2008 OPERATIONS, MAINTENANCE & MONITORING ANNUAL REPORT

DEL AMO WASTE PITS
LOS ANGELES, CALIFORNIA

PREPARED FOR:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PREPARED ON BEHALF OF:

THE DEL AMO RESPONDENTS

PREPARED BY:

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AO	Administrative Order
ASTM	American Society of Testing and Materials
C_1	Carbon Vessel 1
CAL EPA	California Environmental Protection Agency
Cap Gas System	Cap Gas Collection and Treatment System
CO_2	Carbon Dioxide
COC	Constituents of Concern
DTSC	Department of Toxic Substances Control
GAC	Granulated Activated Carbon
LEL	Lower Explosive Limit
ND	non-detected
O_2	Oxygen
OM&M	Operations, Maintenance and Monitoring
OM&M Manual	Operations, Maintenance and Monitoring Manual
PID	Photo Ionization Detector
PLC	Programmable Logic Controller
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
SCAQMD	South Coast Air Quality Management District
scfm	standard cubic feet per minute
SVE/IBT System	Soil Vapor Extraction/ Insitu Biodegradation Technology System
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
Waste Pits	Del Amo Waste Pits Operable Unit

1.0 INTRODUCTION

This Annual Report (Report) has been prepared by C2 REM on behalf of the Del Amo Respondents to summarize the Operations, Maintenance and Monitoring (OM&M) activities conducted at the Del Amo Waste Pits Operable Unit (Waste Pits) site, pursuant to requirements in the *Administrative Order (AO) for Remedial Action, Docket No. 99-08, Del Amo Waste Pits Operable Unit, Torrance, California,* United States Environmental Protection Agency (USEPA), May 3, 1999 and the *Operations, Maintenance and Monitoring Manual for the Del Amo Waste Pits Operable Unit, Torrance, California,* Parsons Engineering Science, March 12, 1999 (OM&M Manual). This Report provides a summation of the OM&M activities conducted from January 2008 through December 2008 at the Waste Pits during the ninth year of operation of the Phase I remedy (e.g., multi-layer cap, soil vapor monitoring probes) and the second year operation of the Phase II remedy (i.e., Soil Vapor Extraction/Insitu Biodegradation Technology System [SVE/IBT System]).

This Report includes discussions on:

1) Benzene concentrations within the Cap Gas Collection and Treatment System (Cap Gas System);
2) OM&M of the soil vapor treatment technology utilized for the SVE/IBT System;
3) Monthly perimeter well monitoring;
4) Inspections (pursuant to both quarterly requirements and post rain events) of the cover system, drainage systems, Cap Gas System, SVE/IBT System and general physical site characteristics;
5) Summaries of maintenance; and
6) Monument survey results.

The remainder of this Report is outlined in the following sections:

2.0 Site History
3.0 Systems Operation and Monitoring
4.0 Inspections
5.0 Routine Maintenance
6.0 Monument Survey Event
7.0 Conclusions and Recommendations
8.0 References

2.0 SITE HISTORY

The Waste Pits are located in Los Angeles County, California and include Lots 36 and 37 of the Los Angeles County Assessor's Map. The Waste Pits property is located between Vermont Avenue (to the east) and Normandie Avenue (to the west) (see Figure 1.0). The northern boundary of the property is a Los Angeles Department of Water and Power easement, and the southern boundary is Del Amo Boulevard. One major petroleum and

petrochemical pipeline corridor is located within the property on the southern boundary of the Waste Pits property.

The Waste Pits include two adjoining parcels of land (Lots 36 and 37), which contained six small rectangular pits (2-series pits) and three large rectangular impoundments (1-series pits) (see Figure 2.0). Both the 1-series and the 2-series pits were used for the disposal of wastes and waste liquids during operation of a synthetic rubber manufacturing facility. The 2-series pits were located on the western side of Lot 36 and the 1-series pits, 1-B and 1-C, were located on the eastern side of Lot 36. Immediately east of Lot 36 is Lot 37, which contains a former large, rectangular impoundment, designated as Pit 1-A. Impacted soils from Pit 1-A were excavated in four phases from 1982 –1984 to a depth of 6 feet at the east side of the pit and to a depth of 25 feet at the west side of the pit. This excavation process was completed under the direction of the California Department of Health Services, with jurisdiction for the Waste Pits under California Environmental Protection Agency's (CAL EPA) Department of Toxic Substances Control (DTSC).

