	<30	<5.0	<200	**5.9**	<5.0	<2.0	**3.8**	**10**	**41**	**870**	**250**	**240**
DES-INF-ADM-102	12/13/16	11	<5.0	**1.8**	<30	<5.0	<200	**3.2**	<5.0	<2.0	**1.1**	**5.8**	**24**	**610**	**170**	**190**
DES-INF-ADM-103	1/30/17		<5.0	<0.50	<30	<5.0	<200	**4.2**	<5.0	<2.0	**1.9**	**8.4**	**33**	**620**	**180**	**172**
DES-INF-ADM-104	2/8/17		<5.0	**0.65**	<30	<5.0	<200	**4.6**	<5.0	<2.0	**2.2**	**10**	**38**	**750**	**210**	**190**
DES-INF-ADM-104	3/1/17	12	<5.0	<0.50	<30	<5.0	<200	**4.5**	<5.0	<2.0	**2.3**	**10**	**35**	**780**	**220**	**210**
DES-INF-ADM-105	4/30/17		<5.0	<0.50	<30	<5.0	<200	**3.2**	<5.0	<2.0	**1.8**	**6.6**	**24**	**490**	**140**	**165**

TABLE 3
Historical Summary of Analytical Sampling Results - Influent Vapor
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Sample ID	Date Sampled	Notes	TAME (µg/L)	Benzene (µg/L)	TBA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)	Ethylbenzene (µg/L)	ETBE (µg/L)	MTBE (µg/L)	Toluene (µg/L)	o-Xylene (µg/L)	m,p-Xylenes (µg/L)	GRO as Hexane (µg/L)	GRO as Hexane (ppmv)	GRO Field PID Reading [A] (ppmv)
CHHSL - Industrial, Shallow Soil Gas (µg/L)			--	0.122	--	--	--	3.6	--		378	887	879	--	--	--
DES-INF-ADM-106	5/25/17		<5.0	<0.50	<30	<5.0	<200	**3.4**	<5.0	<2.0	**1.6**	**8.0**	**27**	**520**	**150**	**175**
DES-INF-ADM-107	6/13/17		<5.0	<0.50	<30	<5.0	<200	**2.6**	<5.0	<2.0	**1.6**	**6.8**	**21**	**400**	**110**	**142**
DES-INF-ADM-108	7/20/17		<5.0	<0.50	<30	<5.0	<200	**2.5**	<5.0	<2.0	**1.9**	**7.0**	**23**	**570**	**160**	**180**
DES-INF-ADM-109	8/16/17		<5.0	<0.50	<30	<5.0	<200	**1.9**	<5.0	<2.0	**1.0**	**3.3**	**12**	**260**	**74**	**110**
DES-INF-ADM-110	9/13/17		<5.0	<0.50	<30	<5.0	<200	**2.6**	<5.0	<2.0	**3.9**	**7.0**	**23**	**410**	**120**	**132**
DES-INF-ADM-111	10/19/17		<5.0	<0.50	<30	<5.0	<200	**0.69**	<5.0	<2.0	**0.56**	**1.8**	**6.0**	**110**	**31**	**60**
DES-INF-ADM-112	11/30/17	13	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**48**	**16**	**40**
DES-INF-ADM-113	1/3/18	14	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**0.50**	**47**	**15**	**35**
DES-INF-ADM-114	1/18/18		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**1.2**	**60**	**17**	**41**
DES-INF-ADM-115	2/26/18		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**0.81**	**50**	**16**	**38**
DES-INF-ADM-116	3/27/18		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**1.8**	**70**	**21**	**45**
DES-INF-ADM-117	4/25/18	8	<5.0	<0.50	<30	<5.0	<200	**0.87**	<5.0	<2.0	<0.50	**1.4**	**3.2**	**150**	**39**	**49**
DES-INF-ADM-118	5/16/18		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	**0.50**	**1.4**	**72**	**23**	**31**
DES-INF-ADM-119	6/20/18	15	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**1.4**	**50**	**12**	**22**
DES-INF-ADM-120	7/18/18	16	<5.0	<0.50	<30	<5.0	<200	**1.8**	<5.0	<2.0	**0.69**	**4.1**	**16**	**260**	**63**	**66**
DES-INF-ADM-121	8/22/18	17	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	**0.61**	**2.5**	**69**	**17**	**38**
DES-INF-ADM-122	9/17/18	17	<5.0	<0.50	<30	<5.0	<200	**0.56**	<5.0	<2.0	<0.50	**1.2**	**5.3**	**140**	**34**	**50**
DES-INF-ADM-123	10/30/18	17	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	**0.74**	**3.0**	**140**	**30**	**40**
DES-INF-ADM-124	11/26/18	17	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**0.74**	**39**	**8.5**	**18**
DES-INF-ADM-125	12/20/18	17	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**10**
DES-INF-ADM-126	1/31/19	17	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**16**
DES-INF-ADM-127	2/26/19	17	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**14**
DES-INF-ADM-128	3/21/19	17	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**13**

***Legend / Notes*:**

TAME = tert-Amyl Methyl Ether
TBA = tert-Butyl alcohol
DIPE = Diisopropyl ether
ETBE = Ethyl-tert-Butyl Ether
MTBE = Methyl-tert-Butyl Ether
GRO = Gasoline range organics
µg/L = micrograms per liter
ppmv = parts per million by volume
PID = photoionization detector
-- = Not measured or not applicable
Detections are shown in **bold.**
<0.50 = Not detected at or above the indicated laboratory reporting limit.
CHHSL = California human health screening levels

A = Concentrations measured using calibrated PID (Mini Rae calibrated to Hexane).

1 = No extraction occurred during August 2014.
2 = Extraction isolated to wells VE-3 and VE-6D based on individual well field PID readings (Table 4) and analytical laboratory data (Table 5).
3 = Additional sample collected to assess decline in concentrations since August 12, 2015 optimization activities.
4 = Opened wells VE-8 and VE-11, and closed well VE-3 based on IW PID data.
5 = Wells AS-26 through AS-37, and VE-38 and VE-39 installed during February 2016 per SGI's January 15, 2016 *Work Plan to Expand Air Sparge and Soil Vapor Extraction Well Array*.
6 = Sample collected prior to changing open and closed wells configuration.
7 = Began expanded sparge and vapor extraction system operations on March 17, 2016 following the completion of well tie-in/hookup work.
8 = Extraction isolated to wells VE-6D and VE-38 (May 19, 2016) and well VE-6D (April 25, 2018) based on individual well field PID readings (Table 4) and analytical laboratory data (Table 5).
9 = Additional influent vapor sample collected for laboratory analysis to assess concentrations following startup of expanded sparge and vapor extraction system.
10 = System automatically shutdown on October 26, 2016 and was left off-line pending the completion of oxidizer troubleshooting and repair work.
11 = System temporarily restarted to collect laboratory samples in order to verify repair work was completed successfully (restart occurred on December 22, 2016 following analytical confirmation of effective removal efficiency).
12 = Sample ID inadvertently not increased by one unit.
13 = System automatically shutdown on November 3, 2017 due to damage to a nearby electrical service line from an automobile accident, and was restarted on November 30, 2017 following completion of repair work by utility company.
14 = System only temporarily operated for testing and to collect a process sample but otherwise off-line from January 2-9, 2018 for maintenance.
15 = System manually shutdown on June 29, 2018 for cycling due to low/asymptotic concentrations.
16 = System cycling began during July 2018 with approximately 1 week per month of operations to allow for more cost-effective treatment.
17 = System off-line for cycling prior to restart since August 6, 2018, August 24, 2018, September 17, 2018, November 5, 2018, November 30, 2018, December 23, 2018, February 7, 2019 and March 5, 2019, respectively.

TABLE 4
Historical Summary of Field Sampling Readings - Individual Well Vapor
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well Gasoline Range Organics Field Concentration (Parts per Million by Volume Measured via RAE Systems Model MiniRAE 3000 Photoionization Detector Equipped with a 10.6 Electron Volts Ultraviolet Lamp)																				
		Building 108													Building 113							
		VE-2	VE-3	VE-4	VE-5	VE-6S	VE-6D	VE-7	VE-8	VE-9	VE-10	VE-11	VE-38 *	VE-39 *	VE-20-S	VE-20-D	VE-21D	VE-22-D	VE-23-S	VE-23-D	VE-24-S	VE-24-D	VE-25-D
5/23/08	1	--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	--	NM	--	NM	NM	--	NM	NM
6/25/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	--	960	--	1,500	1,500	--	NM	1,500
8/4/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	425	425	425	865	865	--	865	865
8/26/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	585	585	585	1,350	1,350	--	1,350	1,350
9/5/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	600	600	600	1,385	1,385	--	1,385	1,385
9/12/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	550	550	550	1,400	1,400	--	1,400	1,400
9/19/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	550	550	550	1,425	1,425	--	1,425	1,425
9/24/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	575	575	575	1,385	1,385	--	1,385	1,385
9/29/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	580	580	580	1,350	1,350	--	1,350	1,350
10/2/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	550	550	550	1,300	1,300	--	1,300	1,300
10/11/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	585	585	585	1,340	1,340	--	1,340	1,340
10/15/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	600	600	600	1,365	1,365	--	1,365	1,365
10/23/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	610	610	610	1,265	1,265	--	1,265	1,265
10/30/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	585	585	585	1,295	1,295	--	1,295	1,295
11/4/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	600	600	600	1,250	1,250	--	1,250	1,250
11/10/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	580	580	580	1,290	1,290	--	1,290	1,290
11/21/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	600	600	600	1,300	1,300	--	1,300	1,300
11/24/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	600	600	600	1,250	1,250	--	1,250	1,250
12/1/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	585	585	585	1,285	1,285	--	1,285	1,285
12/8/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	560	560	560	1,260	1,260	--	1,260	1,260
12/17/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	570	570	570	1,290	1,290	--	1,290	1,290
12/22/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	475	475	475	1,100	1,100	--	1,100	1,100
12/29/08		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	425	425	425	1,300	1,300	--	1,300	1,300
1/9/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	460	460	460	1,275	1,275	--	1,275	1,275
1/15/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	450	450	450	1,200	1,200	--	1,200	1,200
1/23/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	430	430	430	1,175	1,175	--	1,175	1,175
2/3/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	340	340	340	1,185	1,185	--	1,185	1,185
2/13/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	325	325	325	1,150	1,150	--	1,150	1,150
2/20/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	365	365	365	1,100	1,100	--	1,100	1,100
2/24/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	400	400	400	1,120	1,120	--	1,120	1,120
3/5/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	410	410	410	1,080	1,080	--	1,080	1,080
3/10/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	370	370	370	1,190	1,190	--	1,190	1,190
3/20/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	285	285	285	1,225	1,225	--	1,225	1,225
3/26/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	300	300	300	1,200	1,200	--	1,200	1,200
4/2/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	290	290	290	1,275	1,275	--	1,275	1,275
4/10/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	250	250	250	1,200	1,200	--	1,200	1,200
4/17/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	265	265	265	1,175	1,175	--	1,175	1,175
4/21/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	270	270	270	1,150	1,150	--	1,150	1,150
4/29/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	285	285	285	1,100	1,100	--	1,100	1,100
5/6/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	250	250	250	1,100	1,100	--	1,100	1,100
5/14/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	220	220	220	1,150	1,150	--	1,150	1,150
5/21/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	275	275	275	1,275	1,275	--	1,275	1,275

TABLE 4
Historical Summary of Field Sampling Readings - Individual Well Vapor
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well Gasoline Range Organics Field Concentration (Parts per Million by Volume Measured via RAE Systems Model MiniRAE 3000 Photoionization Detector Equipped with a 10.6 Electron Volts Ultraviolet Lamp)																				
		Building 108													Building 113							
		VE-2	VE-3	VE-4	VE-5	VE-6S	VE-6D	VE-7	VE-8	VE-9	VE-10	VE-11	VE-38 *	VE-39 *	VE-20-S	VE-20-D	VE-21D	VE-22-D	VE-23-S	VE-23-D	VE-24-S	VE-24-D	VE-25-D
5/27/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	350	350	350	1,430	1,430	--	1,430	1,430
6/4/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	440	440	440	1,550	1,550	--	1,550	1,550
6/9/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	380	380	380	1,400	1,400	--	1,400	1,400
6/17/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	370	370	370	1,475	1,475	--	1,475	1,475
6/24/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	400	400	400	1,440	1,440	--	1,440	1,440
7/1/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	320	320	320	1,360	1,360	--	1,360	1,360
7/8/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	380	380	380	1,450	1,450	--	1,450	1,450
7/15/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	320	320	320	1,320	1,320	--	1,320	1,320
7/22/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	275	275	275	1,360	1,360	--	1,360	1,360
7/29/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	235	235	235	1,280	1,280	--	1,280	1,280
8/6/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	265	265	265	1,360	1,360	--	1,360	1,360
8/14/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	310	310	310	1,420	1,420	--	1,420	1,420
8/20/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	300	300	300	1,375	1,375	--	1,375	1,375
8/28/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	220	220	220	1,310	1,310	--	1,310	1,310
9/4/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	255	255	255	1,380	1,380	--	1,380	1,380
9/10/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	300	300	300	1,340	1,340	--	1,340	1,340
9/18/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	275	275	275	1,390	1,390	--	1,390	1,390
9/23/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	290	290	290	1,360	1,360	--	1,360	1,360
9/28/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	290	290	290	1,380	1,380	--	1,380	1,380
10/2/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	245	245	245	1,285	1,285	--	1,285	1,285
10/6/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	240	240	240	1,220	1,220	--	1,220	1,220
10/13/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	230	230	230	1,195	1,195	--	1,195	1,195
10/22/09		--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	240	240	240	1,225	1,225	--	1,225	1,225
10/30/09	2	--	--	--	--	--	--	--	--	--	--	--	NA	NA	--	270	270	270	1,100	1,100	--	1,100	1,100
11/6/09		1,350	5,850	4,100	275	15	2,500	1,335	1,050	370	130	750	NA	NA	--	--	--	--	--	--	--	--	--
12/21/09		280	9,999	1,500	370	12	2,125	935	1,785	445	600	800	NA	NA	--	--	--	--	--	--	--	--	--
1/29/10		208	8,800	1,950	325	10	4,100	1,060	1,625	465	635	710	NA	NA	--	--	--	--	--	--	--	--	--
2/26/10		200	7,900	2,200	310	11	3,700	1,100	1,425	390	650	725	NA	NA	--	--	--	--	--	--	--	--	--
4/1/10		185	7,000	2,050	300	11	3,510	1,175	1,340	400	575	735	NA	NA	--	--	--	--	--	--	--	--	--
4/30/10		190	7,200	1,980	275	11	3,250	1,200	1,280	365	510	710	NA	NA	--	--	--	--	--	--	--	--	--
5/26/10		210	2,980	1,290	145	13	8,100	345	265	110	165	175	NA	NA	--	--	--	--	--	--	--	--	--
7/1/10		205	3,600	1,450	130	12	7,500	300	315	85	135	151	NA	NA	--	--	--	--	--	--	--	--	--
7/28/10		165	3,950	875	77	10	4,150	175	330	69	123	137	NA	NA	--	--	--	--	--	--	--	--	--
8/5/10		47	4,550	408	58	NM	5,000	160	NM	NM	NM	NM	NA	NA	--	--	--	--	--	--	--	--	--
9/10/10		130	3,979	750	--	11	3,910	--	193	49	80	122	NA	NA	--	--	--	--	--	--	--	--	--
11/19/10		107	3,475	510	--	8.6	3,675	--	148	46	72	110	NA	NA	--	--	--	--	--	--	--	--	--
1/28/11		95	3,250	475	--	--	3,375	--	136	--	75	105	NA	NA	--	--	--	--	--	--	--	--	--
4/28/11	3	63	3,800	720	7.3	13	5,310	18	195	31	110	92	NA	NA	--	--	--	--	--	--	--	--	--
11/29/11		44	3,675	415	--	--	6,300	--	310	--	55	120	NA	NA	--	--	--	--	--	--	--	--	--
12/28/11		51	3,520	395	--	--	7,100	--	275	--	67	135	NA	NA	--	--	--	--	--	--	--	--	--
4/23/12	3	78	2,600	145	36	8.7	3,200	27	175	39	84	78	NA	NA	--	--	--	--	--	--	--	--	--
8/8/13	3	25	335	2.0	1.0	13	385	2.2	45	14	16	17	NA	NA	--	--	--	--	--	--	--	--	--

TABLE 4
Historical Summary of Field Sampling Readings - Individual Well Vapor
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well Gasoline Range Organics Field Concentration (Parts per Million by Volume Measured via RAE Systems Model MiniRAE 3000 Photoionization Detector Equipped with a 10.6 Electron Volts Ultraviolet Lamp)																				
		Building 108													Building 113								
		VE-2	VE-3	VE-4	VE-5	VE-6S	VE-6D	VE-7	VE-8	VE-9	VE-10	VE-11	VE-38 *	VE-39 *	VE-20-S	VE-20-D	VE-21D	VE-22-D	VE-23-S	VE-23-D	VE-24-S	VE-24-D	VE-25-D
10/30/13	3	31	910	5.1	4.2	12	1,655	3.6	64	19	17	21	NA	NA	--	--	--	--	--	--	--	--	--
12/23/13	3	22	775	4.5	4.0	11	1,800	4.0	60	17	16	23	NA	NA	--	--	--	--	--	--	--	--	--
4/22/14	3	135	258	14	8.3	13	1,845	10	135	16	7.9	14	NA	NA	--	--	--	--	--	--	--	--	--
9/25/14	3,4	33	547	12	17	21	1,550	19	310	193	89	63	NA	NA	--	--	--	--	--	--	--	--	--
10/31/14	3	259	368	144	173	3.1	1,400	127	134	4.1	6.3	103	NA	NA	--	--	--	--	--	--	--	--	--
1/8/15	3	NM	690	17	14	6.7	2,360	56	98	6.7	19	63	NA	NA	--	--	--	--	--	--	--	--	--
1/15/15	3,5	85	545	18	15	7.5	3,700	25	116	7.9	164	35	NA	NA	--	--	--	--	--	--	--	--	--
2/9/15	3,6	59	387	5.8	14	13	1,180	15	54	3.8	45	17	NA	NA	--	--	--	--	--	--	--	--	--
2/13/15	3,7	66	425	4.9	7.1	13	1,240	8.8	41	15	47	21	NA	NA	--	--	--	--	--	--	--	--	--
3/21/15	3	73	515	2.7	3.6	11	1,310	6.3	49	1.7	22	1.5	NA	NA	--	--	--	--	--	--	--	--	--
3/31/15	8	20	168	19	11	2.7	1,380	12	38	4.7	43	22	NA	NA	--	--	--	--	--	--	--	--	--
4/8/15	4	1.0	78	12	0.5	3.0	300	2.0	20	2.7	13	9.0	NA	NA	--	--	--	--	--	--	--	--	--
4/22/15	5	1.0	240	94	3.0	5.0	185	36	--	4.0	--	--	NA	NA	--	--	--	--	--	--	--	--	--
5/26/15		2.0	280	30	2.4	4.2	360	20	26	6.0	22	12	NA	NA	--	--	--	--	--	--	--	--	--
6/25/15		1.8	275	17	1.1	2.7	610	4.0	78	5.6	18	11	NA	NA	--	--	--	--	--	--	--	--	--
7/9/15		4.0	220	NM	--	--	400	16	32	--	NM	NM	NA	NA	--	--	--	--	--	--	--	--	--
8/12/15	9	3.0	180	11	1.0	2.0	320	11	16	4.0	12	8.0	NA	NA	--	--	--	--	--	--	--	--	--
9/2/15	10	4.1	140	16	1.9	2.7	280	14	28	5.4	15	10	NA	NA	--	--	--	--	--	--	--	--	--
10/2/15		4.5	39	3.3	3.9	8.0	120	7.0	23	2.2	7.2	1.6	NA	NA	--	--	--	--	--	--	--	--	--
11/11/15		3.0	60	6.9	3.7	2.6	140	11	20	3.7	9.2	4.7	NA	NA	--	--	--	--	--	--	--	--	--
12/8/15		2.2	78	9.4	2.1	2.3	160	8.1	16	2.5	10	7.7	NA	NA	--	--	--	--	--	--	--	--	--
1/6/16		11	24	6.0	3.0	9.0	200	17	12	13	8.0	16	NA	NA	--	--	--	--	--	--	--	--	--
2/17/16	11	10	11	8.0	2.0	6.0	120	12	27	10	14	28	NA	NA	--	--	--	--	--	--	--	--	--
3/23/16	12	7.8	54	4.3	6.1	4.8	100	15	18	6.9	11	6.6	NA	NA	--	--	--	--	--	--	--	--	--
4/26/16		11	47	5.9	8.3	7.1	160	10	16	9.3	6.3	14	NA	NA	--	--	--	--	--	--	--	--	--
5/26/16	13,14	6.7	27	6.1	4.7	8.2	120	18	10	12	9.3	18	220	13	--	--	--	--	--	--	--	--	--
6/15/16		4.3	38	5.1	6.3	10	128	9.2	14	7.7	8.2	10	190	12	--	--	--	--	--	--	--	--	--
7/20/16		7.7	42	10	8.1	6.9	100	14	20	12	5.4	12	140	19	--	--	--	--	--	--	--	--	--
8/25/16		6.0	20	2.7	3.1	12	120	6.7	13	4.4	10	7.7	160	17	--	--	--	--	--	--	--	--	--
9/22/16		10	24	11	4.1	8.8	90	8.7	16	8.1	7.3	14	120	15	--	--	--	--	--	--	--	--	--
10/10/16		12	16	1.5	2.5	3.1	32	7.2	3.0	1.8	1.0	16	330	12	--	--	--	--	--	--	--	--	--
12/22/16	15	9.0	20	9.0	7.0	8.0	80	11	10	6.0	4.0	13	260	18	--	--	--	--	--	--	--	--	--
1/30/17	15	6.0	28	7.0	6.0	6.0	70	8.0	15	5.0	3.0	12	300	11	--	--	--	--	--	--	--	--	--
2/8/17	16	6.0	26	6.0	5.0	4.0	45	6.0	12	4.0	3.0	11	280	10	--	--	--	--	--	--	--	--	--
3/1/17		4.0	18	3.0	2.0	3.0	60	5.0	8.0	2.0	1.0	10	310	7.0	--	--	--	--	--	--	--	--	--
4/6/17		7.0	13	4.0	4.0	2.0	48	6.0	6.0	2.0	2.0	9.0	240	14	--	--	--	--	--	--	--	--	--
5/10/17		11	16	5.1	3.3	4.9	66	7.0	9.2	3.1	1.7	10	260	12	--	--	--	--	--	--	--	--	--
6/13/17		11	38	3.0	5.5	2.7	72	4.4	7.3	4.0	3.4	8.1	200	9.0	--	--	--	--	--	--	--	--	--
7/20/17		10	24	4.1	8.3	4.7	78	6.2	9.0	3.9	2.2	13	220	16	--	--	--	--	--	--	--	--	--
8/16/17		8.1	18	2.1	5.0	3.4	40	4.4	5.9	1.9	1.7	6.2	140	10	--	--	--	--	--	--	--	--	--
9/13/17		9.3	14	0.9	3.0	1.8	52	3.1	4.3	1.1	0.9	11	160	14	--	--	--	--	--	--	--	--	--