As outlined in the *Remedial Design Work Plan, Del Amo Pits Operable Unit, Torrance, California*, Dames and Moore, June 30, 1998, the USEPA provided oversight for the construction and installation of the Phase I remedy including installation of the SVE wells (a component of the proposed Phase II remedy). The Phase I remedy, which was performed on the 2-series pits and 1-series pits 1-B and 1-C, consisted of a Resource Conservation and Recovery Act (RCRA) equivalent multi-layer cap, soil vapor monitoring probes, the Cap Gas System, security fences, deed restrictions, and surface and subsurface drainage features. During 2006, the treatment technology for site vapor was selected, designed, and installed. The Phase II Remedy, which is the SVE/IBT System, was placed into optimization testing and full-time operation in August 7, 2006.

3.0 SYSTEMS OPERATION AND MONITORING

3.1 CAP GAS SYSTEM OVERVIEW

The Cap Gas System utilizes a series of perforated pipes within the sand layer of the multi-layer cap to extract vapors that may build-up beneath the cap. C2 REM conducted the Cap Gas System monitoring activities pursuant to the requirements as approved by the USEPA and as presented in the report entitled *Cap Gas Collection and Treatment Baseline Monitoring and Long-term Monitoring Recommendations Report, Del Amo Waste Pits Operable Unit, Los Angeles County, California,* C2 REM, December 2000. These monitoring activities were conducted to assess the efficiency of the Cap Gas System in the collection and treatment of fugitive soil vapor emissions from the sand layer within the cap.

The Cap Gas System operates for 4 hours a day (10:00am - 2:00pm), 5 days a week (Monday - Friday). The Cap Gas System is controlled via a Programmable Logic Controller (PLC) unit with capabilities for remote start and stop. In an effort to assess the efficiency and performance of the carbon units of the Cap Gas System, semi-monthly monitoring was conducted from four sample locations (i.e., system influent [#1], effluent

of the lead carbon vessel [#2], effluent of the secondary carbon vessel [#3], and system effluent [#4]).

3.1.1 SEMI-MONTHLY CAP GAS SYSTEM MONITORING RESULTS

During semi-monthly monitoring, a site-dedicated Photo Ionization Detector (PID) (calibrated to benzene) was used to measure total Volatile Organic Compound (VOC) concentrations at each of the four sample locations. As indicated in Table 1.0, influent sample readings ranging from 0.1 parts per million (ppm) to 8.5 ppm, and system effluent readings ranging from 0.0 ppm to 3.5 ppm were recorded during 2008. As outlined in the OM&M Manual and the USEPA-approved carbon bed change-out protocol, system effluent readings greater than 5 ppm require action to assure that the Cap Gas System is operating in compliance. The low concentrations detected at the Cap Gas System effluent demonstrate that the carbon is efficient in controlling VOC emissions (see Figure 3.0). The forms used to record results of the semi-monthly Cap Gas System monitoring events are presented in Appendix A.

The guidelines established for carbon change-out of the Cap Gas System state that when VOC concentrations at the effluent are greater than 5 ppm and/or when the lead vessel efficiency (in relation to the system influent) falls within Zone 2 for two consecutive monitoring events or Zone 3 (see Figure 4.0), carbon shall be replaced. Lead vessel efficiency on June 5, 2008 fell into zone 3 and a follow-up monitoring event confirmed the need for carbon replacement. Based on the aforementioned protocol, the carbon was changed out on July 8, 2008.

3.1.2 CAP GAS SYSTEM CONFIRMATION SAMPLING

C2 REM, with the approval of the USEPA (December 4, 2002), has modified the scope and frequency of the Cap Gas System annual confirmation sampling event. The frequency of the confirmation sampling event has been changed from an annual program to once every 5 years. In addition, South Coast Air Quality Management District (SCAQMD) Method 25.1 has been eliminated from the required list of analyses for collected Cap Gas System samples due to the lack of relevant information obtained from the method, as well as the redundancy of using both SCAQMD Method 25.1 and USEPA Method TO14 (the latter of which provides an adequately detailed analysis of site Constituents of Concern (COC) and other related compounds).

Based on the approved scope and frequency for confirmation sampling, the next sampling event will be conducted during the second quarter of 2010 (to coincide with the second 5-year review) and thereafter in 2015.

3.2 SVE/IBT SYSTEM OVERVIEW

The SVE/IBT System was placed into optimization testing and full-time operation in August 7, 2006. C2 REM conducted SVE/IBT System monitoring activities pursuant to the requirements, as approved by the USEPA and as presented in the Report entitled

SVE/IBT Operations, Maintenance and Monitoring Manual, C2 REM, January 2006. Additional information regarding the design and construction of the SVE/IBT System can be found in the following documents:

- *Remedial Design Work Plan Addendum,* C2 REM 2005
- *SVE/IBT Pre-Final Design Report Addendum,* C2 REM 2005
- *Process Hazard Analysis Report* ,Webb, Murray, & Associates 2005
- *SVE/IBT Operations, Maintenance, & Monitoring Manual,* C2 REM 2006
- *SVE/IBT Final Design Report,* C2 REM 2006
- *SVE/IBT Construction Quality Assurance Plan,* C2 REM 2006
- *SVE/IBT Remedial Action Workplan,* C2 REM 2006

The SVE/IBT System utilizes the existing extraction/monitoring well network to extract vapors at the outer edges of the Waste Pits and inject re-circulated vapors along with generated oxygen to allow for enhanced vadose zone biodegradation, to comply with the Record of Decision (ROD). The ROD cleanup goal is to prevent the migration of contaminants, primarily benzene, from the Waste Pits such that they do not contribute a 0.5% increase in concentration to the existing impacted groundwater underlying the Waste Pits.

The SVE/IBT System final design includes injection at four SVE wells (3, 4, 8, and 9) and extraction at nine SVE wells (1, 2, 5, 6, 7, 10, 11, 12, and 20A) in sequence to enhance the natural aerobic degradation observed within the vadose zone (see Figure 5.0).

The SVE/IBT System normally operates 8 hours per day (8:00 am – 4:00 pm), 5 days per week (Monday – Friday). The SVE/IBT System is controlled via a PLC unit with capabilities for remote start and stop as well as alarm/emergency shutdown protocols. The results of both the pre-system and short-term operations are presented in the *Summary of SVE/IBT Pre-System Startup Operations Technical Memorandum,* C2 REM, February 2007 and the *Summary of SVE/IBT 3-Month Short-Term Operations Technical Memorandum,* C2 REM, December 2006.

On November 8, 2006, short-term operations ended and the SVE/IBT System has been in long-term OM&M since that date. The results of the first year of long-term operations are presented in the *Soil Vapor Extraction In Situ Biodegradation Technology 1 Year Long-Term OM&M Technical Memorandum,* C2 REM June, 2008.

For reporting purposes, the second year long-term OM&M period for the SVE/IBT System began on January 1, 2008 and ended on December 31, 2008. While benzene is not the only constituent detected on the Site, it is detected in concentrations above others (monthly laboratory results from the SVE/IBT system's inlet station for benzene average 24,347 ppm while ethylbenzene and toluene average 687 ppm and 557 ppm, respectively, during this period) and given that the current SVE/IBT System performance parameters are

chemical specific, benzene was selected for this purpose.[1] A summary of laboratory data is provided in Table 2.0.

The information collected during this period, includes field notes (see Appendix B), laboratory data (see Appendix C), and in-line sensor data (see Appendix D), which are discussed in detail in the following subsections. The analysis of the collected information indicates that the SVE/IBT System is performing at a level consistent with design parameters.

3.2.1 SVE/IBT SYSTEM OM&M ACTIVITIES

On January 1, 2008, the second year of the long-term OM&M activities began and included, semi-monthly field monitoring (see Appendix E) and monthly laboratory sampling of the SVE/IBT System, monthly and quarterly perimeter well monitoring, and quarterly full-scale field monitoring of cluster, vacuum performance, and SVE wells (see Appendix F for field monitoring results).