TABLE 4
Historical Summary of Field Sampling Readings - Individual Well Vapor
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well Gasoline Range Organics Field Concentration (Parts per Million by Volume Measured via RAE Systems Model MiniRAE 3000 Photoionization Detector Equipped with a 10.6 Electron Volts Ultraviolet Lamp)																				
		Building 108													Building 113							
		VE-2	VE-3	VE-4	VE-5	VE-6S	VE-6D	VE-7	VE-8	VE-9	VE-10	VE-11	VE-38 *	VE-39 *	VE-20-S	VE-20-D	VE-21D	VE-22-D	VE-23-S	VE-23-D	VE-24-S	VE-24-D	VE-25-D
10/19/17		3.2	9	0.5	1.6	0.9	38	2.1	3.2	0.7	0.6	4.2	80	7.3	--	--	--	--	--	--	--	--	--
11/30/17	17	2.4	10	0.8	1.4	1.0	45	1.7	3.0	0.8	0.5	3.2	60	6.1	--	--	--	--	--	--	--	--	--
1/24/18	18	1.2	9	2.2	1.9	3.6	39	2.6	2.4	1.3	2.0	1.1	45	8.7	--	--	--	--	--	--	--	--	--
2/26/18		1.8	8	0.8	1.4	2.2	46	2.4	2.7	0.7	1.1	2.0	55	7.9	--	--	--	--	--	--	--	--	--
3/27/18		2.5	8	0.5	1.6	1.9	52	1.8	2.4	1.5	1.3	3.1	40	5.3	--	--	--	--	--	--	--	--	--
4/25/18	19	2.2	12	2.5	1.6	3.3	49	0.9	3.4	2.7	1.0	2.2	24	6.2	--	--	--	--	--	--	--	--	--
5/16/18		1.4	7.7	2.1	1.1	2.3	31	0.6	3.0	2.1	0.8	1.6	14	3.6	--	--	--	--	--	--	--	--	--
6/20/18	20	1.1	6.9	2.4	1.5	2.0	22	0.8	3.1	1.9	1.7	1.9	11	3.7	--	--	--	--	--	--	--	--	--
7/9/18	21	2.0	9.6	2.9	2.2	3.4	164	2.5	4.3	3.3	2.4	2.8	50	7.1	--	--	--	--	--	--	--	--	--
8/22/18	22	--	--	--	--	--	48	--	--	--	--	--	18	--	--	--	--	--	--	--	--	--	--
9/4/18	22	--	--	--	--	--	60	--	--	--	--	--	20	--	--	--	--	--	--	--	--	--	--
10/30/18	22	1.1	8.8	1.5	1.6	2.0	53	1.9	2.7	2.3	1.3	2.1	16	5.7	--	--	--	--	--	--	--	--	--
11/26/18	22	0.7	6.3	1.4	1.1	1.5	20	1.6	1.8	2.0	0.9	2.2	14	3.3	--	--	--	--	--	--	--	--	--
12/20/18	22	0.5	4.1	1.2	0.8	1.4	11	1.3	1.5	1.7	0.9	2.0	9.7	2.6	--	--	--	--	--	--	--	--	--
1/31/19	22	0.4	3.2	1.0	0.6	1.1	18	0.5	1.1	1.7	0.9	1.4	13	2.2	--	--	--	--	--	--	--	--	--
2/26/19	22	0.8	2.6	1.1	0.5	0.9	16	0.4	1.4	1.9	0.7	1.3	12	2.0	--	--	--	--	--	--	--	--	--
3/21/19	22	0.9	3.6	2.0	1.8	1.7	15	0.8	1.6	1.4	1.2	1.5	11	2.8	--	--	--	--	--	--	--	--	--

***Legend / Notes*:**

Conveyance piping combined in wells VE-20, VE-21 and VE-22, and wells VE-23, VE-24 and VE-25.

-- = Not measured, extraction well off line.
NA = Not applicable, extraction well not installed.
NM = Not measured, extraction well on line.
* = Wells installed during February 2016 per SGI's January 15, 2016 *Work Plan to Expand Air Sparge and Soil Vapor Extraction Well Array*.

1 = Vapor extraction system startup.
2 = Switched extraction from Building 113 to Building 108.
3 = Previously offline wells remained off line after soil vapor well survey was conducted.
4 = Shut down air sparge system.
5 = Restarted air sparge system.
6 = Began cycling online/offline sparge wells daily (5 on/5 off).
7 = Began cycling online/offline sparge wells twice per week (5 on/5 off).
8 = Opened all extraction wells.
9 = Extraction isolated to wells VE-3 and VE-6D based on individual well field PID readings and analytical laboratory data (Table 5).
10 = Began focused sparge system operations on August 20, 2015 by isolating injection to either wells AS-3 and AS-6 or AS-9 and AS-11 based on observation well analytical monitoring data (Table 7).
11 = Extraction isolated to wells VE-6D, VE-8 and VE-11 based on individual well field PID readings.
12 = Extraction again isolated to wells VE-3 and VE-6D based on individual well field PID readings and analytical laboratory data (Table 5).
13 = Began expanded sparge and vapor extraction system operations on March 17, 2016 following the completion of tie-in/hookup work to wells AS-26 through AS-37, and VE-38 and VE-39.
14 = Extraction isolated to wells VE-6D and VE-38 based on individual well PID readings and analytical laboratory data (Table 5).
15 = No extraction from October 26, 2016 to December 22, 2016, and January 18-27, 2017, pending the completion of oxidizer troubleshooting and repair work.
16 = No extraction from February 10-22, 2017 pending the completion of knockout control float switch assembly repair work.
17 = No extraction from November 3-30, 2017 pending the completion of regional electrical service line repair work by utility company.
18 = No extraction from January 2-9, 2018 due to power outage and pending the completion of maintenance (excluding brief operational period on January 3, 2018 to temporarily test system and collect process sample, see Table 3).
19 = Extraction isolated to well VE-6D based on individual well field PID readings and analytical laboratory data (Table 5).
20 = System manually shutdown on June 29, 2018 for cycling due to low/asymptotic concentrations.
21 = System cycling began during July 2018 with approximately 1 week per month of operations to allow for more cost-effective treatment.
22 = System off-line for cycling prior to restart since August 6, 2018, August 24, 2018, September 17, 2018, November 5, 2018, November 30, 2018, December 23, 2018, February 7, 2019 and March 5, 2019, respectively.

TABLE 5
Historical Summary of Analytical Sampling Results - Individual Well Vapor
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Sample ID	Date Sampled	Notes	TAME (µg/L)	Benzene (µg/L)	TBA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)	Ethylbenzene (µg/L)	ETBE (µg/L)	MTBE (µg/L)	Toluene (µg/L)	o-Xylene (µg/L)	m,p-Xylenes (µg/L)	GRO as Hexane (µg/L)	GRO as Hexane (ppmv)	GRO Field PID Reading [A] (ppmv)
CHHSL - Industrial, Shallow Soil Gas (µg/L)			--	0.122	--	--	--	3.6	--		378	887	879	--	--	--
VE-2	4/28/11		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**28**	**8.0**	**63**
	4/23/12		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**0.71**	**48**	**14**	**78**
	10/31/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**259**
	3/31/15		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**20**
VE-3	4/28/11		<5.0	**0.71**	<30	<5.0	<200	**19**	<5.0	<2.0	**18**	**21**	**100**	**2,200**	**630**	**3,800**
	4/23/12		<5.0	<0.50	<30	<5.0	<200	**9.5**	<5.0	<2.0	**0.99**	**6.0**	**57**	**1,800**	**510**	**2,600**
	10/31/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**368**
	3/31/15		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**170**	**48**	**168**
	1/6/16		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	**0.76**	<0.50	**0.84**	**24**	**6.8**	**24**
	6/28/18	1	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**0.50**	<20	<4.9	**6.9**
VE-4	4/28/11		<5.0	**0.71**	<30	<5.0	<200	**0.61**	<5.0	<2.0	**0.93**	**2.1**	**4.5**	**580**	**160**	**720**
	4/23/12		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**3.4**	**110**	**31**	**145**
	10/31/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**144**
	3/31/15		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**19**
VE-5	4/28/11	2	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**0.95**	**25**	**7.1**	**7.3**
	4/23/12		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**36**
	10/31/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**173**
	3/31/15		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**11**
VE-6S	4/23/12	3	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**8.7**
	10/31/14		--	--	--	--	--	--	--	--	--	--	--	--	--	**3.1**
	3/31/15		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**2.7**
VE-6D	4/28/11		<5.0	**15**	<30	<5.0	<200	**32**	<5.0	<2.0	**150**	**45**	**150**	**2,800**	**800**	**5,310**
	4/23/12		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**2,000**	**570**	**3,200**
	10/31/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**230**	**65**	**1,400**
	3/31/15		<5.0	<0.50	<30	<5.0	<200	**3.0**	<5.0	<2.0	**3.0**	**6.3**	**35**	**1,200**	**340**	**1,380**
	1/6/16		<5.0	<0.50	<30	<5.0	<200	**1.8**	<5.0	<2.0	**1.3**	**2.6**	**15**	**670**	**190**	**200**
	10/10/16		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**71**	**20**	**32**
	3/1/17		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**1.5**	**130**	**37**	**60**
	10/19/17		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**58**	**16**	**38**
	6/28/18	1	<5.0	<0.50	<30	<5.0	<200	**0.73**	<5.0	<2.0	<0.50	<0.50	**1.0**	**42**	**10**	**22**
VE-7	4/28/11	2	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**22.0**	**6.3**	**18**
	4/23/12		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**27**
	10/31/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**127**
	3/31/15		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**12**
VE-8	4/28/11		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**1.0**	**60**	**17**	**195**
	4/23/12		<5.0	**0.52**	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**0.84**	**120**	**34**	**175**
	10/31/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**134**
	3/31/15		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**32**	**9.1**	**38**
	6/28/18	1	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<4.9	**3.1**
VE-9	4/28/11	3	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**24**	**6.8**	**31**
	4/23/12		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**39**
	10/31/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**4.1**
	3/31/15		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**4.7**

TABLE 5
Historical Summary of Analytical Sampling Results - Individual Well Vapor
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Sample ID	Date Sampled	Notes	TAME (µg/L)	Benzene (µg/L)	TBA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)	Ethylbenzene (µg/L)	ETBE (µg/L)	MTBE (µg/L)	Toluene (µg/L)	o-Xylene (µg/L)	m,p-Xylenes (µg/L)	GRO as Hexane (µg/L)	GRO as Hexane (ppmv)	GRO Field PID Reading [A] (ppmv)
CHHSL - Industrial, Shallow Soil Gas (µg/L)			--	0.122	--	--	--	3.6	--		378	887	879	--	--	--
VE-10	4/28/11		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	**0.85**	**66**	**19**	**110**
	10/31/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**6.3**
	3/31/15		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**89**	**25**	**43**
VE-11	4/28/11		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**65**	**18**	**92**
	4/23/12		<5.0	**0.50**	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**44**	**13**	**78**
	10/31/14		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**103**
	3/31/15		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**22**
VE-38	5/17/16	4	<5.0	<0.50	<30	<5.0	<200	**6.0**	<5.0	<2.0	<0.50	**4.6**	**30**	**1,100**	**310**	**240**
	10/10/16		<5.0	**1.4**	<30	<5.0	<200	**6.9**	<5.0	<2.0	**3.1**	**12**	**49**	**1,300**	**370**	**330**
	3/1/17		<5.0	<0.50	<30	<5.0	<200	**6.2**	<5.0	<2.0	**3.2**	**14**	**48**	**1,000**	**280**	**310**
	10/19/17		<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**80**
	6/28/18	1	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**11**
VE-39	5/17/16	4	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	**38**	**11**	**18**
	6/28/18	1	<5.0	<0.50	<30	<5.0	<200	<0.50	<5.0	<2.0	<0.50	<0.50	<0.50	<20	<5.7	**3.7**
VE-AS-20S	12/14/17	5	<5.0	<1.0	<20	<5.0	<200	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	**NA**	**NA**	**12**
VE-AS-21	12/14/17	5	<5.0	<1.0	<20	<5.0	<200	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	**NA**	**NA**	**10**
VE-AS-22	12/14/17	5	<5.0	<1.0	<20	<5.0	<200	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	**NA**	**NA**	**14**
VE-AS-23S	12/14/17	5	<5.0	<1.0	<20	<5.0	<200	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	**NA**	**NA**	**20**
VE-AS-24S	12/14/17	5	<5.0	<1.0	<20	<5.0	<200	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	**NA**	**NA**	**32**
VE-AS-25	12/14/17	5	<5.0	<1.0	<20	<5.0	<200	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	**NA**	**NA**	**18**

***Legend / Notes*:**

TAME = tert-Amyl Methyl Ether
TBA = tert-Butyl alcohol
DIPE = Diisopropyl ether
ETBE = Ethyl-tert-Butyl Ether
MTBE = Methyl-tert-Butyl Ether
GRO = gasoline range organics
PID = photoionization detector

µg/L = micrograms per liter
ppmv = parts per million by volume
CHHSL = California human health screening levels
NA = Not analyzed

Detections are shown in **bold.**

<0.50 = Not detected at or above the indicated laboratory reporting limit.
-- = Not applicable or not sampled
A = Concentrations measured using calibrated field PID (RAE Systems Model MiniRAE 3000 equipped with a 10.6 electron volts ultraviolet lamp and calibrated to Hexane).

1 = Well sampled to confirm system cycling is warranted (i.e., verify low/asymptotic concentration conditions) and provide baseline analytical data from which to compare future rebound levels.
2 = Well closed on September 10, 2010.
3 = Well closed on January 28, 2012.
4 = Well installed during February 2016 as part of SGI's January 15, 2016 *Work Plan to Expand Air Sparge and Soil Vapor Extraction Well Array* with tie-in/hookup to system completed by mid-May 2016.
5 = Well sampled as part of assessment to potentially expand existing vapor extraction well network with only constituent compounds of interest analyzed since estimate of mass removal not applicable (i.e., GRO lab data not required).

TABLE 6A

Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Original Sparge Well Network

DFSP San Pedro Administration Area

3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 South and West										Building 108 North and East											
		AS-3		AS-6		AS-8		AS-9		AS-11		AS-2		AS-4		AS-5		AS-7		AS-10		AS-33 *	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
1/18/11		14.0	4.0	14.0	4.0	14.0	4.0	14.0	4.0	14.0	4.0	10.0	4.5	10.0	4.5	--	--	--	--	10.0	4.5	NA	NA
1/24/11		13.5	4.3	13.5	4.3	13.5	4.3	13.5	4.3	13.5	4.3	11.0	4.8	11.0	4.8	--	--	--	--	11.0	4.8	NA	NA
1/28/11		14.0	4.3	14.0	4.3	14.0	4.3	--	--	14.0	4.3	11.0	4.8	11.0	4.8	--	--	--	--	11.0	4.8	NA	NA
2/7/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
2/14/11		14.5	4.0	14.5	4.0	14.5	4.0	--	--	14.5	4.0	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
2/21/11		13.0	4.3	13.0	4.3	13.0	4.3	--	--	13.0	4.3	11.5	4.5	11.5	4.5	--	--	--	--	11.5	4.5	NA	NA
2/28/11		12.5	4.5	12.5	4.5	12.5	4.5	--	--	12.5	4.5	12.0	4.8	12.0	4.8	--	--	--	--	12.0	4.8	NA	NA
3/11/11		13.0	4.5	13.0	4.5	13.0	4.5	--	--	13.0	4.5	11.5	4.8	11.5	4.8	--	--	--	--	11.5	4.8	NA	NA
3/18/11		14.0	4.3	14.0	4.3	14.0	4.3	--	--	14.0	4.3	10.5	4.5	10.5	4.5	--	--	--	--	10.5	4.5	NA	NA
3/24/11		13.5	4.3	13.5	4.3	13.5	4.3	--	--	13.5	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
3/30/11		14.0	4.3	14.0	4.3	14.0	4.3	--	--	14.0	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
4/8/11		14.5	4.0	14.5	4.0	14.5	4.0	--	--	14.5	4.0	10.0	4.3	10.0	4.3	--	--	--	--	10.0	4.3	NA	NA
4/15/11		13.5	4.0	13.5	4.0	13.5	4.0	--	--	13.5	4.0	10.0	4.3	10.0	4.3	--	--	--	--	10.0	4.3	NA	NA
4/22/11		14.0	4.0	14.0	4.0	14.0	4.0	--	--	14.0	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
4/28/11		15.0	3.8	15.0	3.8	15.0	3.8	--	--	15.0	3.8	8.0	4.0	8.0	4.0	--	--	--	--	8.0	4.0	NA	NA
5/6/11		14.5	3.8	14.5	3.8	14.5	3.8	--	--	14.5	3.8	8.5	4.0	8.5	4.0	--	--	--	--	8.5	4.0	NA	NA
5/13/11		13.0	4.0	13.0	4.0	13.0	4.0	--	--	13.0	4.0	9.0	4.3	9.0	4.3	--	--	--	--	9.0	4.3	NA	NA
5/20/11		13.5	3.8	13.5	3.8	13.5	3.8	--	--	13.5	3.8	8.5	4.0	8.5	4.0	--	--	--	--	8.5	4.0	NA	NA
5/27/11		14.0	3.8	14.0	3.8	14.0	3.8	--	--	14.0	3.8	8.5	4.0	8.5	4.0	--	--	--	--	8.5	4.0	NA	NA
5/31/11		13.5	4.0	13.5	4.0	13.5	4.0	--	--	13.5	4.0	9.0	4.3	9.0	4.3	--	--	--	--	9.0	4.3	NA	NA
6/10/11		13.0	3.8	13.0	3.8	13.0	3.8	--	--	13.0	3.8	9.5	4.0	9.5	4.0	--	--	--	--	9.5	4.0	NA	NA
6/16/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
6/24/11		14.0	3.8	14.0	3.8	14.0	3.8	--	--	14.0	3.8	9.0	4.0	9.0	4.0	--	--	--	--	9.0	4.0	NA	NA
6/29/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
7/6/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
7/15/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
7/21/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
7/28/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
8/4/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
8/12/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
8/19/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
8/26/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
8/30/11		NM	NM	NM	NM	NM	NM	--	--	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
9/9/11		16.0	5.5	16.0	5.5	16.0	5.5	--	--	16.0	5.5	13.0	5.8	13.0	5.8	--	--	--	--	13.0	5.8	NA	NA
9/16/11		15.5	5.0	15.5	5.0	15.5	5.0	--	--	15.5	5.0	14.0	5.3	14.0	5.3	--	--	--	--	14.0	5.3	NA	NA
9/23/11		16.0	5.0	16.0	5.0	16.0	5.0	--	--	16.0	5.0	13.5	5.0	13.5	5.0	--	--	--	--	13.5	5.0	NA	NA
9/29/11		17.0	4.5	17.0	4.5	17.0	4.5	--	--	17.0	4.5	12.5	5.0	12.5	5.0	--	--	--	--	12.5	5.0	NA	NA
10/7/11		15.5	4.3	15.5	4.3	15.5	4.3	--	--	15.5	4.3	12.0	4.8	12.0	4.8	--	--	--	--	12.0	4.8	NA	NA

TABLE 6A
Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Original Sparge Well Network
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 South and West										Building 108 North and East											
		AS-3		AS-6		AS-8		AS-9		AS-11		AS-2		AS-4		AS-5		AS-7		AS-10		AS-33 *	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
10/11/11		16.0	4.3	16.0	4.3	16.0	4.3	16.0	4.3	16.0	4.3	12.0	4.8	12.0	4.8	--	--	--	--	12.0	4.8	NA	NA
10/20/11		14.5	4.0	14.5	4.0	14.5	4.0	14.5	4.0	14.5	4.0	11.5	4.5	11.5	4.5	--	--	--	--	11.5	4.5	NA	NA
10/27/11		14.0	4.0	14.0	4.0	14.0	4.0	14.0	4.0	14.0	4.0	12.0	4.5	12.0	4.5	--	--	--	--	12.0	4.5	NA	NA
11/4/11		14.5	4.3	14.5	4.3	14.5	4.3	14.5	4.3	14.5	4.3	11.5	4.8	11.5	4.8	--	--	--	--	11.5	4.8	NA	NA
11/7/11		12.0	3.8	12.0	3.8	12.0	3.8	12.0	3.8	12.0	3.8	10.0	4.0	10.0	4.0	--	--	--	--	10.0	4.0	NA	NA
11/11/11		12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
11/17/11		15.0	4.3	15.0	4.3	15.0	4.3	15.0	4.3	15.0	4.3	10.5	4.8	10.5	4.8	--	--	--	--	10.5	4.8	NA	NA
11/23/11		13.5	4.3	13.5	4.3	13.5	4.3	13.5	4.3	13.5	4.3	10.5	4.5	10.5	4.5	--	--	--	--	10.5	4.5	NA	NA
11/29/11		13.0	4.0	13.0	4.0	13.0	4.0	13.0	4.0	13.0	4.0	10.0	4.3	10.0	4.3	--	--	--	--	10.0	4.3	NA	NA
12/8/11		13.5	4.0	13.5	4.0	13.5	4.0	13.5	4.0	13.5	4.0	10.5	4.5	10.5	4.5	--	--	--	--	10.5	4.5	NA	NA
12/15/11		13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	10.5	4.5	10.5	4.5	--	--	--	--	10.5	4.5	NA	NA
12/21/11		13.0	4.0	13.0	4.0	13.0	4.0	13.0	4.0	13.0	4.0	10.0	4.3	10.0	4.3	--	--	--	--	10.0	4.3	NA	NA
12/28/11		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	10.5	4.5	10.5	4.5	--	--	--	--	10.5	4.5	NA	NA
1/6/12		13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	10.0	4.5	10.0	4.5	--	--	--	--	10.0	4.5	NA	NA
1/12/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
1/20/12		13.0	4.0	13.0	4.0	13.0	4.0	--	--	13.0	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
1/25/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	10.5	4.5	10.5	4.5	--	--	--	--	10.5	4.5	NA	NA
1/31/12		13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
2/2/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
2/9/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	11.5	4.5	11.5	4.5	--	--	--	--	11.5	4.5	NA	NA
2/17/12		12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	11.0	4.3	11.0	4.3	--	--	--	--	11.0	4.3	NA	NA
2/24/12		12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	11.0	4.3	11.0	4.3	--	--	--	--	11.0	4.3	NA	NA
2/28/12		13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	10.5	4.5	10.5	4.5	--	--	--	--	10.5	4.5	NA	NA
3/5/12		13.5	4.3	13.5	4.3	13.5	4.3	13.5	4.3	13.5	4.3	11.5	4.5	11.5	4.5	--	--	--	--	11.5	4.5	NA	NA
3/15/12		13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
3/22/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
3/29/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
4/6/12		13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
4/13/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	10.5	4.5	10.5	4.5	--	--	--	--	10.5	4.5	NA	NA
4/19/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
4/23/13		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
4/27/12		13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	11.5	4.5	11.5	4.5	--	--	--	--	11.5	4.5	NA	NA
5/4/12		12.0	4.3	12.0	4.3	12.0	4.3	12.0	4.3	12.0	4.3	11.5	4.3	11.5	4.3	--	--	--	--	11.5	4.3	NA	NA
5/10/12		12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
5/18/12		13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
5/23/12		13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
5/31/12		13.5	4.3	13.5	4.3	13.5	4.3	13.5	4.3	13.5	4.3	10.5	4.5	10.5	4.5	--	--	--	--	10.5	4.5	NA	NA
6/5/12		13.5	4.3	13.5	4.3	13.5	4.3	13.5	4.3	13.5	4.3	10.0	4.5	10.0	4.5	--	--	--	--	10.0	4.5	NA	NA

TABLE 6A

Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Original Sparge Well Network

DFSP San Pedro Administration Area

3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 South and West										Building 108 North and East											
		AS-3		AS-6		AS-8		AS-9		AS-11		AS-2		AS-4		AS-5		AS-7		AS-10		AS-33 *	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
6/13/12		12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
6/20/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
6/28/12		13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	10.5	4.5	10.5	4.5	--	--	--	--	10.5	4.5	NA	NA
7/6/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
7/13/12		13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	13.0	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
7/19/12		13.5	4.0	13.5	4.0	13.5	4.0	13.5	4.0	13.5	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
7/26/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
7/31/12		12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	12.5	4.3	11.5	4.5	11.5	4.5	--	--	--	--	11.5	4.5	NA	NA
8/8/12		12.0	4.3	12.0	4.3	12.0	4.3	12.0	4.3	12.0	4.3	11.0	4.5	11.0	4.5	--	--	--	--	11.0	4.5	NA	NA
8/17/12		12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	11.0	4.3	11.0	4.3	--	--	--	--	11.0	4.3	NA	NA
8/23/12		11.5	4.0	11.5	4.0	11.5	4.0	11.5	4.0	11.5	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
8/29/12		12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	10.0	4.3	10.0	4.3	--	--	--	--	10.0	4.3	NA	NA
9/5/12		12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
9/13/12		12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	10.0	4.3	10.0	4.3	--	--	--	--	10.0	4.3	NA	NA
9/20/12		12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
9/26/12		12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	12.5	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
10/4/12		12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
10/12/12		12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	10.0	4.3	10.0	4.3	--	--	--	--	10.0	4.3	NA	NA
10/16/12		11.5	4.0	11.5	4.0	11.5	4.0	11.5	4.0	11.5	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
10/25/12		12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	10.0	4.3	10.0	4.3	--	--	--	--	10.0	4.3	NA	NA
10/31/12		12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	12.0	4.0	10.5	4.3	10.5	4.3	--	--	--	--	10.5	4.3	NA	NA
11/9/12		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
11/14/12		11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	10.0	4.0	10.0	4.0	--	--	--	--	10.0	4.0	NA	NA
11/21/12		12.0	3.8	12.0	3.8	12.0	3.8	12.0	3.8	12.0	3.8	10.0	4.0	10.0	4.0	--	--	--	--	10.0	4.0	NA	NA
11/29/12		11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	10.5	4.0	10.5	4.0	--	--	--	--	10.5	4.0	NA	NA
12/7/12		11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	10.0	4.0	10.0	4.0	--	--	--	--	10.0	4.0	NA	NA
12/12/12		11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	10.5	4.0	10.5	4.0	--	--	--	--	10.5	4.0	NA	NA
12/19/12		12.0	3.8	12.0	3.8	12.0	3.8	12.0	3.8	12.0	3.8	10.0	4.0	10.0	4.0	--	--	--	--	10.0	4.0	NA	NA
12/26/12		12.0	3.8	12.0	3.8	12.0	3.8	12.0	3.8	12.0	3.8	10.5	4.0	10.5	4.0	--	--	--	--	10.5	4.0	NA	NA
1/4/13		11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.0	3.8	11.0	3.8	--	--	--	--	11.0	3.8	NA	NA
1/10/13		11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	10.5	4.0	10.5	4.0	--	--	--	--	10.5	4.0	NA	NA
1/17/13		12.0	3.5	12.0	3.5	12.0	3.5	12.0	3.5	12.0	3.5	11.0	3.8	11.0	3.8	--	--	--	--	11.0	3.8	NA	NA
1/24/13		12.0	3.5	12.0	3.5	12.0	3.5	12.0	3.5	12.0	3.5	10.5	3.8	10.5	3.8	--	--	--	--	10.5	3.8	NA	NA
1/31/13		11.0	3.8	11.0	3.8	11.0	3.8	11.0	3.8	11.0	3.8	10.5	4.0	10.5	4.0	--	--	--	--	10.5	4.0	NA	NA
2/6/13		11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	10.5	4.0	10.5	4.0	--	--	--	--	10.5	4.0	NA	NA
2/15/13		12.0	3.5	12.0	3.5	12.0	3.5	12.0	3.5	12.0	3.5	11.0	3.8	11.0	3.8	--	--	--	--	11.0	3.8	NA	NA
2/21/13		11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.0	3.8	11.0	3.8	--	--	--	--	11.0	3.8	NA	NA
2/28/13		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA

TABLE 6A

Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Original Sparge Well Network

DFSP San Pedro Administration Area

3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 South and West										Building 108 North and East											
		AS-3		AS-6		AS-8		AS-9		AS-11		AS-2		AS-4		AS-5		AS-7		AS-10		AS-33 *	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
3/7/13		12.5	3.8	12.5	3.8	12.5	3.8	12.5	3.8	12.5	3.8	10.0	4.0	10.0	4.0	--	--	--	--	10.0	4.0	NA	NA
3/14/13		11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	10.5	4.0	10.5	4.0	--	--	--	--	10.5	4.0	NA	NA
3/21/13		12.0	3.5	12.0	3.5	12.0	3.5	12.0	3.5	12.0	3.5	10.5	3.8	10.5	3.8	--	--	--	--	10.5	3.8	NA	NA
3/28/13		12.5	3.5	12.5	3.5	12.5	3.5	12.5	3.5	12.5	3.5	11.0	3.8	11.0	3.8	--	--	--	--	11.0	3.8	NA	NA
4/10/13		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
4/11/13		11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	10.5	4.0	10.5	4.0	--	--	--	--	10.5	4.0	NA	NA
4/16/13		11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	10.5	3.8	10.5	3.8	--	--	--	--	10.5	3.8	NA	NA
4/24/13		11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	10.0	4.0	10.0	4.0	--	--	--	--	10.0	4.0	NA	NA
4/30/13		11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	10.5	3.8	10.5	3.8	--	--	--	--	10.5	3.8	NA	NA
5/8/13		12.0	3.8	12.0	3.8	12.0	3.8	12.0	3.8	12.0	3.8	10.5	4.0	10.5	4.0	--	--	--	--	10.5	4.0	NA	NA
5/15/13		11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	10.0	3.8	10.0	3.8	--	--	--	--	10.0	3.8	NA	NA
5/21/13		11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	10.5	3.8	10.5	3.8	--	--	--	--	10.5	3.8	NA	NA
5/30/13		11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	11.5	3.8	10.0	4.0	10.0	4.0	--	--	--	--	10.0	4.0	NA	NA
6/5/13		11.0	3.8	11.0	3.8	11.0	3.8	11.0	3.8	11.0	3.8	10.5	4.0	10.5	4.0	--	--	--	--	10.5	4.0	NA	NA
6/11/13		11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	10.5	3.8	10.5	3.8	--	--	--	--	10.5	3.8	NA	NA
6/14/13		12.0	3.5	12.0	3.5	12.0	3.5	12.0	3.5	12.0	3.5	10.0	3.8	10.0	3.8	--	--	--	--	10.0	3.8	NA	NA
6/19/13		11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	10.0	3.8	10.0	3.8	--	--	--	--	10.0	3.8	NA	NA
6/24/13		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
6/27/13		11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	10.0	3.8	10.0	3.8	--	--	--	--	10.0	3.8	NA	NA
7/1/13		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
7/5/13		12.5	3.8	12.5	3.8	12.5	3.8	12.5	3.8	12.5	3.8	10.0	4.0	10.0	4.0	--	--	--	--	10.0	4.0	NA	NA
7/11/13		11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	11.5	3.5	10.5	3.8	10.5	3.8	--	--	--	--	10.5	3.8	NA	NA
7/15/13		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
7/19/13		13.0	3.8	13.0	3.8	13.0	3.8	13.0	3.8	13.0	3.8	11.0	4.0	11.0	4.0	--	--	--	--	11.0	4.0	NA	NA
7/25/13		13.5	3.8	13.5	3.8	13.5	3.8	13.5	3.8	13.5	3.8	11.5	4.3	11.5	4.3	--	--	--	--	11.5	4.3	NA	NA
7/31/13		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	--	--	--	--	NM	NM	NA	NA
8/8/13		13.5	3.8	13.5	3.8	13.5	3.8	13.5	3.8	13.5	3.8	14.5	4.5	14.5	4.5	--	--	--	--	14.5	4.5	NA	NA
8/16/13		14.0	3.8	14.0	3.8	14.0	3.8	14.0	3.8	14.0	3.8	14.5	4.5	14.5	4.5	--	--	--	--	14.5	4.5	NA	NA
8/20/13		14.5	3.8	14.5	3.8	14.5	3.8	14.5	3.8	14.5	3.8	14.0	4.8	14.0	4.8	--	--	--	--	14.0	4.8	NA	NA
8/29/13		13.5	3.5	13.5	3.5	13.5	3.5	13.5	3.5	13.5	3.5	12.5	4.3	12.5	4.3	--	--	--	--	12.5	4.3	NA	NA
9/4/13		13.5	3.8	13.5	3.8	13.5	3.8	13.5	3.8	13.5	3.8	12.0	4.3	12.0	4.3	--	--	--	--	12.0	4.3	NA	NA
9/5/13		13.5	3.8	13.5	3.8	13.5	3.8	13.5	3.8	13.5	3.8	12.0	4.3	12.0	4.3	--	--	--	--	12.0	4.3	NA	NA
9/9/13		14.0	3.8	14.0	3.8	14.0	3.8	14.0	3.8	14.0	3.8	12.0	4.3	12.0	4.3	--	--	--	--	12.0	4.3	NA	NA
9/10/13		14.0	3.8	14.0	3.8	14.0	3.8	14.0	3.8	14.0	3.8	12.0	4.3	12.0	4.3	--	--	--	--	12.0	4.3	NA	NA
9/17/13		14.5	3.8	14.5	3.8	14.5	3.8	14.5	3.8	14.5	3.8	12.0	4.3	12.0	4.3	--	--	--	--	12.0	4.3	NA	NA
9/27/13		15.0	4.0	15.0	4.0	15.0	4.0	15.0	4.0	15.0	4.0	12.5	4.3	12.5	4.3	--	--	--	--	12.5	4.3	NA	NA
10/2/13		14.5	4.0	14.5	4.0	14.5	4.0	14.5	4.0	14.5	4.0	13.0	4.3	13.0	4.3	--	--	--	--	13.0	4.3	NA	NA
10/9/13		15.0	4.3	15.0	4.3	15.0	4.3	15.0	4.3	15.0	4.3	13.5	4.5	13.5	4.5	--	--	--	--	13.5	4.5	NA	NA

TABLE 6A

Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Original Sparge Well Network

DFSP San Pedro Administration Area

3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 South and West										Building 108 North and East											
		AS-3		AS-6		AS-8		AS-9		AS-11		AS-2		AS-4		AS-5		AS-7		AS-10		AS-33 *	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
10/17/13		14.5	4.3	14.5	4.3	14.5	4.3	14.5	4.3	14.5	4.3	13.5	4.5	13.5	4.5	--	--	--	--	13.5	4.5	NA	NA
10/24/13		15.0	4.5	15.0	4.5	15.0	4.5	15.0	4.5	15.0	4.5	14.0	4.8	14.0	4.8	--	--	--	--	14.0	4.8	NA	NA
10/30/13		13.5	3.8	13.5	3.8	13.5	3.8	13.5	3.8	13.5	3.8	14.5	4.5	14.5	4.5	--	--	--	--	14.5	4.5	NA	NA
11/8/13		15.0	3.8	15.0	3.8	15.0	3.8	15.0	3.8	15.0	3.8	14.0	4.5	14.0	4.5	--	--	--	--	14.0	4.5	NA	NA
11/15/13		15.5	4.3	15.5	4.3	15.5	4.3	15.5	4.3	15.5	4.3	14.5	4.5	14.5	4.5	--	--	--	--	14.5	4.5	NA	NA
11/21/13		16.0	4.5	16.0	4.5	16.0	4.5	16.0	4.5	16.0	4.5	15.0	4.8	15.0	4.8	--	--	--	--	15.0	4.8	NA	NA
11/26/13		15.0	4.3	15.0	4.3	15.0	4.3	15.0	4.3	15.0	4.3	14.5	4.5	14.5	4.5	--	--	--	--	14.5	4.5	NA	NA
12/3/13		15.5	4.5	15.5	4.5	15.5	4.5	15.5	4.5	15.5	4.5	14.5	4.8	14.5	4.8	--	--	--	--	14.5	4.8	NA	NA
12/10/13		14.5	4.3	14.5	4.3	14.5	4.3	14.5	4.3	14.5	4.3	15.0	4.5	15.0	4.5	--	--	--	--	15.0	4.5	NA	NA
12/16/13		15.5	4.5	15.5	4.5	15.5	4.5	15.5	4.5	15.5	4.5	15.0	4.8	15.0	4.8	--	--	--	--	15.0	4.8	NA	NA
12/23/13		16.0	4.3	16.0	4.3	16.0	4.3	16.0	4.3	16.0	4.3	14.5	4.8	14.5	4.8	--	--	--	--	14.5	4.8	NA	NA
1/8/14		15.5	4.3	15.5	4.3	15.5	4.3	15.5	4.3	15.5	4.3	15.0	4.5	15.0	4.5	--	--	--	--	15.0	4.5	NA	NA
1/16/14		15.0	4.3	15.0	4.3	15.0	4.3	15.0	4.3	15.0	4.3	15.5	4.8	15.5	4.8	--	--	--	--	15.5	4.8	NA	NA
1/23/14		15.5	4.5	15.5	4.5	15.5	4.5	15.5	4.5	15.5	4.5	14.5	4.8	14.5	4.8	--	--	--	--	14.5	4.8	NA	NA
1/29/14		15.5	4.3	15.5	4.3	15.5	4.3	15.5	4.3	15.5	4.3	15.0	4.8	15.0	4.8	--	--	--	--	15.0	4.8	NA	NA
2/6/14		15.5	4.5	15.5	4.5	15.5	4.5	15.5	4.5	15.5	4.5	15.5	5.0	15.5	5.0	--	--	--	--	15.5	5.0	NA	NA
2/13/14		16.0	4.5	16.0	4.5	16.0	4.5	16.0	4.5	16.0	4.5	15.0	4.8	15.0	4.8	--	--	--	--	15.0	4.8	NA	NA
2/20/14		16.0	4.5	16.0	4.5	16.0	4.5	16.0	4.5	16.0	4.5	15.5	5.0	15.5	5.0	--	--	--	--	15.5	5.0	NA	NA
2/28/14		15.5	4.5	15.5	4.5	15.5	4.5	15.5	4.5	15.5	4.5	15.5	5.0	15.5	5.0	--	--	--	--	15.5	5.0	NA	NA
3/6/14		16.0	4.5	16.0	4.5	16.0	4.5	16.0	4.5	16.0	4.5	15.0	4.8	15.0	4.8	--	--	--	--	15.0	4.8	NA	NA
3/12/14		16.5	4.8	16.5	4.8	16.5	4.8	16.5	4.8	16.5	4.8	15.5	5.0	15.5	5.0	--	--	--	--	15.5	5.0	NA	NA
3/20/14		16.0	4.8	16.0	4.8	16.0	4.8	16.0	4.8	16.0	4.8	16.5	5.3	16.5	5.3	--	--	--	--	16.5	5.3	NA	NA
3/25/14		15.5	4.8	15.5	4.8	15.5	4.8	15.5	4.8	15.5	4.8	17.0	5.3	17.0	5.3	--	--	--	--	17.0	5.3	NA	NA
3/27/14		17.0	5.0	17.0	5.0	17.0	5.0	17.0	5.0	17.0	5.0	17.5	5.5	17.5	5.5	--	--	--	--	17.5	5.5	NA	NA
4/4/14		17.0	4.8	17.0	4.8	17.0	4.8	17.0	4.8	17.0	4.8	16.0	5.3	16.0	5.3	--	--	--	--	16.0	5.3	NA	NA
4/11/14		17.5	5.0	17.5	5.0	17.5	5.0	17.5	5.0	17.5	5.0	17.5	5.5	17.5	5.5	--	--	--	--	17.5	5.5	NA	NA
4/16/14		18.5	5.3	18.5	5.3	18.5	5.3	18.5	5.3	18.5	5.3	18.0	5.8	18.0	5.8	--	--	--	--	18.0	5.8	NA	NA
4/22/14		19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	17.5	5.8	17.5	5.8	--	--	--	--	17.5	5.8	NA	NA
4/29/14		18.5	5.3	18.5	5.3	18.5	5.3	18.5	5.3	18.5	5.3	17.5	5.8	17.5	5.8	--	--	--	--	17.5	5.8	NA	NA
5/19/14		19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	18.0	5.5	18.0	5.5	--	--	--	--	18.0	5.5	NA	NA
5/22/14		19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	17.5	5.5	17.5	5.5	--	--	--	--	17.5	5.5	NA	NA
5/29/14		18.5	5.0	18.5	5.0	18.5	5.0	18.5	5.0	18.5	5.0	17.5	5.5	17.5	5.5	--	--	--	--	17.5	5.5	NA	NA
6/3/14		18.0	5.3	18.0	5.3	18.0	5.3	18.0	5.3	18.0	5.3	18.5	5.8	18.5	5.8	--	--	--	--	18.5	5.8	NA	NA
6/12/14		18.5	5.3	18.5	5.3	18.5	5.3	18.5	5.3	18.5	5.3	18.0	5.8	18.0	5.8	--	--	--	--	18.0	5.8	NA	NA
6/18/14		19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	18.0	5.5	18.0	5.5	--	--	--	--	18.0	5.5	NA	NA
6/23/14		19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	17.5	5.5	17.5	5.5	--	--	--	--	17.5	5.5	NA	NA
6/30/14		19.5	5.3	19.5	5.3	19.5	5.3	19.5	5.3	19.5	5.3	18.0	5.8	18.0	5.8	--	--	--	--	18.0	5.8	NA	NA
7/10/14		19.0	5.3	19.0	5.3	19.0	5.3	19.0	5.3	19.0	5.3	18.0	5.8	18.0	5.8	--	--	--	--	18.0	5.8	NA	NA