The SVE/IBT System was monitored at the following four stations:

- Station 1 - Influent: the inlet (the combined flow of the nine extraction wells);
- Station 2 - Post Ambient Air: the diversion loop (to the Granulated Activated Carbon [GAC] beds) just after the ambient air intake;
- Station 3 - Carbon Vessel 1 (C_1): at the effluent of the primary carbon vessel; and
- Station 4 - Effluent: the effluent stack.

These four measurement points were monitored for VOCs, Oxygen (O_2), Carbon Dioxide (CO_2), and flow rate using hand-held monitoring equipment, and corresponding in-line measurements from the PLC System were also recorded where applicable. The SVE/IBT System in-line sensors record the following parameters: O_2, flow rate, % Lower Explosive Limit (LEL), temperature, relative humidity, and benzene (ppm) (see Figure 6.0 for the location of each in-line sensor). Along with the field monitoring that was conducted, samples were also obtained from the SVE/IBT System enclosure at the four sample stations once a month and analyzed for VOCs using USEPA Method 8260B and for fixed gases using American Society of Testing and Materials (ASTM) Method 1946.

Additionally, full-scale field monitoring was conducted quarterly from all cluster, vacuum performance wells, and SVE injection and extraction wells (see Appendix F). Perimeter wells were monitored monthly (wells A, B, C, D, H) and quarterly (wells E, F, G, I, J, K, L) for VOCs, O_2, and CO_2 to ensure that soil vapors do not migrate out beyond the cap boundaries (see Figure 5.0 for well locations).[2] The procedures for monitoring the wells included measuring well pressure (inches of water), purging the appropriate pore volume

[1] In instances where duplicate samples were collected during Monthly Laboratory Sampling Events, both the original and duplicate samples were used to calculate the yearly average.
[2] Pursuant to USEPA request (August 15, 2008), C2 REM began monitoring perimeter wells A, B, C, D, and H monthly starting in August 2008.

and analyzing vapors from each well with a PID calibrated to benzene and a RKI Eagle that measures O_2, LEL, and CO_2.

3.2.1.1 SVE/IBT System Monitoring Results

Based on laboratory results, the benzene concentrations at the inlet ranged from 14,000 to 35,000 ppm with an average of 24,347 ppm. [1] The benzene concentrations at post ambient air ranged from 48 to 5,700 ppm. The benzene concentrations at the outlet of C_1 ranged from non-detect (ND) to 6,200 ppm. The benzene concentrations at the effluent ranged from ND to 0.015 ppm (see Table 2.0). Benzene concentrations at Stations 1-4 demonstrated that the SVE/IBT System was effective in controlling LEL conditions and maintaining acceptable emission limits (i.e., less than 50 ppm) (see Figure 7.0). O_2 concentration at inlet ranged from 11.0 to 19.0% with an average of 16.0%.[1] CO_2 concentration at inlet ranged from 9.4 to 15.0% with an average of 13.0%.[1]

3.2.1.2 Cluster Well Monitoring Results

The field data collected from the cluster wells during this operation period is presented in Table 3.0. O_2 concentrations ranged from 0.0 to 24% with an average of 17.1%. CO_2 concentrations ranged from 0.0 to 20.4% with an average of 4.2%. VOC concentrations ranged from 0.0 to greater than 15,000 ppm. Due to the limitations of field equipment (i.e., 0-15,000 ppm) the field results for VOCs are presented herein for completeness only.

The primary function of the cluster wells is to assist in determining vertical soil vapor concentration profiles and evaluate the effectiveness of the SVE/IBT System. However, since the SVE/IBT System has been operating throughout 2008 and the vapors in the subsurface have been mixing, an accurate determination of the concentration of VOCs in each vertical soil profile cannot be assessed. Instead, this data has been used to assess the effectiveness of the SVE/IBT System in increasing the O_2 available for biodegradation. In order to accurately assess the vertical distribution of VOCs, the SVE/IBT System would need to be shut-down for an expanded period of time and allow soil vapor concentrations to rebound prior to monitoring. This data could then be compared to historic data to determine the system's effectiveness and potential for satisfying remedial objectives.