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DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 South and West										Building 108 North and East											
		AS-3		AS-6		AS-8		AS-9		AS-11		AS-2		AS-4		AS-5		AS-7		AS-10		AS-33 *	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
7/18/14		19.5	5.3	19.5	5.3	19.5	5.3	19.5	5.3	19.5	5.3	18.0	5.5	18.0	5.5	--	--	--	--	18.0	5.5	NA	NA
7/24/14		19.5	5.3	19.5	5.3	19.5	5.3	19.5	5.3	19.5	5.3	18.5	5.8	18.5	5.8	--	--	--	--	18.5	5.8	NA	NA
7/30/14		19.5	5.3	19.5	5.3	19.5	5.3	19.5	5.3	19.5	5.3	18.0	5.8	18.0	5.8	--	--	--	--	18.0	5.8	NA	NA
8/4/14	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
8/7/14		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
8/15/14		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
8/22/14		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
8/29/14		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
9/5/14	2	18.0	5.5	18.0	5.5	18.0	5.5	18.0	5.5	18.0	5.5	17.5	6.0	17.5	6.0	--	--	--	--	17.5	6.0	NA	NA
9/12/14		19.0	5.3	19.0	5.3	19.0	5.3	19.0	5.3	19.0	5.3	18.5	5.8	18.5	5.8	--	--	--	--	18.5	5.8	NA	NA
9/17/14		17.5	5.5	17.5	5.5	17.5	5.5	17.5	5.5	17.5	5.5	16.5	6.0	16.5	6.0	--	--	--	--	16.5	6.0	NA	NA
9/25/14	3	19.5	5.5	19.5	5.5	19.5	5.5	19.5	5.5	19.5	5.5	17.5	6.0	17.5	6.0	--	--	--	--	17.5	6.0	NA	NA
1/15/15	2	19.0	5.3	19.0	5.3	19.0	5.3	19.0	5.3	19.0	5.3	15.5	6.3	15.5	6.3	--	--	--	--	15.5	6.3	NA	NA
1/22/15	1,2	19.0	5.3	19.0	5.3	19.0	5.3	19.0	5.3	19.0	5.3	16.0	5.8	16.0	5.8	--	--	--	--	16.0	5.8	NA	NA
1/29/15		18.5	5.3	18.5	5.3	18.5	5.3	18.5	5.3	18.5	5.3	17.0	5.8	17.0	5.8	--	--	--	--	17.0	5.8	NA	NA
2/5/15	1,2	17.5	5.3	17.5	5.3	17.5	5.3	17.5	5.3	17.5	5.3	16.5	5.8	16.5	5.8	--	--	--	--	16.5	5.8	NA	NA
2/9/15	4	--	--	15.5	5.5	--	--	--	--	15.5	5.5	--	--	15.0	6.8	15.0	6.8	--	--	15.0	6.8	NA	NA
2/10/15		18.0	5.8	--	--	18.0	5.8	18.0	5.8	--	--	12.5	7.0	--	--	--	--	12.5	7.0	--	--	NA	NA
2/11/15		--	--	15.0	5.5	--	--	--	--	15.0	5.5	--	--	14.5	6.5	14.5	6.5	--	--	14.5	6.5	NA	NA
2/12/15		17.5	5.5	--	--	17.5	5.5	17.5	5.5	--	--	13.5	7.0	--	--	--	--	13.5	7.0	--	--	NA	NA
2/13/15	5	--	--	14.5	5.3	--	--	--	--	14.5	5.3	--	--	15.0	5.8	15.0	5.8	--	--	15.0	5.8	NA	NA
2/16/15		17.0	5.5	--	--	17.0	5.5	17.0	5.5	--	--	13.5	6.8	--	--	--	--	13.5	6.8	--	--	NA	NA
2/18/15		--	--	14.5	5.3	--	--	--	--	14.5	5.3	--	--	15.0	5.8	15.0	5.8	--	--	15.0	5.8	NA	NA
2/20/15		17.5	5.5	--	--	17.5	5.5	17.5	5.5	--	--	13.5	6.5	--	--	--	--	13.5	6.5	--	--	NA	NA
2/24/15		--	--	15.0	5.3	--	--	--	--	15.0	5.3	--	--	15.0	5.8	15.0	5.8	--	--	15.0	5.8	NA	NA
2/27/15		17.0	5.5	--	--	17.0	5.5	17.0	5.5	--	--	13.0	6.5	--	--	--	--	13.0	6.5	--	--	NA	NA
3/2/15		--	--	14.5	5.3	--	--	--	--	14.5	5.3	--	--	15.5	5.8	15.5	5.8	--	--	15.5	5.8	NA	NA
3/5/15		16.5	5.5	--	--	16.5	5.5	16.5	5.5	--	--	12.5	6.5	--	--	--	--	12.5	6.5	--	--	NA	NA
3/9/15		--	--	14.5	5.3	--	--	--	--	14.5	5.3	--	--	15.0	5.8	15.0	5.8	--	--	15.0	5.8	NA	NA
3/11/15		16.5	5.3	--	--	16.5	5.3	16.5	5.3	--	--	13.5	6.3	--	--	--	--	13.5	6.3	--	--	NA	NA
3/13/15		--	--	14.5	5.5	--	--	--	--	14.5	5.5	--	--	14.5	6.0	14.5	6.0	--	--	14.5	6.0	NA	NA
3/18/15		17.0	5.3	--	--	17.0	5.3	17.0	5.3	--	--	13.0	6.3	--	--	--	--	13.0	6.3	--	--	NA	NA
3/21/15		--	--	15.0	5.5	--	--	--	--	15.0	5.5	--	--	14.0	6.0	14.0	6.0	--	--	14.0	6.0	NA	NA
3/23/15		16.5	5.3	--	--	16.5	5.3	16.5	5.3	--	--	13.5	6.0	--	--	--	--	13.5	6.0	--	--	NA	NA
3/31/15	6	--	--	14.5	5.5	--	--	--	--	14.5	5.5	--	--	14.0	6.3	14.0	6.3	--	--	14.0	6.3	NA	NA
4/8/15	7	16.0	4.8	16.0	4.8	16.0	4.8	--	--	16.0	4.8	14.5	5.3	14.5	5.3	14.5	5.3	14.5	5.3	--	--	NA	NA
4/23/15	8	16.5	5.0	16.5	5.0	16.5	5.0	16.5	5.0	16.5	5.0	15.0	5.5	15.0	5.5	15.0	5.5	--	--	15.0	5.5	NA	NA
5/7/15		16.0	4.8	16.0	4.8	16.0	4.8	16.0	4.8	16.0	4.8	14.5	5.3	14.5	5.3	14.5	5.3	--	--	14.5	5.3	NA	NA

TABLE 6A
Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Original Sparge Well Network
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 South and West										Building 108 North and East											
		AS-3		AS-6		AS-8		AS-9		AS-11		AS-2		AS-4		AS-5		AS-7		AS-10		AS-33 *	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
5/20/15		16.5	5.0	16.5	5.0	16.5	5.0	16.5	5.0	16.5	5.0	14.5	5.3	14.5	5.3	14.5	5.3	--	--	14.5	5.3	NA	NA
6/1/15		15.5	4.8	15.5	4.8	15.5	4.8	15.5	4.8	15.5	4.8	13.5	5.3	13.5	5.3	13.5	5.3	--	--	13.5	5.3	NA	NA
6/25/15		17.0	5.0	17.0	5.0	17.0	5.0	17.0	5.0	17.0	5.0	15.0	5.5	15.0	5.5	15.0	5.5	--	--	15.0	5.5	NA	NA
7/9/15	1,2	18.0	5.0	18.0	5.0	18.0	5.0	18.0	5.0	18.0	5.0	14.5	5.5	14.5	5.5	14.5	5.5	--	--	14.5	5.5	NA	NA
7/15/15		19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	19.0	5.0	18.0	5.0	18.0	5.0	18.0	5.0	--	--	18.0	5.0	NA	NA
7/23/15		20.0	5.0	20.0	5.0	20.0	5.0	20.0	5.0	20.0	5.0	16.5	5.5	16.5	5.5	16.5	5.5	--	--	16.5	5.5	NA	NA
7/31/15		22.0	5.3	22.0	5.3	22.0	5.3	22.0	5.3	22.0	5.3	17.5	5.8	17.5	5.8	17.5	5.8	--	--	17.5	5.8	NA	NA
8/12/15		24.0	5.0	24.0	5.0	24.0	5.0	24.0	5.0	24.0	5.0	18.0	5.5	18.0	5.5	18.0	5.5	--	--	18.0	5.5	NA	NA
8/21/15	9	25.0	7.0	25.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
8/27/15		24.0	7.0	24.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
8/31/15	1,2	--	--	--	--	--	--	26.0	7.3	26.0	7.3	--	--	--	--	--	--	--	--	--	--	NA	NA
9/2/15		--	--	--	--	--	--	24.0	7.3	24.0	7.3	--	--	--	--	--	--	--	--	--	--	NA	NA
9/8/15	1,2	25.0	7.0	25.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
9/15/15	1,2	23.0	7.0	23.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
9/18/15		24.0	7.0	24.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
9/24/15		26.0	7.3	26.0	7.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
10/2/15		--	--	--	--	--	--	22.0	6.3	22.0	6.3	--	--	--	--	--	--	--	--	--	--	NA	NA
10/8/15		--	--	--	--	--	--	22.0	6.3	22.0	6.3	--	--	--	--	--	--	--	--	--	--	NA	NA
10/15/15		--	--	--	--	--	--	22.0	6.3	22.0	6.3	--	--	--	--	--	--	--	--	--	--	NA	NA
10/28/15		--	--	--	--	--	--	21.5	6.0	21.5	6.0	--	--	--	--	--	--	--	--	--	--	NA	NA
11/4/15		--	--	--	--	--	--	22.5	6.3	22.5	6.3	--	--	--	--	--	--	--	--	--	--	NA	NA
11/11/15		--	--	--	--	--	--	23.0	6.5	23.0	6.5	--	--	--	--	--	--	--	--	--	--	NA	NA
11/18/15		--	--	--	--	--	--	23.0	6.5	23.0	6.5	--	--	--	--	--	--	--	--	--	--	NA	NA
11/24/15		--	--	--	--	--	--	23.0	6.5	23.0	6.5	--	--	--	--	--	--	--	--	--	--	NA	NA
11/30/15		--	--	--	--	--	--	23.5	6.5	23.5	6.5	--	--	--	--	--	--	--	--	--	--	NA	NA
12/8/15		--	--	--	--	--	--	23.5	7.0	23.5	7.0	--	--	--	--	--	--	--	--	--	--	NA	NA
12/16/15		24.5	8.3	24.5	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
12/23/15		24.0	8.0	24.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
12/30/15		25.0	8.0	25.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
1/6/16		25.0	7.8	25.0	7.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
1/14/16		24.5	7.5	24.5	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
1/20/16		24.0	7.8	24.0	7.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
1/27/16		23.5	7.5	23.5	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
2/2/16		23.0	7.5	23.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
2/12/16		23.0	7.8	23.0	7.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
2/17/16		--	--	--	--	--	--	20.0	7.5	20.0	7.5	--	--	--	--	--	--	--	--	--	--	NA	NA
2/25/16		--	--	--	--	--	--	21.5	6.5	21.5	6.5	--	--	--	--	--	--	--	--	--	--	NA	NA
3/4/16		--	--	--	--	--	--	20.5	6.3	20.5	6.3	--	--	--	--	--	--	--	--	--	--	NA	NA
3/11/16		--	--	--	--	--	--	20.0	6.0	20.0	6.0	--	--	--	--	--	--	--	--	--	--	NA	NA
3/16/16		--	--	--	--	--	--	21.0	5.8	21.0	5.8	--	--	--	--	--	--	--	--	--	--	NA	NA

TABLE 6A

Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Original Sparge Well Network

DFSP San Pedro Administration Area

3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 South and West										Building 108 North and East											
		AS-3		AS-6		AS-8		AS-9		AS-11		AS-2		AS-4		AS-5		AS-7		AS-10		AS-33 *	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
3/23/16		21.0	5.5	21.0	5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
3/31/16		21.5	5.5	21.5	5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
4/7/16		20.5	6.0	20.5	6.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
4/13/16		20.0	6.0	20.0	6.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
4/20/16		20.5	6.0	20.5	6.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
4/26/16		21.0	6.5	21.0	6.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
5/5/16		20.5	6.0	20.5	6.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
5/12/16		20.0	6.0	20.0	6.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NA	NA
5/17/16	10,11	--	--	--	--	--	--	20.5	5.8	20.5	5.8	--	--	--	--	--	--	--	--	--	--	4.0	7.0
5/19/16	12	--	--	--	--	--	--	20.5	6.0	20.5	6.0	--	--	--	--	--	--	--	--	--	--	4.5	6.5
5/26/16	13	--	--	--	--	--	--	20.0	6.0	20.0	6.0	--	--	--	--	--	--	--	--	--	--	4.8	6.0
6/3/16		--	--	--	--	--	--	19.5	6.0	19.5	6.0	--	--	--	--	--	--	--	--	--	--	5.0	6.0
6/10/16		20.0	5.5	20.0	5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.0	5.8
6/15/16		20.5	6.0	20.5	6.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NM	NM
6/24/16		20.0	6.0	20.0	6.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.0	5.5
6/28/16		20.0	5.5	20.0	5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.0	5.5
7/6/16		18.0	8.5	18.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.5	5.0
7/13/16		16.5	7.5	16.5	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.0	6.0
7/20/16		14.0	7.5	14.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.0	5.5
7/29/16	1,2	12.0	7.5	12.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.0	5.5
8/3/16		12.5	8.0	12.5	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.5	6.0
8/10/16		--	--	--	--	--	--	12.0	7.5	12.0	7.5	--	--	--	--	--	--	--	--	--	--	4.5	5.5
8/18/16		--	--	--	--	--	--	6.0	6.5	6.0	6.5	--	--	--	--	--	--	--	--	--	--	5.0	6.0
8/25/16		--	--	--	--	--	--	6.0	6.5	6.0	6.5	--	--	--	--	--	--	--	--	--	--	5.5	6.5
8/31/16	14,15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/13/16	16,17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/7/16	18,19	--	--	--	--	--	--	10.0	8.0	10.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--
10/13/16	20	--	--	--	--	--	--	12.0	8.5	12.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--
10/20/16		--	--	--	--	--	--	10.0	8.0	10.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--
10/26/16	21	--	--	--	--	--	--	13.0	8.5	13.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--
12/15/16	22	13.0	7.0	13.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/22/16		13.0	7.0	13.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/28/16		13.0	7.5	13.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/4/17		12.0	7.0	12.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/11/17		12.0	7.5	12.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/18/17		11.0	7.0	11.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/24/17		11.0	7.0	11.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/30/17		12.0	7.5	12.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/22/17	23	--	--	--	--	--	--	11.0	7.0	11.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--
3/1/17		--	--	--	--	--	--	13.0	8.0	13.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 6A

Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Original Sparge Well Network

DFSP San Pedro Administration Area

3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 South and West										Building 108 North and East											
		AS-3		AS-6		AS-8		AS-9		AS-11		AS-2		AS-4		AS-5		AS-7		AS-10		AS-33 *	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
3/9/17		--	--	--	--	--	--	12.5	7.5	12.5	7.5	--	--	--	--	--	--	--	--	--	--	--	--
3/16/17		--	--	--	--	--	--	12.0	7.0	12.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--
3/21/17		--	--	--	--	--	--	12.0	7.0	12.0	7.0	--	--	--	--	--	--	--	--	--	--	--	--
3/31/17		12.0	9.0	12.0	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/6/17		15.5	9.0	15.5	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/13/17		15.0	9.5	15.0	9.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/21/17		16.0	9.0	16.0	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/30/17		15.5	9.0	15.5	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/5/17		14.5	8.5	14.5	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/10/17		14.0	9.0	14.0	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/18/17		13.0	8.5	13.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/25/17		12.0	8.5	12.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6/1/17		12.0	8.5	12.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6/6/17		13.0	9.0	13.0	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6/13/17		--	--	--	--	--	--	12.5	8.3	12.5	8.3	--	--	--	--	--	--	--	--	--	--	--	--
6/22/17		--	--	--	--	--	--	11.5	8.0	11.5	8.0	--	--	--	--	--	--	--	--	--	--	--	--
6/26/17		--	--	--	--	--	--	11.0	7.5	11.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--
7/7/17		--	--	--	--	--	--	11.5	8.0	11.5	8.0	--	--	--	--	--	--	--	--	--	--	--	--
7/14/17		12.0	8.0	12.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/20/17		12.0	8.0	12.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/26/17		13.0	8.5	13.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8/1/17		12.0	9.0	12.0	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8/11/17		12.5	8.5	12.5	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8/16/17		13.0	9.0	13.0	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8/25/17		12.0	8.5	12.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8/31/17		--	--	--	--	--	--	11.0	8.0	11.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--
9/8/17		--	--	--	--	--	--	12.0	7.5	12.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--
9/13/17		--	--	--	--	--	--	11.5	8.0	11.5	8.0	--	--	--	--	--	--	--	--	--	--	--	--
9/21/17		--	--	--	--	--	--	12.5	8.0	12.5	8.0	--	--	--	--	--	--	--	--	--	--	--	--
9/28/17		--	--	--	--	--	--	11.5	7.5	11.5	7.5	--	--	--	--	--	--	--	--	--	--	--	--
10/6/17		12.5	9.0	12.5	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/19/17		12.0	8.5	12.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/24/17		13.0	8.5	13.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/31/17		12.0	8.0	12.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/30/17	24	12.5	9.0	12.5	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/17		12.0	8.5	12.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/12/17		13.0	9.0	13.0	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/18/17		12.5	8.5	12.5	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/29/17		--	--	--	--	--	--	11.5	8.0	11.5	8.0	--	--	--	--	--	--	--	--	--	--	--	--
1/3/18		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 6A

Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Original Sparge Well Network

DFSP San Pedro Administration Area

3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 South and West										Building 108 North and East											
		AS-3		AS-6		AS-8		AS-9		AS-11		AS-2		AS-4		AS-5		AS-7		AS-10		AS-33 *	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
1/5/18		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/9/18	25	--	--	--	--	--	--	12.5	8.0	12.5	8.0	--	--	--	--	--	--	--	--	--	--	--	--
1/18/18		--	--	--	--	--	--	13.0	7.5	13.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--
1/24/18		--	--	--	--	--	--	12.0	7.5	12.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--
2/1/18		12.5	7.0	12.5	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/8/18		13.0	7.3	13.0	7.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/15/18		12.5	7.0	12.5	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/23/18		11.5	8.5	11.5	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/26/18		12.5	9.0	12.5	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/7/18		--	--	--	--	--	--	12.5	9.0	12.5	9.0	--	--	--	--	--	--	--	--	--	--	--	--
3/15/18		--	--	--	--	--	--	12.0	8.5	12.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--
3/21/18		--	--	--	--	--	--	13.0	8.0	13.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--
3/27/18		--	--	--	--	--	--	12.0	8.5	12.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--
4/5/18		--	--	--	--	--	--	11.0	8.5	11.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--
4/12/18		--	--	--	--	--	--	11.5	9.0	11.5	9.0	--	--	--	--	--	--	--	--	--	--	--	--
4/20/18		--	--	--	--	--	--	11.0	9.0	11.0	9.0	--	--	--	--	--	--	--	--	--	--	--	--
4/25/18		12.0	9.0	12.0	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/4/18		11.5	8.5	11.5	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/11/18		11.0	8.5	11.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/16/18		10.5	8.5	10.5	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/23/18		11.5	8.5	11.5	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/31/18		13.0	9.0	13.0	9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6/6/18		--	--	--	--	--	--	13.0	8.8	13.0	8.8	--	--	--	--	--	--	--	--	--	--	--	--
6/15/18		--	--	--	--	--	--	12.0	8.5	12.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--
6/20/18		--	--	--	--	--	--	13.0	9.0	13.0	9.0	--	--	--	--	--	--	--	--	--	--	--	--
6/29/18		--	--	--	--	--	--	13.0	8.8	13.0	8.8	--	--	--	--	--	--	--	--	--	--	--	--
7/9/18	26	--	--	--	--	--	--	12.5	9.0	12.5	9.0	--	--	--	--	--	--	--	--	--	--	--	--
12/18/18	27	--	--	--	--	--	--	14.0	9.5	14.0	9.5	--	--	--	--	--	--	--	--	--	--	--	--
12/27/18		--	--	--	--	--	--	13.0	8.5	13.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--
1/4/19		--	--	--	--	--	--	12.0	8.0	12.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--
1/10/19		--	--	--	--	--	--	12.0	8.0	12.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--
1/18/19	25	10.0	8.5	10.0	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/31/19		10.5	8.5	10.5	8.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/7/19		11.0	8.0	11.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/12/19		10.0	7.5	10.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/26/19		--	--	--	--	--	--	13.0	7.5	13.0	7.5	--	--	--	--	--	--	--	--	--	--	--	--
3/5/19		--	--	--	--	--	--	13.0	8.0	13.0	8.0	--	--	--	--	--	--	--	--	--	--	--	--
3/14/19	28	--	--	--	--	--	--	13.5	8.5	13.5	8.5	--	--	--	--	--	--	--	--	--	--	--	--
3/21/19		--	--	--	--	--	--	13.0	8.8	13.0	8.8	--	--	--	--	--	--	--	--	--	--	--	--
3/28/19	28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Legend / Notes on Next Page.

TABLE 6A
Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Original Sparge Well Network
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																			
		Building 108 South and West										Building 108 North and East									
		AS-3		AS-6		AS-8		AS-9		AS-11		AS-2		AS-4		AS-5		AS-7		AS-10		AS-33 *	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)

Legend / Notes :

AS = Air sparge cfm = cubic feet per minute (indicated) psi = pounds per square inch -- = Not measured, well off line NA = Not applicable, well not installed NM = Not measured, well on line

All wells installed during August 2005 and screened from 65-70 feet below grade surface (bgs) except for wells AS-4 (68-73 feet bgs) and AS-6 (70-75 feet bgs).

* = Installed during February 2016 and screened from 65-70 feet bgs as part of expanded sparge well network (Table 6B) with system tie in /hook up work completed by mid-May 2016.

Refer to historical reports for data collected prior to January 18, 2011.

1 = AS system automatically shut down prior to technician arrival.

2 = Restarted AS system.

3 = AS system shut down pending compressor replacement.

4 = Began cycling online/offline AS wells daily (5 on/5 off).

5 = Began cycling online/offline AS wells twice per week (5 on/5 off).

6 = Opened all soil vapor extraction wells.

7 = AS system shut down in advance of influence monitoring and restarted on April 15, 2015 after deploying data loggers in wells GTMW-46 and GTMW-50.

8 = AS system restarted after being shut down on April 20, 2015 as part of influence monitoring.

9 = Began focused AS system operations on August 20, 2015 by isolating injection to either wells AS-3 and AS-6 or AS-9 and AS-11 based on observation well analytical monitoring data (Table 7).

10 = Began expanded sparge and vapor extraction system operations following the completion of tie-in/hookup work to wells AS-26 through AS-37, and VE-38 and VE-39 per SGI's January 15, 2016 *Work Plan to Expand Air Sparge and Soil Vapor Extraction Well Array* (see Table 6B for sparge flow and pressure data associated with wells AS-26 through AS-32, and AS-34 through AS-37).

11 = Collected background dissolved oxygen data from newly installed sparge wells and deployed data loggers in wells GTMW-46 and GTMW-50 prior to startup of expanded sparge system (see Note 10).

12 = Follow up site visit to confirm expanded system functioning properly subsequent to startup as well as to check data logger units.

13 = Downloaded influence monitoring data and removed loggers from observation wells GMW-46 and GTMW-50 on May 23, 2016.

14 = Deployed secondary air compressor for the purpose of running the expanded sparge well network at increased injection rates based on influence monitoring data per SGI's July 15, 2016 *Remediation Status Report - Second Quarter 2016.*

15 = Primary air compressor off-line upon arrival and was determined to require off-site warranty repair after unit troubleshooting conducted on September 1, 2016.

16 = Completed installation and hookup of secondary air compressor and tested unit overnight at increased injection rates (Table 6B) to confirm functionality.

17 = Primary air compressor disconnected and removed from compound followed by being transported for warranty repair with unit redeployment anticipated during October 2016.

18 = Deployed data loggers in wells GTMW-46 and GTMW-50 on October 4, 2016 to collect background readings in advance of AS system restart at increased injection rates.

19 = Primary air compressor re-deployed and hooked up followed by AS system restart at increased injection rates with secondary air compressor.

20 = Completed influence monitoring at increased injection rates (Figures 5 and 6) followed by removal of data loggers from wells GTMW-46 and GTMW-50.

21 = Automatic sparge and vapor extraction system shutdown with both systems being left off-line pending the completion of oxidizer troubleshooting and repair work.

22 = Completed oxidizer repair work and restarted AS system in advance of vapor extraction system restart.

23 = AS system restarted (off-line since January 31, 2017) following the completion of receiver tank piping repair work.

24 = AS system restarted (off-line since November 3, 2017) following the completion of regional electrical service line repair work by utility company.

25 = AS system restarted (off-line since January 2, 2018 and January 10, 2019, respectively) following automatic shutdown and subsequent completion of repair work.

26 = Automatic sparge system shutdown on July 13, 2018 with system remaining off-line through November 2018 (compressor removed from site during August 2018 for repair and re-installed during October 2018 with subsequent electrical related issues delaying restart).

27 = AS system restarted (off-line since July 13, 2018) following completion of extensive required equipment and electrical repair/maintenance work.

28 = Automatic sparge system shutdown on March 13, 2019 and March 26, 2019 prior to technician site visit with system being restarted the first time but left off-line after the second occurrence pending further troubleshooting.

TABLE 6B

Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Expanded Sparge Well Network

DFSP San Pedro Administration Area

3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 Northwest														Building 108 Southeast							
		AS-26		AS-27		AS-28		AS-29		AS-30		AS-31 *		AS-32		AS-34		AS-35		AS-36		AS-37	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
5/17/16	1,2	1.5	7.5	2.0	7.5	2.0	6.5	2.0	7.0	2.5	6.5	NA	NA	2.5	6.5	3.0	6.5	3.5	6.5	3.0	6.5	2.0	7.0
5/19/16	3	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA	NA	NA	NA	NM	NM	NM	NM	NM	NM	NM	NM
5/26/16	4	1.8	8.0	2.3	8.0	2.4	7.0	2.3	7.6	3.0	7.2	NA	NA	2.8	7.0	3.2	7.1	4.0	7.5	3.5	7.8	2.5	8.0
6/3/16	5	4.0	19.0	3.5	18.0	4.0	18.0	4.0	17.0	5.0	16.5	5.0	16.5	4.5	16.0	6.5	13.5	6.0	13.5	6.0	14.5	6.0	14.5
6/10/16		4.5	24.0	4.0	23.0	4.5	24.0	4.5	23.0	5.3	22.0	6.0	22.0	5.4	23.0	8.0	18.0	7.0	19.0	7.0	20.0	7.0	20.0
6/15/16		5.0	30.0	5.0	30.0	5.0	30.0	5.0	29.0	5.5	28.0	6.5	27.5	6.0	28.0	9.5	23.0	8.0	24.0	8.0	24.0	8.0	24.0
6/24/16		5.4	32.0	5.3	32.0	5.4	31.5	5.4	32.0	5.9	31.0	6.9	31.5	6.4	32.0	9.8	26.0	9.2	28.0	8.7	28.0	8.8	28.0
6/28/16		5.5	32.5	5.5	33.0	5.5	32.0	5.5	32.5	6.0	32.0	7.0	32.0	6.5	32.5	10.0	26.5	9.5	29.0	9.0	29.0	9.0	28.5
7/6/16		5.0	31.0	5.0	30.0	5.3	32.0	5.5	31.5	5.5	30.0	6.5	30.0	5.5	29.5	9.5	26.0	8.5	28.0	8.5	26.0	8.5	27.0
7/13/16		4.5	32.0	5.0	29.5	5.0	31.5	5.5	29.0	5.0	27.0	5.5	28.5	4.5	27.5	8.5	24.5	7.5	26.0	8.0	24.0	7.5	24.0
7/20/16		4.5	26.0	4.5	25.0	4.0	25.5	4.5	25.5	4.5	24.0	5.0	26.0	4.0	24.5	7.0	19.5	6.5	19.0	7.0	18.0	6.0	18.0
7/29/16		5.0	27.5	5.0	27.0	5.0	27.5	5.5	26.5	5.0	25.5	6.0	27.5	5.0	26.0	7.5	21.5	7.0	23.5	8.0	22.0	7.5	22.0
8/3/16		5.0	29.5	5.5	28.0	5.0	25.0	5.5	28.0	5.5	28.5	5.5	28.5	5.5	29.5	8.0	21.0	7.5	24.0	8.5	24.5	8.0	24.0
8/10/16		5.0	30.0	5.0	29.0	5.0	24.0	5.5	28.0	6.0	27.0	6.5	27.5	6.0	27.5	8.5	22.5	8.0	24.5	9.0	25.0	8.0	23.5
8/18/16		NM	NM	5.0	28.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	7.0	28.0	NM	NM	8.5	28.0
8/25/16		5.5	30.0	5.0	30.0	5.5	30.0	5.0	30.0	7.0	30.0	7.0	30.0	6.0	30.0	10.0	30.0	7.0	30.0	9.0	30.0	9.0	30.0
8/31/16	6,7	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
9/7/16	8	10.0	40.0	9.0	40.0	10.0	40.0	9.5	40.0	10.5	40.0	13.0	40.0	11.5	40.0	18.0	40.0	17.0	40.0	15.0	40.0	15.5	40.0
9/8/16	9,10	10.5	42.0	9.5	43.0	10.5	42.0	10.0	42.5	11.0	42.0	14.0	42.0	12.0	42.5	18.0	42.0	17.5	42.0	16.0	42.0	16.5	42.5
10/7/16	11,12	10.0	40.0	10.0	42.0	10.0	41.0	10.0	42.0	11.0	41.0	12.5	40.0	11.5	40.0	18.0	40.0	17.0	40.0	16.0	41.0	16.0	41.0
10/13/16	13	10.0	40.0	10.0	40.0	10.0	40.0	10.0	40.0	11.0	40.0	13.0	40.0	12.0	40.0	18.5	42.0	17.5	41.0	15.5	40.0	16.0	40.0
10/20/16		10.5	40.0	10.0	40.0	10.5	40.0	10.5	40.0	10.5	40.0	13.5	40.0	12.5	40.0	18.0	41.0	17.0	40.0	16.0	40.0	16.5	42.0
10/26/16	14	10.5	40.0	10.0	40.0	10.5	40.0	10.5	40.0	11.0	40.0	13.0	40.0	12.5	40.0	18.0	40.0	18.0	42.0	16.0	40.0	16.0	40.0
12/15/16	15	11.0	42.0	10.5	42.0	11.0	42.0	10.5	42.0	11.0	42.0	14.0	42.0	12.5	42.0	19.0	42.0	18.0	42.0	16.0	42.0	16.5	42.0
12/22/16		10.5	42.0	11.0	43.0	11.0	41.0	10.0	40.0	10.5	40.0	13.0	40.0	11.5	40.0	18.0	40.0	17.0	40.0	15.0	40.0	15.5	40.0
12/28/16		10.5	40.0	10.5	42.0	10.5	40.0	10.0	40.0	11.0	40.0	14.0	42.0	12.0	40.0	18.5	42.0	17.5	42.0	16.0	42.0	16.5	42.0
1/4/17		11.0	41.0	11.0	42.0	11.0	41.0	10.0	41.0	11.0	42.0	13.5	43.0	12.5	41.0	18.0	42.0	18.0	42.0	16.0	44.0	16.5	43.0
1/11/17		10.5	42.0	10.5	43.0	11.0	43.0	10.0	42.0	11.0	42.0	14.0	44.0	12.5	41.0	18.5	43.0	18.0	43.0	16.0	45.0	16.5	44.0
1/18/17		10.0	43.0	10.0	44.0	10.5	44.0	10.5	43.0	10.5	43.0	14.0	45.0	12.0	42.0	19.0	44.0	18.0	44.0	16.0	46.0	16.5	45.0
1/24/17		10.5	44.0	11.0	45.0	10.5	45.0	10.0	44.0	10.5	44.0	14.0	46.0	12.0	43.0	18.5	44.0	18.0	44.0	15.5	46.0	16.5	46.0
1/30/17		10.0	45.0	10.5	46.0	11.0	46.0	10.0	45.0	11.0	44.0	13.5	46.0	11.5	44.0	18.0	45.0	17.5	45.0	15.5	47.0	16.0	46.0
2/22/17	16	11.0	46.0	11.0	46.0	10.5	46.0	10.0	46.0	10.5	45.0	13.5	46.5	11.5	45.0	17.5	46.0	17.0	46.0	15.5	48.0	16.5	47.0
3/1/17		10.5	47.0	11.0	48.0	10.5	47.0	10.5	47.0	11.0	46.0	13.5	46.0	11.0	46.0	17.5	46.0	16.5	47.0	15.0	48.0	16.5	48.0
3/9/17		10.0	48.0	10.5	49.0	10.0	48.0	10.5	48.0	11.0	46.0	13.0	46.0	11.0	47.0	17.0	46.0	16.0	48.0	15.0	49.0	16.0	48.0
3/16/17		10.5	49.0	11.0	49.0	10.5	48.0	10.5	48.0	11.0	46.5	13.0	46.0	11.0	48.0	17.0	47.0	16.0	48.0	15.0	49.0	16.5	49.0
3/23/17		10.5	49.0	10.5	49.0	10.0	49.0	10.0	48.0	10.5	47.0	13.0	46.0	11.0	48.0	17.0	47.0	16.0	49.0	15.0	50.0	16.0	49.0
3/30/17		10.0	49.5	10.0	49.5	10.0	49.5	10.0	48.0	11.0	47.0	13.0	46.0	11.0	49.0	17.0	47.0	16.0	49.5	15.0	50.0	16.0	50.0
4/6/17		10.5	50.0	10.0	49.5	10.5	49.5	10.5	48.5	11.5	47.5	13.5	46.5	11.5	48.0	17.5	47.0	16.5	50.0	15.5	50.0	16.5	50.0
4/13/17		10.0	49.5	10.0	49.5	10.0	49.0	10.0	48.0	11.0	47.0	13.0	46.0	11.0	48.0	18.0	47.5	16.0	49.0	15.5	50.0	16.5	50.5

TABLE 6B

Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Expanded Sparge Well Network

DFSP San Pedro Administration Area

3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 Northwest														Building 108 Southeast							
		AS-26		AS-27		AS-28		AS-29		AS-30		AS-31 *		AS-32		AS-34		AS-35		AS-36		AS-37	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
4/21/17		10.0	50.0	10.0	50.0	10.0	48.0	10.5	48.5	11.0	47.0	13.0	46.0	11.0	48.5	17.5	47.5	16.0	49.0	15.0	49.0	17.0	51.0
4/30/17		10.5	51.0	9.5	49.0	10.0	48.0	10.0	48.0	11.5	47.5	13.0	46.0	11.5	49.0	17.0	47.0	16.0	49.0	15.0	49.0	17.0	51.0
5/5/17		10.0	50.5	9.5	49.0	10.0	48.5	10.0	48.0	12.0	48.0	13.5	46.5	11.5	49.0	17.0	47.0	16.0	49.0	15.0	49.0	17.5	51.0
5/10/17		10.0	50.0	10.0	49.5	10.5	49.5	10.5	48.5	11.0	47.0	13.0	46.0	11.0	48.5	17.5	47.5	16.5	49.5	15.5	49.5	17.0	50.5
5/18/17		10.5	51.0	10.0	49.5	10.0	49.0	11.0	49.0	11.0	47.0	13.0	46.0	11.0	48.0	17.5	47.5	16.0	49.0	15.0	49.0	17.0	50.5
5/25/17		10.5	51.0	10.0	49.5	10.0	49.0	10.5	48.0	11.5	47.5	13.5	46.5	11.5	48.5	18.0	48.0	16.0	49.0	15.5	49.5	16.5	50.0
6/1/17		11.0	51.5	10.5	50.0	10.5	49.5	10.5	48.5	12.0	48.0	13.0	46.0	11.5	48.5	17.5	48.0	16.0	49.0	15.0	49.0	17.0	50.5
6/6/17		10.5	51.0	10.0	50.0	10.0	49.0	11.0	49.0	12.5	48.0	13.0	46.0	12.0	49.0	18.0	48.0	16.5	49.5	15.0	49.5	17.5	51.0
6/13/17		11.0	51.5	9.5	49.0	10.0	49.0	11.5	49.0	13.0	48.5	13.5	46.5	11.5	48.5	18.5	48.0	16.5	49.5	15.5	50.0	17.5	51.0
6/22/17		10.0	51.0	9.5	49.5	10.0	49.5	10.5	48.5	11.5	47.5	13.0	46.0	11.5	48.5	17.5	47.5	16.0	49.0	15.0	49.0	16.5	50.0
6/26/17		10.0	51.0	9.5	49.5	10.0	49.0	10.5	48.5	11.5	48.0	13.5	46.5	12.0	49.0	17.5	47.5	16.0	49.5	15.0	49.5	17.0	50.5
7/7/17		9.5	50.5	9.5	49.0	10.5	49.0	10.5	49.0	11.0	47.0	13.5	47.0	12.0	49.0	18.0	48.0	16.0	49.0	15.0	49.0	17.0	51.0
7/14/17		10.5	51.0	9.0	48.5	10.5	49.0	10.0	49.0	11.5	48.0	13.0	47.0	11.5	49.5	17.5	48.0	16.5	48.5	15.0	49.5	17.5	50.5
7/20/17		10.0	50.5	10.0	49.5	9.5	48.5	10.5	49.5	11.0	47.5	12.5	47.5	12.0	49.0	17.0	48.5	16.0	48.5	14.5	50.0	17.0	50.5
7/26/17		9.5	50.0	9.5	49.0	10.0	49.0	10.0	49.5	10.5	47.0	12.0	47.0	11.5	49.0	17.0	49.0	16.5	48.0	14.5	49.0	16.5	51.5
8/1/17		9.5	50.0	9.0	48.0	10.5	49.5	9.5	50.0	10.0	46.5	12.5	47.5	11.0	49.5	17.5	48.5	16.5	48.0	15.0	49.0	16.5	51.0
8/11/17		10.0	49.5	9.5	48.5	9.5	49.0	9.5	49.5	10.0	46.5	12.5	48.0	11.5	49.0	17.0	49.0	16.5	48.0	14.5	50.0	16.5	51.0
8/16/17		10.0	49.5	9.5	49.0	10.0	49.0	9.5	49.5	10.5	47.0	12.0	48.0	11.5	49.0	17.0	49.0	17.0	47.5	15.0	49.5	16.0	51.5
8/25/17		10.5	50.5	9.0	48.0	9.5	48.5	10.0	50.0	10.0	48.0	12.5	48.5	11.0	50.0	16.5	49.5	17.0	47.0	14.5	50.0	17.0	50.5
8/31/17		10.5	50.0	9.0	48.0	9.5	48.5	9.5	49.5	10.0	47.5	12.5	48.5	10.5	50.0	17.0	49.0	16.5	48.0	14.5	50.0	16.5	51.0
9/8/17		10.0	49.5	9.5	48.5	9.5	48.0	10.0	50.0	10.5	47.5	12.5	47.5	10.5	50.0	16.5	49.5	17.0	47.0	14.0	50.5	16.0	51.5
9/13/17		10.0	49.5	9.0	48.0	10.0	48.5	10.0	50.0	10.0	48.0	12.0	48.0	11.0	49.5	17.0	49.0	17.0	47.0	14.0	50.5	16.5	51.0
9/21/17		10.0	50.0	9.0	48.0	9.5	48.0	9.5	49.5	10.5	47.0	12.0	48.0	11.0	49.5	17.0	48.5	17.0	46.5	14.0	51.0	16.0	51.5
9/28/17		10.0	50.0	9.5	48.5	10.0	48.5	9.5	49.5	10.0	48.0	12.5	47.5	11.0	49.5	16.5	49.0	16.5	47.5	14.0	51.0	16.0	51.5
10/6/17		10.5	50.5	9.0	48.0	10.0	49.0	10.0	50.0	10.5	47.5	12.0	48.0	10.5	50.0	17.0	49.5	17.0	48.0	14.5	51.0	16.5	52.0
10/19/17		10.0	49.5	9.0	49.0	10.0	49.5	9.5	50.0	10.0	48.0	12.0	48.5	10.5	50.5	17.0	50.0	16.5	48.5	14.0	51.5	16.5	52.0
10/24/17		9.5	50.0	9.5	48.5	9.5	49.5	10.0	50.5	10.5	49.0	12.5	49.0	11.0	50.5	16.5	49.0	16.5	49.0	14.0	51.0	16.0	52.0
10/31/17		10.0	50.5	9.0	48.5	10.0	50.0	9.5	50.5	10.0	48.5	12.0	49.0	11.0	50.0	16.0	49.0	16.0	48.5	14.5	51.5	16.0	51.5
11/30/17	17	10.0	50.0	9.5	49.0	9.5	49.0	9.0	50.0	10.0	49.0	12.5	48.5	10.5	49.5	16.5	50.0	16.5	49.0	14.5	51.0	16.5	52.5
12/4/17		9.5	50.0	9.0	49.0	10.0	49.5	9.5	50.5	10.5	48.5	12.5	49.5	10.5	50.0	17.0	50.5	16.0	48.0	14.0	51.0	16.0	52.0
12/12/17		9.5	50.5	9.0	49.0	9.5	49.0	9.0	50.0	10.0	48.0	12.5	49.0	11.0	50.5	16.5	50.5	16.0	48.0	14.5	52.0	16.5	52.5
12/18/17		9.0	50.0	9.5	49.5	9.5	49.5	9.5	50.5	10.5	49.0	12.0	48.5	11.0	51.0	16.5	51.0	16.5	49.0	14.5	52.0	16.0	52.0
12/29/17		9.5	51.0	9.0	49.5	9.5	50.0	9.0	50.5	10.5	49.5	12.0	49.0	10.5	51.0	16.0	50.5	16.0	49.0	14.0	51.5	16.0	52.5
1/9/18	16	10.0	50.5	9.5	49.5	10.0	50.0	9.5	50.5	10.0	48.5	12.5	49.5	11.0	51.0	16.5	51.0	16.0	48.5	14.5	51.0	17.0	52.5
1/18/18		9.5	50.5	9.0	49.5	9.5	49.5	9.0	50.0	10.5	49.5	13.0	49.5	10.5	50.5	16.0	50.5	16.5	49.0	15.0	51.5	16.5	52.0
2/1/18		9.5	50.5	9.5	49.5	10.0	50.0	10.0	50.0	11.0	49.0	13.0	49.0	10.5	50.0	16.0	50.0	16.0	48.5	15.5	51.0	16.5	52.0
2/15/18		10.0	50.5	10.0	49.5	9.0	49.0	9.5	49.5	11.0	48.5	12.5	48.5	11.0	50.5	16.5	50.0	16.5	49.0	15.5	50.5	17.0	52.0
2/26/18		9.0	50.0	9.5	49.0	9.5	49.5	9.0	50.0	10.5	49.0	12.0	48.5	10.5	50.0	15.5	50.0	16.0	48.5	15.0	50.5	16.0	51.5
3/15/18		9.0	49.5	9.0	49.0	9.0	48.0	9.5	50.0	11.0	49.0	12.5	49.0	11.0	50.5	15.5	49.0	16.5	49.0	15.0	50.0	16.0	51.0