Results from the 2003 baseline laboratory confirmation sampling event are compared with field results obtained during the second year long-term OM&M period in 2008 and presented in Figures 8.0 through 10.0. O_2 levels in 2008 generally continue to show increases compared to the 2003 O_2 levels demonstrating that the SVE/IBT System is effective in mixing of subsurface airflow and increasing the O_2 available for biodegradation.

[1] In instances where duplicate samples were collected during Monthly Laboratory Sampling Events, both the original and duplicate samples were used to calculate the yearly average.

3.2.1.3 Vacuum Performance Well Monitoring Results

The field data collected from the vacuum performance wells during this operation period is presented in Table 4.0. O_2 concentrations ranged from 0.2 to 21.5% with an average of 14.8%. CO_2 concentrations ranged from 0.0 to 18.2% with an average of 6.0%. VOC concentrations ranged from 0.0 to greater than 15,000 ppm. Due to the limitations of field equipment (i.e., 0-15,000 ppm) the field results for VOCs are presented herein for completeness only.

The primary function of the vacuum performance wells is to assess radius of influence of the SVE/IBT System. The nature of the SVE/IBT System (e.g., air re-circulation) makes this observation difficult in subareas 1 and 2, and as such C2 REM's use of these wells was to assess the oxygen and vapor distribution between extraction and injection points. In subarea 3, where extraction well 20A is located, no injection is occurring in the vicinity; therefore, the radius of influence from this extraction well was calculated using the following equation:

$$\text{ROI}=R_w*\text{EXP}\left\{\ln\left(\frac{r}{R_w}\right)*\left(\frac{P_{atm}^2-P_w^2}{P_r^2-P_w^2}\right)\right\},$$

where:

ROI = radius of influence where pressure is equal to preset value;
R_w = well radius of the vapor extraction well;
r = radial distance from the vapor extraction well;
P_{atm} = atmospheric pressure or a preset value;
P_r = pressure at a radial distance, r, from the vapor extraction well; and
P_w = pressure at the vapor extraction well.

Two monitoring locations (I"-1 and J') were used to calculate the radius of influence for extraction well 20A. The results are 42.85 feet and 52.87 feet, respectively (see Table 5.0).

Results from the 2003 baseline laboratory confirmation sampling event are compared with field results obtained during the second year long-term OM&M period in 2008 and presented in Figure 11.0. O_2 levels in 2008 continue to generally show increases compared to the 2003 O_2 levels demonstrating that the SVE/IBT System is effective in mixing of subsurface airflow and increasing the O_2 available for biodegradation.

3.2.1.4 SVE Well Monitoring Results

The field data collected from the SVE wells during this operation period is presented in Table 6.0. O_2 concentrations ranged from 0.0 to 32.7% with an average of 11.5%. CO_2 concentrations ranged from 0.1 to 20.4% with an average of 11.9%. VOC concentrations ranged from 0.3 to greater than 15,000 ppm. Due to the limitations of field equipment (i.e., 0-15,000 ppm) the field results for VOCs are presented herein for completeness only.

3.2.1.5 Perimeter Well Monitoring Results

The field data collected from the perimeter wells during this operation period is presented in Table 7.0. O_2 concentrations ranged from 8.3 to 20.9% with an average of 17.7%. CO_2 concentrations ranged from 0.0 to 10.2% with an average of 3.4%. VOC concentrations measured with a PID ranged from 0.0 to 2.3 ppm with and average of 0.2 ppm (excluding the monitoring results collected on June 26, 2008). The VOC results for June 26, 2008 ranged from 0.0 to 87.0 ppm; however, due to suspected instrument error and fouling of the sensor, the results were deemed inaccurate and re-monitoring was conducted on July 1, 2008. The VOC readings at these perimeter wells during the re-monitoring event ranged from 0.0 to 0.8 ppm

The continued low concentrations of VOC's detected at the perimeter wells indicate good control of injected air volumes, the cover system is performing as designed, and the contaminated soil vapors are not migrating beyond the cap boundaries (see Figure 12.0).