TABLE 6B

Historical Summary of Field Sampling Readings - Individual Flow and Pressure Measurements for Expanded Sparge Well Network

DFSP San Pedro Administration Area

3171 N Gaffey Street, San Pedro, CA

Date	Notes	Well ID																					
		Building 108 Northwest														Building 108 Southeast							
		AS-26		AS-27		AS-28		AS-29		AS-30		AS-31 *		AS-32		AS-34		AS-35		AS-36		AS-37	
		Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)	Flow (cfm)	Pressure (psi)
3/27/18		9.5	49.5	9.0	48.5	9.5	48.5	9.0	49.5	10.5	48.0	12.0	48.0	10.5	49.5	16.0	49.0	16.0	48.0	14.5	50.0	16.5	51.0
4/12/18		9.5	50.0	9.5	49.5	9.5	49.0	10.0	50.0	11.0	49.0	12.0	48.5	11.0	50.0	16.0	49.5	15.5	48.0	15.0	51.0	16.5	51.5
4/25/18		10.0	50.5	9.0	48.5	10.0	49.5	9.5	49.0	10.5	48.5	12.5	49.0	10.5	49.5	16.5	50.5	16.0	49.0	14.5	50.5	16.0	51.0
5/11/18		9.5	49.5	8.5	48.0	9.0	48.5	10.5	49.5	11.0	49.5	13.0	49.5	11.0	50.5	17.0	50.0	15.5	49.5	14.5	51.0	16.0	51.5
5/23/18		10.5	51.0	9.0	49.0	9.5	49.0	10.5	49.0	11.0	49.0	12.5	49.0	11.0	51.0	16.0	49.5	15.0	49.0	14.0	50.5	16.5	52.0
6/15/18		9.5	50.0	8.5	49.0	10.0	50.0	10.0	48.0	10.5	48.5	12.5	49.5	10.5	50.0	16.5	50.0	15.5	49.5	14.5	51.5	16.0	51.5
6/29/18		10.0	51.0	8.5	49.0	9.5	49.5	11.0	48.0	11.0	49.5	12.0	48.5	11.0	51.0	17.0	50.5	15.0	49.5	14.0	51.0	16.0	52.0
7/9/18	18	10.0	50.5	9.0	49.5	9.0	49.5	10.0	49.0	10.0	49.5	12.0	49.0	10.5	50.5	16.0	50.0	15.0	50.0	14.0	51.5	15.5	52.0
12/18/18	19	9.5	50.0	8.5	48.5	9.3	48.5	10.5	48.5	11.0	49.5	11.5	49.0	11.0	51.0	16.0	49.5	15.5	50.5	13.5	50.5	15.0	51.0
12/27/19		10.0	51.0	9.0	49.0	9.0	49.0	10.0	49.0	10.0	49.0	12.0	49.5	10.5	50.5	16.0	50.0	15.0	50.0	14.0	51.0	15.5	51.5
1/4/19		9.5	52.0	9.0	50.0	9.5	51.0	10.5	52.0	10.5	50.0	12.5	50.5	11.0	52.0	16.5	51.5	16.0	52.0	15.0	52.5	16.5	52.5
1/31/19		10.5	52.5	8.5	50.5	9.0	50.5	10.5	54.0	11.0	50.5	12.5	51.5	10.5	51.5	17.0	52.5	15.5	51.5	14.5	53.0	16.0	53.5
2/12/19		10.0	53.0	9.0	51.5	9.5	52.0	10.0	53.0	10.0	51.0	13.0	51.0	11.0	53.0	17.0	53.5	15.5	53.0	15.0	54.0	17.0	53.0
2/26/29		10.0	52.5	8.5	51.0	9.0	52.5	11.0	55.0	10.5	52.0	12.5	52.0	11.0	52.5	16.5	53.0	16.0	53.5	14.5	53.5	16.5	54.0
3/5/19		9.5	53.0	9.0	52.0	9.0	52.0	10.5	56.0	10.5	51.5	12.5	52.5	10.5	53.5	17.0	54.0	15.5	54.5	15.0	54.5	16.5	55.0
3/21/18		10.0	53.0	9.0	52.5	9.5	53.0	10.0	55.0	10.0	52.0	13.0	53.0	11.0	54.0	17.0	54.5	16.0	54.5	15.0	55.0	17.0	55.0

Legend / Notes **:**

AS = Air sparge cfm = cubic feet per minute (indicated) psi = pounds per square inch -- = Not measured, well off line NM = Not measured, well on line

All wells installed during February 2016 and screened from 65-70 feet below grade surface (bgs) except for wells AS-27 through AS-29 and AS-31 (70-75 feet bgs), and AS-30 (67-72 feet bgs).

* = Well installed during February 2016 and screened from 65-70 feet bgs with system tie in /hook up work completed by early June 2016.

Wells initially configured to run individually for two hour cycles on a daily basis as part of startup testing phase.

1 = Startup of expanded sparge and vapor extraction system following the completion of well tie-in/hookup work per SGI's January 15, 2016 *Work Plan to Expand Air Sparge and Soil Vapor Extraction Well Array.*

2 = Collected background dissolved oxygen data prior to expanded AS system startup followed by deploying data loggers in observation wells GTMW-46 and GTMW-50 for influence monitoring.

3 = Follow up site visit to confirm expanded AS system functioning properly subsequent to startup as well as to check data logger units.

4 = Downloaded influence monitoring data and removed loggers from observation wells GMW-46 and GTMW-50 on May 23, 2016.

5 = Gradually increased injection rates to new sparge wells through end of reporting period based on influence monitoring data per SGI's July 15, 2016 *Remediation Status Report - Second Quarter 2016.*

6 = Deployed secondary air compressor for the purpose of running the expanded sparge well network at increased injection rates based on influence monitoring data per SGI's July 15, 2016 *Remediation Status Report - Second Quarter 2016.*

7 = Primary air compressor off-line upon arrival and was determined to require off-site warranty repair after unit troubleshooting conducted on September 1, 2016.

8 = Completed installation and hookup of secondary air compressor and tested unit overnight at increased injection rates to confirm functionality.

9 = Primary air compressor disconnected and removed from compound followed by being transported for warranty repair with unit redeployment anticipated during October 2016.

10 = Secondary air compressor manually shutdown since both compressors feed to a common receiver tank and the tank pressure is below the effective working pressure band of the receiver with just this single compressor online.

11 = Deployed data loggers in wells GTMW-46 and GTMW-50 on October 4, 2016 to collect background readings in advance of AS system restart at increased injection rates.

12 = Primary air compressor re-deployed and hooked up followed by AS system restart at increased injection rates with secondary air compressor.

13 = Completed influence monitoring at increased injection rates (Figures 5 and 6) followed by removal of data loggers from wells GTMW-46 and GTMW-50.

14 = Automatic sparge and vapor extraction system shutdown with both systems being left off-line pending the completion of oxidizer troubleshooting and repair work.

15 = Completed oxidizer repair work and restarted AS system in advance of vapor extraction system restart.

16 = AS system restarted following the completion of repair/maintenance work (off-line since January 31, 2017 and January 2, 2018, respectively).

17 = AS system restarted (off-line since November 3, 2017) following the completion of regional electrical service line repair work by utility company.

18 = Automatic sparge system shutdown on July 13, 2018 with system remaining off-line through November 2018 (compressor removed from site during August 2018 for repair and re-installed during October 2018 with subsequent electrical related issues delaying restart).

19 = AS system restarted (off-line since July 13, 2018) following completion of extensive required equipment and electrical repair/maintenance work.

TABLE 7
Air Sparge - Observation Well Monitoring
DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Groundwater Wells (Nearest Active Sparge Well : Distance in feet)	Date Sampled	Quarter Sampled	Dissolved Oxygen Concentrations (mg/L)	Dissolved Concentration in Groundwater				Air Sparge System Status (ON/OFF)
				DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)	MTBE (µg/L)	
GTMW-42 (VE-AS-10 : 60)	10/5/10	4Q2010	5.22	**440**	ND	**2.5**	ND	ON
	9/1/11	2Q2011	0.98	**620**	ND	**0.63**	ND	OFF (30 Days)
	9/13/11	2Q2011	2.89	--	--	--	--	ON (13 Days)
	11/7/11	4Q2011	3.24	**270**	ND	ND	ND	ON (36 Days)
	4/3/12	2Q2012	--	**820**	ND	**0.51**	ND	ON
	10/1/12	4Q2012	1.24	**550**	ND	ND	ND	ON
	4/1/13	2Q2013	2.06	**560**	**100**	ND	ND	ON
	10/7/13	4Q2013	2.30	--	--	--	--	ON
	10/8/13	4Q2013	--	**470**	ND <100	ND <0.50	ND <2.0	ON
	4/7/14	2Q2014	2.17	--	--	--	--	ON
	4/8/14	2Q2014	--	**380**	ND <100	ND <0.50	ND <2.0	ON
	10/6/14	4Q2014	--	**570**	ND <100	ND <0.50	ND <2.0	OFF
	4/7/15	2Q2015	3.06	**450**	ND <100	ND <0.50	ND <2.0	ON
	9/29/15	4Q2015	2.51	**530**	**120**	ND <0.50	ND <2.0	ON
	5/3/16	2Q2016	--	**660**	**100**	ND <0.50	ND <2.0	ON
	10/18/16	4Q2016	3.68	**600**	ND <100	ND <0.50	ND <2.0	ON
	4/11/17	2Q2017	1.06	**600**	ND <100	ND <0.50	ND <2.0	ON
	10/17/17	4Q2017	--	**540**	ND <100	ND <0.50	ND <2.0	ON
	5/1/18	2Q2018	--	**780**	ND <100	**0.84**	ND <2.0	ON
	10/10/18	4Q2018	--	**340**	ND <100	ND <0.50	ND <2.0	OFF [3]
GTMW-44D (VE-AS-20 : 25)	10/1/12	4Q2012	4.99	**630**	ND	ND	ND	OFF
	4/1/13	2Q2013	3.34	**340**	ND	ND	ND	OFF
	10/7/13	4Q2013	3.60	--	--	--	--	ON
	10/8/13	4Q2013	--	**180**	**160**	**0.66**	ND <2.0	ON
	4/7/14	2Q2014	4.60	--	--	--	--	ON
	4/8/14	2Q2014	--	**260**	ND <100	ND <0.50	ND <2.0	ON
	10/7/14	4Q2014	--	**360**	ND <100	ND <0.50	ND <2.0	OFF
	4/7/15	2Q2015	4.07	**190**	ND <100	ND <0.50	ND <2.0	ON
	9/29/15	4Q2015	3.69	**120**	ND <100	ND <0.50	ND <2.0	ON
	5/3/16	2Q2016	--	**150**	ND <100	ND <0.50	ND <2.0	ON
	10/18/16	4Q2016	4.20	ND <100	ND <100	ND <0.50	ND <2.0	ON
	4/11/17	2Q2017	0.87	ND <100	ND <100	ND <0.50	ND <2.0	ON
	10/17/17	4Q2017	--	**170**	ND <100	ND <0.50	ND <2.0	ON
	5/1/18	2Q2018	--	**150**	ND <100	ND <0.50	ND <2.0	ON
	10/9/18	4Q2018	--	ND <100	ND <100	ND <0.50	ND <2.0	OFF [3]
GTMW-45D (VE-AS-2 : 24, VE-AS-5 : 28)	10/5/10	4Q2010	5.86	**160**	ND	ND	ND	ON
	9/1/11	2Q2011	0.25	**180**	**290**	ND	ND	OFF (30 Days)
	9/13/11	2Q2011	0.42	--	--	--	--	ON (13 Days)
	11/7/11	4Q2011	1.89	**200**	**330**	ND	ND	ON (36 Days)
	4/3/12	2Q2012	--	**210**	**280**	ND	ND	ON
	10/1/12	4Q2012	3.81	**200**	**260**	ND	ND	ON
	4/1/13	2Q2013	3.24	**140**	**530**	**0.60**	ND	ON
	10/7/13	4Q2013	3.32	--	--	--	--	ON
	10/8/13	4Q2013	--	ND <100	**160**	ND <0.50	ND <2.0	ON
	4/7/14	2Q2014	5.28	--	--	--	--	ON
	4/8/14	2Q2014	--	**180**	**180**	ND <0.50	ND <2.0	ON
	10/7/14	4Q2014	3.50	**460**	**210**	ND <0.50	ND <2.0	OFF
	4/7/15	2Q2015	3.98	**110**	**210**	ND <0.50	ND <2.0	ON
	9/29/15	4Q2015	3.64	ND <100	**260**	**0.57**	ND <2.0	ON
	5/3/16	2Q2016	--	ND <100	**160**	ND <0.50	ND <2.0	ON
	10/18/16	4Q2016	3.59	ND <100	**130**	ND <0.50	ND <2.0	ON
	4/11/17	2Q2017	0.77	ND <100	ND <100	ND <0.50	ND <2.0	ON
	10/17/17	4Q2017	--	ND <100	ND <100	ND <0.50	ND <2.0	ON
	5/1/18	2Q2018	--	**130**	ND <100	ND <0.50	ND <2.0	ON
	10/10/18	4Q2018	--	ND <100	ND <100	ND <0.50	ND <2.0	OFF [3]

TABLE 7
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DFSP San Pedro Administration Area
3171 N Gaffey Street, San Pedro, CA

Groundwater Wells (Nearest Active Sparge Well : Distance in feet)	Date Sampled	Quarter Sampled	Dissolved Oxygen Concentrations (mg/L)	Dissolved Concentration in Groundwater				Air Sparge System Status (ON/OFF)
				DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)	MTBE (µg/L)	
GTMW-46 (VE-AS-11 : 25, VE-AS-9 : 30)	10/5/10	4Q2010	3.62	**890**	**840**	**100**	ND	ON
	9/1/11	2Q2011	0.29	**1,100**	**1,200**	**71**	ND	OFF (30 Days)
	9/13/11	2Q2011	0.33	--	--	--	--	ON (13 Days)
	11/7/11	4Q2011	2.12	**1,400**	**560**	**16**	ND	ON (36 Days)
	4/3/12	2Q2012	--	**1,200**	**170**	**1.1**	ND	ON
	10/1/12	4Q2012	7.13	**1,100**	**870**	**12**	ND	ON
	4/1/13	2Q2013	2.70	**700**	**680**	**7.4**	ND	ON
	10/7/13	4Q2013	3.00	--	--	--	--	ON
	10/8/13	4Q2013	--	**820**	**1,100**	**41**	ND <2.0	ON
	4/7/14	2Q2014	4.00	--	--	--	--	ON
	4/8/14	2Q2014	--	**1,300**	**1,100**	**27**	ND <2.0	ON
	10/7/14	4Q2014	3.12	**1,200**	**1,400**	**22**	ND <2.0	OFF
	4/7/15	2Q2015	3.85	**1,100**	**1,400**	**27**	ND <2.0	ON
	9/29/15	4Q2015	3.21	**510**	**1,300**	**40**	ND <2.0	ON
	5/3/16	2Q2016	-- [1]	**730**	**1,400**	**45**	ND <2.0	ON
	10/18/16	4Q2016	7.52 [2]	**220**	**190**	**7.9**	ND <2.0	ON
	4/11/17	2Q2017	8.43	**300**	**120**	**9.8**	ND <2.0	ON
	10/17/17	4Q2017	--	**120**	ND <100	ND <0.50	ND <2.0	ON
	5/1/18	2Q2018	--	**630**	**640**	**20**	ND <2.0	ON
	10/10/18	4Q2018	--	ND <100	**200**	**2.7**	ND <2.0	OFF [3]
GTMW-50 (VE-AS-3 : 25, VE-AS-6 : 26)	10/5/10	4Q2010	3.96	**680**	**1,000**	**18**	ND	ON
	9/1/11	2Q2011	0.19	**560**	**750**	**32**	ND	OFF (30 Days)
	9/13/11	2Q2011	0.51	--	--	--	--	ON (13 Days)
	11/7/11	4Q2011	0.71	**920**	**1,200**	**42**	ND	ON (36 Days)
	4/3/12	2Q2012	--	**780**	**2,500**	**140**	ND	ON
	10/1/12	4Q2012	0.84	**550**	**1,100**	**58**	ND	ON
	4/1/13	2Q2013	3.02	**670**	**2,000**	**150**	ND	ON
	10/7/13	4Q2013	4.20	--	--	--	--	ON
	10/8/13	4Q2013	--	**390**	**1,100**	**13**	ND <2.0	ON
	4/7/14	2Q2014	3.69	--	--	--	--	ON
	4/8/14	2Q2014	--	**660**	**1,800**	**120**	ND <2.0	ON
	10/7/14	4Q2014	3.74	**910**	**2,600**	**140**	ND <2.0	OFF
	4/7/15	2Q2015	3.82	**780**	**2,400**	**150**	ND <2.0	ON
	9/29/15	4Q2015	3.50	**470**	**2,100**	**67**	ND <2.0	ON
	5/3/16	2Q2016	-- [1]	**520**	**2,400**	**75**	ND <2.0	ON
	10/18/16	4Q2016	3.77 [2]	**220**	**1,200**	**6.9**	ND <2.0	ON
	4/11/17	2Q2017	7.48	**110**	**980**	**4.9**	ND <2.0	ON
	10/17/17	4Q2017	--	**180**	ND <100	**6.0**	ND <2.0	ON
	5/1/18	2Q2018	--	**450**	**1,400**	**38.0**	ND <2.0	ON
	10/10/18	4Q2018	--	**180**	**480**	**6.7**	ND <2.0	OFF [3]
GTMW-51D (VE-AS-23 : 30)	10/1/12	4Q2012	7.91	**290**	ND	ND	**5.0**	OFF
	4/1/13	2Q2013	3.76	**320**	ND	ND	**4.6**	OFF
	10/7/13	4Q2013	3.68	--	--	--	--	ON
	10/8/13	4Q2013	--	**260**	ND <100	ND <0.50	**2.3**	ON
	4/7/14	2Q2014	3.39	--	--	--	--	ON
	4/8/14	2Q2014	--	**460**	ND <100	ND <0.50	**2.7**	ON
	10/6/14	4Q2014	4.72	--	--	--	--	OFF
	10/7/14	4Q2014	--	**330**	ND <100	ND <0.50	**2.6**	OFF
	4/7/15	2Q2015	4.85	**370**	ND <100	ND <0.50	**3.3**	ON
	9/29/15	4Q2015	3.60	**220**	ND <100	ND <0.50	**4.1**	ON
	5/3/16	2Q2016	--	**280**	ND <100	ND <0.50	**2.6**	ON
	10/18/16	4Q2016	4.07	**150**	ND <100	ND <0.50	ND <2.0	ON
	4/11/17	2Q2017	0.81	**250**	ND <100	ND <0.50	**2.0**	ON
	10/17/17	4Q2017	--	**220**	ND <100	ND <0.50	**2.3**	ON
	5/1/18	2Q2018	--	**230**	ND <100	ND <0.50	ND <2.0	ON
	10/9/18	4Q2018	--	**150**	ND <100	ND <0.50	ND <2.0	OFF [3]

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Groundwater Wells (Nearest Active Sparge Well : Distance in feet)	Date Sampled	Quarter Sampled	Dissolved Oxygen Concentrations (mg/L)	Dissolved Concentration in Groundwater				Air Sparge System Status (ON/OFF)
				DRO (µg/L)	GRO (µg/L)	Benzene (µg/L)	MTBE (µg/L)	
GTMW-52 (VE-AS-11 : 90)	10/5/10	4Q2010	--	ND	**230**	**49**	ND	ON
	9/1/11	2Q2011	--	**100**	**110**	**3.8**	ND	OFF (30 Days)
	9/13/11	2Q2011	--	--	--	--	--	ON (13 Days)
	11/7/11	4Q2011	2.13	ND	ND	ND	ND	ON (36 Days)
	4/3/12	2Q2012	--	ND	**100**	**0.95**	ND	ON
	10/1/12	4Q2012	0.61	ND	**110**	**1.5**	ND	ON
	4/1/13	2Q2013	3.40	ND	ND	**3.6**	ND	ON
	10/7/13	4Q2013	3.20	--	--	--	--	ON
	10/8/13	4Q2013	--	ND <100	ND <100	ND <0.50	ND <2.0	ON
	4/7/14	2Q2014	3.61	--	--	--	--	ON
	4/8/14	2Q2014	--	**110**	ND <100	ND <0.50	ND <2.0	ON
	10/7/14	4Q2014	--	**140**	ND <100	ND <0.50	ND <2.0	OFF
	4/7/15	2Q2015	3.56	**110**	ND <100	ND <0.50	ND <2.0	ON
	9/29/15	4Q2015	3.33	ND <100	ND <100	ND <0.50	ND <2.0	ON
	5/3/16	2Q2016	--	**110**	ND <100	ND <0.50	ND <2.0	ON
	10/18/16	4Q2016	4.34	ND <100	ND <100	ND <0.50	ND <2.0	ON
	4/11/17	2Q2017	0.42	**120**	ND <100	ND <0.50	ND <2.0	ON
	10/17/17	4Q2017	--	ND <100	ND <100	ND <0.50	ND <2.0	ON
	5/1/18	2Q2018	--	**160**	ND <100	ND <0.50	ND <2.0	ON
	NS	4Q2018	--	--	--	--	--	OFF [3]
GTMW-53 (VE-AS-22 : 60)	10/1/12	4Q2012	5.48	ND	ND	ND	ND	OFF
	4/1/13	2Q2013	0.89	ND	ND	ND	ND	OFF
	10/7/13	4Q2013	3.61	--	--	--	--	ON
	10/8/13	4Q2013	--	ND <100	ND <100	ND <0.50	ND <2.0	ON
	4/7/14	2Q2014	4.76	--	--	--	--	ON
	4/8/14	2Q2014	--	ND <100	ND <100	ND <0.50	ND <2.0	ON
	10/6/14	4Q2014	3.96	--	--	--	--	OFF
	10/7/14	4Q2014	--	ND <100	ND <100	ND <0.50	ND <2.0	OFF
	4/7/15	2Q2015	4.44	ND <100	ND <100	ND <0.50	ND <2.0	ON
	9/29/15	4Q2015	3.52	**210**	ND <100	ND <0.50	ND <2.0	ON
	5/3/16	2Q2016	--	**290**	ND <100	ND <0.50	ND <2.0	ON
	10/18/16	4Q2016	4.48	ND <100	ND <100	ND <0.50	ND <2.0	ON
	4/11/17	2Q2017	1.02	ND <100	ND <100	ND <0.50	ND <2.0	ON
	10/17/17	4Q2017	--	ND <100	ND <100	ND <0.50	ND <2.0	ON
	5/1/18	2Q2018	--	**150**	ND <100	ND <0.50	ND <2.0	ON
	NS	4Q2018	--	--	--	--	--	OFF [3]

Legend / Notes:

DRO = diesel-range organics

GRO = gasoline-range organics

MTBE = methyl tertiary-butyl ether

mg/L = milligrams per liter

µg/L = micrograms per liter

-- = not measured or analyzed

ND = Not detected at or above the indicated laboratory reporting limit (see historical laboratory reports if not listed).

NS = Not sampled per SGI's August 30, 2018 *Revised Groundwater Monitoring and Sampling Plan.*

Detections are shown in **bold.**

Dissolved oxygen concentrations measured above grade via a YSI 556 water quality meter connected to a flow cell.

1 = See SGI's July 15, 2016 *Remediation Status Report - Second Quarter 2016* for range of dissolved oxygen concentrations measured via down well data logger (In-Situ, Inc. Troll® 9500 water quality meter) deployed from May 17-23, 2016 during sparge system influence monitoring.

2 = See SGI's January 13, 2017 *Remediation Status Report - Fourth Quarter 2016* for range of dissolved oxygen concentrations measured via down well data logger (In-Situ, Inc. Troll® 9500 water quality meter) deployed from October 4-13, 2016 during sparge system influence monitoring.

3 = Air sparge system off-line since mid-July 2018 due to extensive required equipment and electrical repair/maintenance work.

ATTACHMENT A
Laboratory Analytical Results and Chain-of-Custody Documents

AMERICAN ANALYTICS

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February 11, 2019

Neil Irish

The Source Group, Inc. (SH)

1962 Freeman Ave.

Signal Hill, CA 90755

Re : SDLA Admin / 04-DES

A5332985 / 9A31009

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 01/31/19 17:45 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5332985
Date Received: 01/31/19
Date Reported: 02/11/19

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
GRO in Vapor as Hexane					
DES-INF-ADM-126	9A31009-01	Vapor	5	01/31/19 07:30	01/31/19 17:45
VOCs BTEX/OXY Vapor GC/MS					
DES-INF-ADM-126	9A31009-01	Vapor	5	01/31/19 07:30	01/31/19 17:45
VOCs Gasoline Range Organics Vapor					
DES-INF-ADM-126	9A31009-01	Vapor	5	01/31/19 07:30	01/31/19 17:45

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5332985
Project No:	04-DES	**Date Received:**	01/31/19
Project Name:	SDLA Admin	**Date Reported:**	02/11/19
Matrix:	Vapor	**Sampled:**	01/31/19
Dilution:	1	**Prepared:**	02/01/19
Method:	VOCs BTEX/OXY Vapor by GC/MS 8260M	**Analyzed:**	02/01/19

DES-INF-ADM-126

9A31009-01 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
tert-Amyl Methyl Ether (TAME)	<5.0	ug/L	5.0	<1.2	ppmv	1.2
Benzene	<0.50	ug/L	0.50	<0.16	ppmv	0.16
tert-Butyl alcohol (TBA)	<30	ug/L	30	<9.9	ppmv	9.9
Diisopropyl ether (DIPE)	<5.0	ug/L	5.0	<1.2	ppmv	1.2
Ethanol	<200	ug/L	200	<110	ppmv	110
Ethylbenzene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
Ethyl-tert-Butyl Ether (ETBE)	<5.0	ug/L	5.0	<1.2	ppmv	1.2
Methyl-tert-Butyl Ether (MTBE)	<2.0	ug/L	2.0	<0.55	ppmv	0.55
Toluene	<0.50	ug/L	0.50	<0.13	ppmv	0.13
o-Xylene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
m,p-Xylenes	<0.50	ug/L	0.50	<0.12	ppmv	0.12

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	137 %	70-140
Dibromofluoromethane	138 %	70-140
Toluene-d8	114 %	70-140

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5332985
Project No:	04-DES	**Date Received:**	01/31/19
Project Name:	SDLA Admin	**Date Reported:**	02/11/19
Matrix:	Vapor	**Sampled:**	01/31/19
Dilution:	1	**Prepared:**	02/01/19
Method:	Gasoline Range Organics in Vapor by GC/FID	**Analyzed:**	02/01/19

DES-INF-ADM-126

9A31009-01 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Gasoline Range Organics (GRO)	<20	ug/L	20	<4.9	ppmv	4.9

Surrogates	%REC	%REC Limits
a,a,a-Trifluorotoluene	93.4 %	70-130

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5332985
Project No:	04-DES	**Date Received:**	01/31/19
Project Name:	SDLA Admin	**Date Reported:**	02/11/19
Method:	GRO in Vapor as Hexane	**Units:**	ppmv

Date Sampled:	01/31/19	
Date Prepared:	02/01/19	
Date Analyzed:	02/01/19	
AA ID No:	9A31009-01	
Client ID No:	DES-INF-ADM-126	
Matrix:	Vapor	
Dilution Factor:	1	MRL

GRO in Vapor as Hexane (EPA 8015M)

GRO as Hexane	<5.7	5.7

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5332985
Date Received: 01/31/19
Date Reported: 02/11/19

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs BTEX/OXY Vapor by GC/MS 8260M - Quality Control										
*Batch B9B0103 - *** DEFAULT PREP ****										
Blank (B9B0103-BLK1)				Prepared & Analyzed: 02/01/19						
tert-Amyl Methyl Ether (TAME)	<5.0	5.0	ug/L							
Benzene	<0.50	0.50	ug/L							
tert-Butyl alcohol (TBA)	<30	30	ug/L							
Diisopropyl ether (DIPE)	<5.0	5.0	ug/L							
Ethanol	<200	200	ug/L							
Ethylbenzene	<0.50	0.50	ug/L							
Ethyl-tert-Butyl Ether (ETBE)	<5.0	5.0	ug/L							
Methyl-tert-Butyl Ether (MTBE)	<2.0	2.0	ug/L							
Toluene	<0.50	0.50	ug/L							
o-Xylene	<0.50	0.50	ug/L							
m,p-Xylenes	<0.50	0.50	ug/L							
Surrogate: 4-Bromofluorobenzene	*54.9*		*ug/L*	*50*		*110*	*70-140*			
Surrogate: Dibromofluoromethane	*51.5*		*ug/L*	*50*		*103*	*70-140*			
Surrogate: Toluene-d8	*53.4*		*ug/L*	*50*		*107*	*70-140*			
LCS (B9B0103-BS1)				Prepared & Analyzed: 02/01/19						
tert-Amyl Methyl Ether (TAME)	**17.8**	5.0	ug/L	20		89.0	75-125		30	
Benzene	**16.2**	0.50	ug/L	20		80.8	75-125		30	
tert-Butyl alcohol (TBA)	**115**	30	ug/L	100		115	75-125		30	
Diisopropyl ether (DIPE)	**14.5**	5.0	ug/L	20		72.7	75-125		30	***
Ethylbenzene	**23.9**	0.50	ug/L	20		120	75-125		30	
Ethyl-tert-Butyl Ether (ETBE)	**17.8**	5.0	ug/L	20		89.2	75-125		30	
Methyl-tert-Butyl Ether (MTBE)	**38.7**	2.0	ug/L	40		96.7	75-125		30	
Toluene	**21.9**	0.50	ug/L	20		109	75-125		30	
o-Xylene	**22.1**	0.50	ug/L	20		110	75-125		30	
m,p-Xylenes	**43.6**	0.50	ug/L	40		109	75-125		30	
Surrogate: 4-Bromofluorobenzene	*53.8*		*ug/L*	*50*		*108*	*70-140*			
Surrogate: Dibromofluoromethane	*56.9*		*ug/L*	*50*		*114*	*70-140*			
Surrogate: Toluene-d8	*52.7*		*ug/L*	*50*		*105*	*70-140*			
Duplicate (B9B0103-DUP1)			**Source: 9A31010-01**	Prepared & Analyzed: 02/01/19						
tert-Amyl Methyl Ether (TAME)	**<5.0**	5.0	ug/L						30	
Benzene	**<0.50**	0.50	ug/L						30	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5332985
Date Received: 01/31/19
Date Reported: 02/11/19

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs BTEX/OXY Vapor by GC/MS 8260M - Quality Control										
*Batch B9B0103 - *** DEFAULT PREP ****										
Duplicate (B9B0103-DUP1) Continued			**Source: 9A31010-01**	Prepared & Analyzed: 02/01/19						
tert-Butyl alcohol (TBA)	**<30**	30	ug/L						30	
Diisopropyl ether (DIPE)	**<5.0**	5.0	ug/L						30	
Ethanol	**<200**	200	ug/L						30	
Ethylbenzene	**<0.50**	0.50	ug/L						30	
Ethyl-tert-Butyl Ether (ETBE)	**<5.0**	5.0	ug/L						30	
Methyl-tert-Butyl Ether (MTBE)	**<2.0**	2.0	ug/L						30	
Toluene	**<0.50**	0.50	ug/L						30	
o-Xylene	**<0.50**	0.50	ug/L						30	
m,p-Xylenes	**<0.50**	0.50	ug/L						30	
Surrogate: 4-Bromofluorobenzene	*52.7*		*ug/L*	*50*		*105*	*70-140*			
Surrogate: Dibromofluoromethane	*52.2*		*ug/L*	*50*		*104*	*70-140*			
Surrogate: Toluene-d8	*50.8*		*ug/L*	*50*		*102*	*70-140*			
Gasoline Range Organics in Vapor by GC/FID - Quality Control										
*Batch B9B0105 - *** DEFAULT PREP ****										
Blank (B9B0105-BLK1)				Prepared & Analyzed: 02/01/19						
Gasoline Range Organics (GRO)	<20	20	ug/L							
Surrogate: a,a,a-Trifluorotoluene	*49.3*		*ug/L*	*50*		*98.5*	*70-130*			
LCS (B9B0105-BS1)				Prepared & Analyzed: 02/01/19						
Gasoline Range Organics (GRO)	**445**	20	ug/L	500		89.0	75-125			
Surrogate: a,a,a-Trifluorotoluene	*55.9*		*ug/L*	*50*		*112*	*70-130*			
LCS Dup (B9B0105-BSD1)				Prepared & Analyzed: 02/01/19						
Gasoline Range Organics (GRO)	**456**	20	ug/L	500		91.1	75-125	2.36	30	
Surrogate: a,a,a-Trifluorotoluene	*57.0*		*ug/L*	*50*		*114*	*70-130*			
Duplicate (B9B0105-DUP1)			**Source: 9A31012-02**	Prepared & Analyzed: 02/01/19						
Gasoline Range Organics (GRO)	**30900**	200	ug/L		33100			6.95	30	
Surrogate: a,a,a-Trifluorotoluene	*57.0*		*ug/L*	*50*		*114*	*70-130*			
GRO in Vapor as Hexane - Quality Control										
*Batch B9B0105 - *** DEFAULT PREP ****										

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5332985
Date Received: 01/31/19
Date Reported: 02/11/19

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
GRO in Vapor as Hexane - Quality Control										
*Batch B9B0105 - *** DEFAULT PREP ****										
Blank (B9B0105-BLK1)				Prepared & Analyzed: 02/01/19						
GRO as Hexane	<5.7	5.7	ppmv							
Duplicate (B9B0105-DUP1)		**Source: 9A31012-02**		Prepared & Analyzed: 02/01/19						
GRO as Hexane	**6740**	57	ppmv		7240			7.10	30	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5332985
Project No:	04-DES	**Date Received:**	01/31/19
Project Name:	SDLA Admin	**Date Reported:**	02/11/19

Special Notes

[1] = ******* : Exceeds lower control limit.

Viorel Vasile
Operations Manager

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311
Tel: 818-998-5547 FAX: 818-998-7258

A.A. COC No.: 17496
70055346
Page 1 of 1

Client: APEX-SGI	**Project Name / No.:** DESP SAN PEDRO - ADMIN	**Sampler's Name:** DAVID WOLFE
Project Manager: MIKE WOOD	**Site Address:** 3171 N. GAFFEY	**Sampler's Signature:**
Phone: 805-373-4063	**City:** SAN Pedro	**P.O. No.:** —
Fax: 805-373-4073	**State & Zip:** Ca 90731	**Quote No.:** —

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	8015M	8260B									Special Instructions
DES-INF-ADM-126	9A31209-01	1-31-19	730	AIR	1	X	X									8015M TPH@HEXANE
																8260B - BTEX, VOC's
																OXY's, GRO (Ethanol)
																19 JAN 31 5:45P

For Laboratory Use

PRIORITY
Rush 2 Hrs 48 SH
Date 2/1/19 Time 0600 Sign

A.A. Project No.: AS33298S / 9A31009

Relinquished by	Date	Time	Received by
	1-31-19	15:50	
	1/31/19	17:45	
	Date	Time	Received by

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.

AMERICAN ANALYTICS

9765 Eton Avenue
Chatsworth
California 91311
Tel: (818) 998-5547
Fax: (818) 998-7258

March 11, 2019

Neil Irish

The Source Group, Inc. (SH)

1962 Freeman Ave.

Signal Hill, CA 90755

Re : SDLA Admin / 04-DES

A5333012 / 9B26019

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 02/26/19 19:21 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5333012
Date Received: 02/26/19
Date Reported: 03/11/19

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
GRO in Vapor as Hexane					
DES-INF-ADM-127	9B26019-01	Vapor	5	02/26/19 09:00	02/26/19 19:21
VOCs BTEX/OXY Vapor GC/MS					
DES-INF-ADM-127	9B26019-01	Vapor	5	02/26/19 09:00	02/26/19 19:21
VOCs Gasoline Range Organics Vapor					
DES-INF-ADM-127	9B26019-01	Vapor	5	02/26/19 09:00	02/26/19 19:21

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5333012
Project No:	04-DES	**Date Received:**	02/26/19
Project Name:	SDLA Admin	**Date Reported:**	03/11/19
Matrix:	Vapor	**Sampled:**	02/26/19
Dilution:	1	**Prepared:**	03/01/19
Method:	VOCs BTEX/OXY Vapor by GC/MS 8260M	**Analyzed:**	03/01/19

DES-INF-ADM-127

9B26019-01 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
tert-Amyl Methyl Ether (TAME)	<5.0	ug/L	5.0	<1.2	ppmv	1.2
Benzene	<0.50	ug/L	0.50	<0.16	ppmv	0.16
tert-Butyl alcohol (TBA)	<30	ug/L	30	<9.9	ppmv	9.9
Diisopropyl ether (DIPE)	<5.0	ug/L	5.0	<1.2	ppmv	1.2
Ethanol	<200	ug/L	200	<110	ppmv	110
Ethylbenzene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
Ethyl-tert-Butyl Ether (ETBE)	<5.0	ug/L	5.0	<1.2	ppmv	1.2
Methyl-tert-Butyl Ether (MTBE)	<2.0	ug/L	2.0	<0.55	ppmv	0.55
Toluene	<0.50	ug/L	0.50	<0.13	ppmv	0.13
o-Xylene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
m,p-Xylenes	<0.50	ug/L	0.50	<0.12	ppmv	0.12

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	99.9 %	70-140
Dibromofluoromethane	98.3 %	70-140
Toluene-d8	100 %	70-140

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5333012
Project No:	04-DES	**Date Received:**	02/26/19
Project Name:	SDLA Admin	**Date Reported:**	03/11/19
Matrix:	Vapor	**Sampled:**	02/26/19
Dilution:	1	**Prepared:**	02/28/19
Method:	Gasoline Range Organics in Vapor by GC/FID	**Analyzed:**	02/28/19

DES-INF-ADM-127

9B26019-01 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Gasoline Range Organics (GRO)	<20	ug/L	20	<4.9	ppmv	4.9

Surrogates	%REC	%REC Limits
a,a,a-Trifluorotoluene	95.3 %	70-130

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5333012
Project No:	04-DES	**Date Received:**	02/26/19
Project Name:	SDLA Admin	**Date Reported:**	03/11/19
Method:	GRO in Vapor as Hexane	**Units:**	ppmv

Date Sampled:	02/26/19	
Date Prepared:	02/28/19	
Date Analyzed:	02/28/19	
AA ID No:	9B26019-01	
Client ID No:	DES-INF-ADM-127	
Matrix:	Vapor	
Dilution Factor:	1	MRL

GRO in Vapor as Hexane (EPA 8015M)

GRO as Hexane	<5.7	5.7

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5333012
Date Received: 02/26/19
Date Reported: 03/11/19

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs BTEX/OXY Vapor by GC/MS 8260M - Quality Control										
*Batch B9C0102 - *** DEFAULT PREP ****										
Blank (B9C0102-BLK1)				Prepared & Analyzed: 03/01/19						
tert-Amyl Methyl Ether (TAME)	<5.0	5.0	ug/L							
Benzene	<0.50	0.50	ug/L							
tert-Butyl alcohol (TBA)	<30	30	ug/L							
Diisopropyl ether (DIPE)	<5.0	5.0	ug/L							
Ethanol	<200	200	ug/L							
Ethylbenzene	<0.50	0.50	ug/L							
Ethyl-tert-Butyl Ether (ETBE)	<5.0	5.0	ug/L							
Methyl-tert-Butyl Ether (MTBE)	<2.0	2.0	ug/L							
Toluene	<0.50	0.50	ug/L							
o-Xylene	<0.50	0.50	ug/L							
m,p-Xylenes	<0.50	0.50	ug/L							
Surrogate: 4-Bromofluorobenzene	*49.2*		*ug/L*	*50*		*98.5*	*70-140*			
Surrogate: Dibromofluoromethane	*50.2*		*ug/L*	*50*		*100*	*70-140*			
Surrogate: Toluene-d8	*49.7*		*ug/L*	*50*		*99.4*	*70-140*			
LCS (B9C0102-BS1)				Prepared & Analyzed: 03/01/19						
tert-Amyl Methyl Ether (TAME)	**14.7**	5.0	ug/L	20		73.6	75-125		30	
Benzene	**15.9**	0.50	ug/L	20		79.4	75-125		30	
tert-Butyl alcohol (TBA)	**77.0**	30	ug/L	100		77.0	75-125		30	
Diisopropyl ether (DIPE)	**13.5**	5.0	ug/L	20		67.4	75-125		30	
Ethylbenzene	**20.7**	0.50	ug/L	20		104	75-125		30	
Ethyl-tert-Butyl Ether (ETBE)	**15.8**	5.0	ug/L	20		79.0	75-125		30	
Methyl-tert-Butyl Ether (MTBE)	**31.6**	2.0	ug/L	40		79.1	75-125		30	
Toluene	**19.0**	0.50	ug/L	20		95.2	75-125		30	
o-Xylene	**20.0**	0.50	ug/L	20		100	75-125		30	
m,p-Xylenes	**41.3**	0.50	ug/L	40		103	75-125		30	
Surrogate: 4-Bromofluorobenzene	*50.5*		*ug/L*	*50*		*101*	*70-140*			
Surrogate: Dibromofluoromethane	*45.6*		*ug/L*	*50*		*91.1*	*70-140*			
Surrogate: Toluene-d8	*50.1*		*ug/L*	*50*		*100*	*70-140*			
LCS Dup (B9C0102-BSD1)				Prepared: 03/01/19 Analyzed: 03/02/19						
tert-Amyl Methyl Ether (TAME)	**17.6**	5.0	ug/L	20		88.2	75-125	18.1	30	
Benzene	**16.8**	0.50	ug/L	20		83.8	75-125	5.39	30	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5333012
Date Received: 02/26/19
Date Reported: 03/11/19

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs BTEX/OXY Vapor by GC/MS 8260M - Quality Control										
*Batch B9C0102 - *** DEFAULT PREP ****										
LCS Dup (B9C0102-BSD1) Continued				Prepared: 03/01/19 Analyzed: 03/02/19						
tert-Butyl alcohol (TBA)	**95.2**	30	ug/L	100		95.2	75-125	21.1	30	
Diisopropyl ether (DIPE)	**15.2**	5.0	ug/L	20		76.2	75-125	12.3	30	
Ethylbenzene	**21.2**	0.50	ug/L	20		106	75-125	2.43	30	
Ethyl-tert-Butyl Ether (ETBE)	**19.4**	5.0	ug/L	20		96.8	75-125	20.3	30	
Methyl-tert-Butyl Ether (MTBE)	**40.1**	2.0	ug/L	40		100	75-125	23.6	30	
Toluene	**18.9**	0.50	ug/L	20		94.6	75-125	0.580	30	
o-Xylene	**20.8**	0.50	ug/L	20		104	75-125	3.77	30	
m,p-Xylenes	**41.9**	0.50	ug/L	40		105	75-125	1.37	30	
Surrogate: 4-Bromofluorobenzene	*51.3*		*ug/L*	*50*		*103*	*70-140*			
Surrogate: Dibromofluoromethane	*51.1*		*ug/L*	*50*		*102*	*70-140*			
Surrogate: Toluene-d8	*49.3*		*ug/L*	*50*		*98.6*	*70-140*			
Duplicate (B9C0102-DUP1)			**Source: 9B26019-01**	Prepared & Analyzed: 03/01/19						
tert-Amyl Methyl Ether (TAME)	**<5.0**	5.0	ug/L		<5.0				30	
Benzene	**<0.50**	0.50	ug/L		<0.50				30	
tert-Butyl alcohol (TBA)	**<30**	30	ug/L		<30				30	
Diisopropyl ether (DIPE)	**<5.0**	5.0	ug/L		<5.0				30	
Ethanol	**<200**	200	ug/L		<200				30	
Ethylbenzene	**<0.50**	0.50	ug/L		<0.50				30	
Ethyl-tert-Butyl Ether (ETBE)	**<5.0**	5.0	ug/L		<5.0				30	
Methyl-tert-Butyl Ether (MTBE)	**<2.0**	2.0	ug/L		<2.0				30	
Toluene	**<0.50**	0.50	ug/L		<0.50				30	
o-Xylene	**<0.50**	0.50	ug/L		<0.50				30	
m,p-Xylenes	**<0.50**	0.50	ug/L		<0.50				30	
Surrogate: 4-Bromofluorobenzene	*49.4*		*ug/L*	*50*		*98.7*	*70-140*			
Surrogate: Dibromofluoromethane	*50.1*		*ug/L*	*50*		*100*	*70-140*			
Surrogate: Toluene-d8	*50.2*		*ug/L*	*50*		*100*	*70-140*			
Gasoline Range Organics in Vapor by GC/FID - Quality Control										
*Batch B9B2808 - *** DEFAULT PREP ****										
Blank (B9B2808-BLK1)				Prepared & Analyzed: 02/28/19						
Gasoline Range Organics (GRO)	<20	20	ug/L							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5333012
Date Received: 02/26/19
Date Reported: 03/11/19

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Gasoline Range Organics in Vapor by GC/FID - Quality Control										
*Batch B9B2808 - *** DEFAULT PREP ****										
Blank (B9B2808-BLK1) Continued				Prepared & Analyzed: 02/28/19						
Surrogate: a,a,a-Trifluorotoluene	*47.5*		*ug/L*	*50*		*94.9*	*70-130*			
LCS (B9B2808-BS1)				Prepared & Analyzed: 02/28/19						
Gasoline Range Organics (GRO)	**472**	20	ug/L	500		94.4	75-125			
Surrogate: a,a,a-Trifluorotoluene	*55.6*		*ug/L*	*50*		*111*	*70-130*			
LCS Dup (B9B2808-BSD1)				Prepared & Analyzed: 02/28/19						
Gasoline Range Organics (GRO)	**478**	20	ug/L	500		95.7	75-125	1.34	30	
Surrogate: a,a,a-Trifluorotoluene	*56.1*		*ug/L*	*50*		*112*	*70-130*			
Duplicate (B9B2808-DUP1)			**Source: 9B27015-01**	Prepared & Analyzed: 02/28/19						
Gasoline Range Organics (GRO)	**1140**	20	ug/L		1120			2.22	30	
Surrogate: a,a,a-Trifluorotoluene	*59.2*		*ug/L*	*50*		*118*	*70-130*			
GRO in Vapor as Hexane - Quality Control										
*Batch B9B2808 - *** DEFAULT PREP ****										
Blank (B9B2808-BLK1)				Prepared & Analyzed: 02/28/19						
GRO as Hexane	<5.7	5.7	ppmv							
Duplicate (B9B2808-DUP1)			**Source: 9B27015-01**	Prepared & Analyzed: 02/28/19						
GRO as Hexane	**249**	5.7	ppmv		244			2.22	30	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5333012
Project No:	04-DES	**Date Received:**	02/26/19
Project Name:	SDLA Admin	**Date Reported:**	03/11/19

Special Notes

Viorel Vasile
Operations Manager

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311
Tel: 818-998-5547 FAX: 818-998-7258

A.A. COC No.: 17637
70055364
Page 1 of 1

Client:	APEX-SGI	**Project Name / No.:**	DFSP SAN PEDRO ADMIN	**Sampler's Name:**	DAVID Webb
Project Manager:	MIKE WOOD	**Site Address:**	3171 N. GAFFEY	**Sampler's Signature:**	
Phone:	1-805-373-9063	**City:**	SAN PEDRO	**P.O. No.:**	—
Fax:	1-805-373-9073	**State & Zip:**	CA 90731	**Quote No.:**	—

TAT Turnaround Codes **

(1) = Same Day Rush
(2) = 24 Hour Rush
(3) = 48 Hour Rush
(4) = 72 Hour Rush
(5) = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	8260B	8015M									Special Instructions
DES-INF-ADM-127	9B26019-01	2-26-19	9AM	AIR	1	X	X									8015 TPH - HEXANE
																8260B - BTEX, OXYS VOCs, GTBE/Ethanol
																'19 FEB 26 7:21PM

For Laboratory Use

PRIORITY
Rush ___ Hrs SH ✓
Date 2/27/19 Time 0700 Sign

A.A. Project No.: AS333012 / 9B26019

Relinquished by	Date	Time	Received by
	X 2-26-19	X 16:30	X
Relinquished by	Date	Time	Received by
	2-26-19	19:21	
Relinquished by	Date	Time	Received by

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.

AMERICAN ANALYTICS

9765 Eton Avenue
Chatsworth
California 91311
Tel: (818) 998-5547
Fax: (818) 998-7258

March 29, 2019

Neil Irish

The Source Group, Inc. (SH)

1962 Freeman Ave.

Signal Hill, CA 90755

Re : SDLA Admin / 04-DES

A5333026 / 9C21009

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received on 03/21/19 15:01 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report or require additional information please call me at American Analytics.

Sincerely,

Viorel Vasile

Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5333026
Date Received: 03/21/19
Date Reported: 03/29/19

Sample ID	Laboratory ID	Matrix	TAT	Date Sampled	Date Received
GRO in Vapor as Hexane					
DES-INF-ADM-128	9C21009-01	Vapor	5	03/21/19 09:15	03/21/19 15:01
VOCs BTEX/OXY Vapor GC/MS					
DES-INF-ADM-128	9C21009-01	Vapor	5	03/21/19 09:15	03/21/19 15:01
VOCs Gasoline Range Organics Vapor					
DES-INF-ADM-128	9C21009-01	Vapor	5	03/21/19 09:15	03/21/19 15:01

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5333026
Project No:	04-DES	**Date Received:**	03/21/19
Project Name:	SDLA Admin	**Date Reported:**	03/29/19
Matrix:	Vapor	**Sampled:**	03/21/19
Dilution:	1	**Prepared:**	03/22/19
Method:	VOCs BTEX/OXY Vapor by GC/MS 8260M	**Analyzed:**	03/22/19

DES-INF-ADM-128

9C21009-01 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
tert-Amyl Methyl Ether (TAME)	<5.0	ug/L	5.0	<1.2	ppmv	1.2
Benzene	<0.50	ug/L	0.50	<0.16	ppmv	0.16
tert-Butyl alcohol (TBA)	<30	ug/L	30	<9.9	ppmv	9.9
Diisopropyl ether (DIPE)	<5.0	ug/L	5.0	<1.2	ppmv	1.2
Ethanol	<200	ug/L	200	<110	ppmv	110
Ethylbenzene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
Ethyl-tert-Butyl Ether (ETBE)	<5.0	ug/L	5.0	<1.2	ppmv	1.2
Methyl-tert-Butyl Ether (MTBE)	<2.0	ug/L	2.0	<0.55	ppmv	0.55
Toluene	<0.50	ug/L	0.50	<0.13	ppmv	0.13
o-Xylene	<0.50	ug/L	0.50	<0.12	ppmv	0.12
m,p-Xylenes	<0.50	ug/L	0.50	<0.12	ppmv	0.12

Surrogates	%REC	%REC Limits
4-Bromofluorobenzene	103 %	70-140
Dibromofluoromethane	111 %	70-140
Toluene-d8	106 %	70-140

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5333026
Project No:	04-DES	**Date Received:**	03/21/19
Project Name:	SDLA Admin	**Date Reported:**	03/29/19
Matrix:	Vapor	**Sampled:**	03/21/19
Dilution:	1	**Prepared:**	03/22/19
Method:	Gasoline Range Organics in Vapor by GC/FID	**Analyzed:**	03/22/19

DES-INF-ADM-128

9C21009-01 (Vapor)

Analyte	Result	(ug/L)	MRL	Result	(ppmv)	MRL
Gasoline Range Organics (GRO)	<20	ug/L	20	<4.9	ppmv	4.9

Surrogates	%REC	%REC Limits
a,a,a-Trifluorotoluene	94.8 %	70-130

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5333026
Project No:	04-DES	**Date Received:**	03/21/19
Project Name:	SDLA Admin	**Date Reported:**	03/29/19
Method:	GRO in Vapor as Hexane	**Units:**	ppmv

Date Sampled:	03/21/19	
Date Prepared:	03/22/19	
Date Analyzed:	03/22/19	
AA ID No:	9C21009-01	
Client ID No:	DES-INF-ADM-128	
Matrix:	Vapor	
Dilution Factor:	1	MRL

GRO in Vapor as Hexane (EPA 8015M)

GRO as Hexane	<5.7	5.7

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5333026
Date Received: 03/21/19
Date Reported: 03/29/19

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs BTEX/OXY Vapor by GC/MS 8260M - Quality Control										
*Batch B9C2209 - *** DEFAULT PREP ****										
Blank (B9C2209-BLK1)				Prepared & Analyzed: 03/22/19						
tert-Amyl Methyl Ether (TAME)	<5.0	5.0	ug/L							
Benzene	<0.50	0.50	ug/L							
tert-Butyl alcohol (TBA)	<30	30	ug/L							
Diisopropyl ether (DIPE)	<5.0	5.0	ug/L							
Ethanol	<200	200	ug/L							
Ethylbenzene	<0.50	0.50	ug/L							
Ethyl-tert-Butyl Ether (ETBE)	<5.0	5.0	ug/L							
Methyl-tert-Butyl Ether (MTBE)	<2.0	2.0	ug/L							
Toluene	<0.50	0.50	ug/L							
o-Xylene	<0.50	0.50	ug/L							
m,p-Xylenes	<0.50	0.50	ug/L							
Surrogate: 4-Bromofluorobenzene	*52.6*		*ug/L*	*50*		*105*	*70-140*			
Surrogate: Dibromofluoromethane	*58.1*		*ug/L*	*50*		*116*	*70-140*			
Surrogate: Toluene-d8	*52.5*		*ug/L*	*50*		*105*	*70-140*			
LCS (B9C2209-BS1)				Prepared & Analyzed: 03/22/19						
tert-Amyl Methyl Ether (TAME)	**20.1**	5.0	ug/L	20		100	75-125		30	
Benzene	**20.3**	0.50	ug/L	20		101	75-125		30	
tert-Butyl alcohol (TBA)	**95.4**	30	ug/L	100		95.4	75-125		30	
Diisopropyl ether (DIPE)	**20.0**	5.0	ug/L	20		100	75-125		30	
Ethylbenzene	**21.7**	0.50	ug/L	20		108	75-125		30	
Ethyl-tert-Butyl Ether (ETBE)	**20.9**	5.0	ug/L	20		104	75-125		30	
Methyl-tert-Butyl Ether (MTBE)	**40.6**	2.0	ug/L	40		102	75-125		30	
Toluene	**20.0**	0.50	ug/L	20		100	75-125		30	
o-Xylene	**21.6**	0.50	ug/L	20		108	75-125		30	
m,p-Xylenes	**43.4**	0.50	ug/L	40		109	75-125		30	
Surrogate: 4-Bromofluorobenzene	*52.4*		*ug/L*	*50*		*105*	*70-140*			
Surrogate: Dibromofluoromethane	*55.9*		*ug/L*	*50*		*112*	*70-140*			
Surrogate: Toluene-d8	*52.1*		*ug/L*	*50*		*104*	*70-140*			
LCS Dup (B9C2209-BSD1)				Prepared & Analyzed: 03/22/19						
tert-Amyl Methyl Ether (TAME)	**20.0**	5.0	ug/L	20		100	75-125	0.499	30	
Benzene	**21.5**	0.50	ug/L	20		108	75-125	5.98	30	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5333026
Date Received: 03/21/19
Date Reported: 03/29/19

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
VOCs BTEX/OXY Vapor by GC/MS 8260M - Quality Control										
*Batch B9C2209 - *** DEFAULT PREP ****										
LCS Dup (B9C2209-BSD1) Continued				Prepared & Analyzed: 03/22/19						
tert-Butyl alcohol (TBA)	**93.0**	30	ug/L	100		93.0	75-125	2.60	30	
Diisopropyl ether (DIPE)	**21.1**	5.0	ug/L	20		106	75-125	5.45	30	
Ethylbenzene	**20.4**	0.50	ug/L	20		102	75-125	6.19	30	
Ethyl-tert-Butyl Ether (ETBE)	**21.0**	5.0	ug/L	20		105	75-125	0.335	30	
Methyl-tert-Butyl Ether (MTBE)	**39.4**	2.0	ug/L	40		98.4	75-125	3.10	30	
Toluene	**20.2**	0.50	ug/L	20		101	75-125	0.746	30	
o-Xylene	**21.0**	0.50	ug/L	20		105	75-125	2.82	30	
m,p-Xylenes	**42.7**	0.50	ug/L	40		107	75-125	1.65	30	
Surrogate: 4-Bromofluorobenzene	*53.8*		*ug/L*	*50*		*108*	*70-140*			
Surrogate: Dibromofluoromethane	*55.1*		*ug/L*	*50*		*110*	*70-140*			
Surrogate: Toluene-d8	*52.8*		*ug/L*	*50*		*106*	*70-140*			
Duplicate (B9C2209-DUP1)			**Source: 9C20005-02**	Prepared & Analyzed: 03/22/19						
tert-Amyl Methyl Ether (TAME)	**<5.0**	5.0	ug/L						30	
Benzene	**2.70**	0.50	ug/L		2.32			15.1	30	
tert-Butyl alcohol (TBA)	**<30**	30	ug/L						30	
Diisopropyl ether (DIPE)	**<5.0**	5.0	ug/L						30	
Ethanol	**<200**	200	ug/L						30	
Ethylbenzene	**<0.50**	0.50	ug/L		0.440				30	
Ethyl-tert-Butyl Ether (ETBE)	**<5.0**	5.0	ug/L						30	
Methyl-tert-Butyl Ether (MTBE)	**<2.0**	2.0	ug/L						30	
Toluene	**<0.50**	0.50	ug/L						30	
o-Xylene	**<0.50**	0.50	ug/L						30	
m,p-Xylenes	**0.980**	0.50	ug/L		0.950			3.11	30	
Surrogate: 4-Bromofluorobenzene	*51.9*		*ug/L*	*50*		*104*	*70-140*			
Surrogate: Dibromofluoromethane	*56.0*		*ug/L*	*50*		*112*	*70-140*			
Surrogate: Toluene-d8	*52.8*		*ug/L*	*50*		*106*	*70-140*			
Gasoline Range Organics in Vapor by GC/FID - Quality Control										
*Batch B9C2202 - *** DEFAULT PREP ****										
Blank (B9C2202-BLK1)				Prepared & Analyzed: 03/22/19						
Gasoline Range Organics (GRO)	<20	20	ug/L							

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client: The Source Group, Inc. (SH)
Project No: 04-DES
Project Name: SDLA Admin

AA Project No: A5333026
Date Received: 03/21/19
Date Reported: 03/29/19

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Gasoline Range Organics in Vapor by GC/FID - Quality Control										
*Batch B9C2202 - *** DEFAULT PREP ****										
Blank (B9C2202-BLK1) Continued				Prepared & Analyzed: 03/22/19						
Surrogate: a,a,a-Trifluorotoluene	*45.3*		*ug/L*	*50*		*90.6*	*70-130*			
LCS (B9C2202-BS1)				Prepared & Analyzed: 03/22/19						
Gasoline Range Organics (GRO)	**452**	20	ug/L	500		90.5	75-125			
Surrogate: a,a,a-Trifluorotoluene	*53.8*		*ug/L*	*50*		*108*	*70-130*			
LCS Dup (B9C2202-BSD1)				Prepared & Analyzed: 03/22/19						
Gasoline Range Organics (GRO)	**457**	20	ug/L	500		91.4	75-125	1.06	30	
Surrogate: a,a,a-Trifluorotoluene	*53.5*		*ug/L*	*50*		*107*	*70-130*			
Duplicate (B9C2202-DUP1)			**Source: 9C21009-01**	Prepared & Analyzed: 03/22/19						
Gasoline Range Organics (GRO)	**<20**	20	ug/L		<20				30	
Surrogate: a,a,a-Trifluorotoluene	*47.8*		*ug/L*	*50*		*95.6*	*70-130*			
GRO in Vapor as Hexane - Quality Control										
*Batch B9C2202 - *** DEFAULT PREP ****										
Blank (B9C2202-BLK1)				Prepared & Analyzed: 03/22/19						
GRO as Hexane	<5.7	5.7	ppmv							
Duplicate (B9C2202-DUP1)			**Source: 9C21009-01**	Prepared & Analyzed: 03/22/19						
GRO as Hexane	**<5.7**	5.7	ppmv		<5.7				30	

Viorel Vasile
Operations Manager

LABORATORY ANALYSIS RESULTS

Client:	The Source Group, Inc. (SH)	**AA Project No:**	A5333026
Project No:	04-DES	**Date Received:**	03/21/19
Project Name:	SDLA Admin	**Date Reported:**	03/29/19

Special Notes

Viorel Vasile
Operations Manager

AMERICAN ANALYTICS CHAIN-OF-CUSTODY RECORD

9765 ETON AVE., CHATSWORTH, CA 91311
Tel: 818-998-5547 FAX: 818-998-7258

A.A. COC No.: 14761

№ 70025781

Page 1 of 1

Client:	APEX-SGI	Project Name / No.:	DFSP SAN PEDRO	Sampler's Name:	DAWN Webon
Project Manager:	MIKE WOOD	Site Address:	3171 N. GAFFEY	Sampler's Signature:	(signature)
Phone:	805-373-9063	City:	SAN PEDRO	P.O. No.:	—
Fax:	805-373-9073	State & Zip:	Ca 90731	Quote No.:	—

TAT Turnaround Codes **

1 = Same Day Rush
2 = 24 Hour Rush
3 = 48 Hour Rush
4 = 72 Hour Rush
5 = 5 Day Rush
X = 10 Working Days (Standard TAT)

ANALYSIS REQUESTED (Test Name)

Please enter the TAT Turnaround Codes ** below

Client I.D.	A.A. I.D.	Date	Time	Sample Matrix	No. of Cont	8260B	8015m								Special Instructions
DFS-INF-ADM-127 (28)	9C21009-01	3-21-19	915	AIR	1	x	x								8015 TPH-g/Blank
	v..														
															8260B BTEX, oxys
															VOCs, 8260 w/ethanol
															'19MAR21 3:01

For Laboratory Use

PRIORITY
Rush ___ Hrs SH (signature)
Date 3/21/19 Time 1530 Sign (signature)

A.A. Project No.: AS333026 / 9C21009

Relinquished by	Date	Time	Received by
(signature)	3-21-19	13:00	(signature)
(signature)	3-21-19	1520	(signature)

Note: By relinquishing samples to American Analytics, client agrees to pay for the services requested on this chain of custody form and any additional client-requested analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 45 days following the submittal of the sample(s) to American Analytics.