3.2.2 SVE/IBT SYSTEM OPERATION SUMMARY

During the first year long-term OM&M period in 2007, C2 REM tested various operating scenarios to assess the optimal conditions for O_2 utilization. The O_2 generator was operated until the subsurface O_2 concentration was approximately 18.0% to 19.0% and then was shut-off in order to observe O_2 utilization rates at various levels. The rates of O_2 utilization were calculated for each O_2 level to determine the optimal oxygen level. Based on the O_2 in-line sensor at Station 1 during this period, the highest average O_2 utilization rate was 0.0020 at an O_2 concentration of 15%.

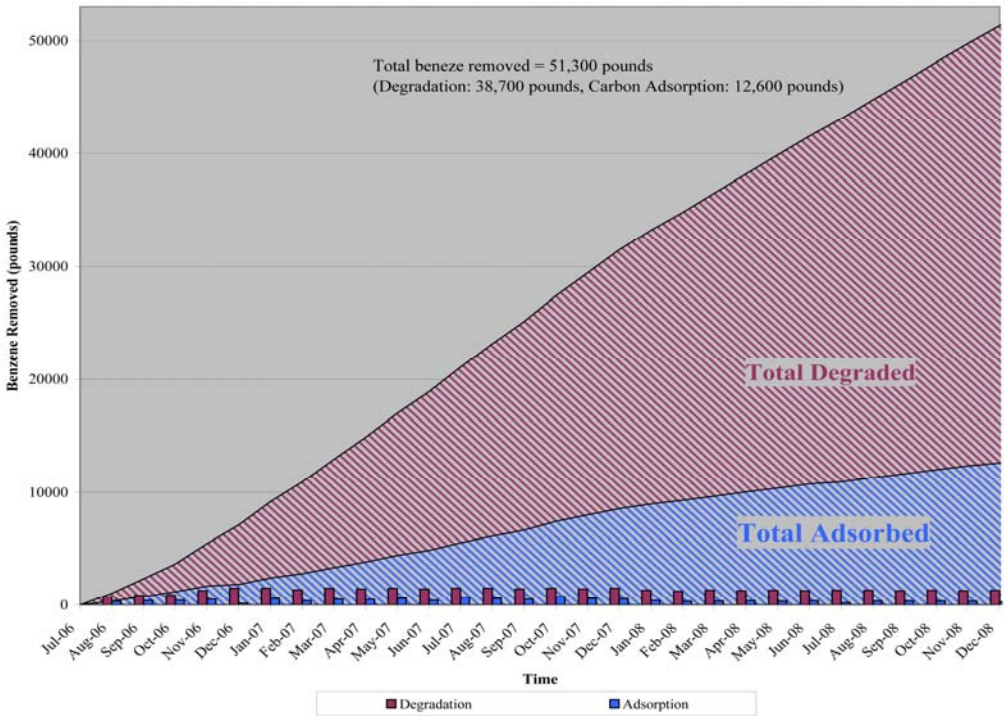
During the second year long-term OM&M period in 2008, C2 REM continued to maintain the optimal O_2 concentration of approximately 15% by regulating the operation of the O_2 generator. In 2008, the O_2 generator operated for a total of 1,409 hours to maintain the optimal O_2 level. This is about 81% of the time of the system operation in 2008 in comparison of about 56 % in 2007. The increased operation time of the O_2 generator required to maintain the 15 % optimal O_2 concentration and the continued increase of CO_2 concentrations in 2008 are strong indications of an increase in biodegradation and an increase of the microbial population (see Figure 13.0).

From January 1, 2008 through December 31, 2008, the SVE/IBT System operated for approximately 1,747 hours. Total estimated operating parameters are as follows:

- Injected re-circulated air volume - approximately 3,710,628 standard cubic feet (scf) at an average flow rate of 35.4 standard cubic feet per minute (scfm).
- Generated oxygen gas injected - approximately 456,516 scf at an average flow rate of 5.4 scfm and 91% purity.
- Extracted air volume - approximately 4,538,706 scf at an average flow rate of 43.3 scfm.
- Treated air volume - approximately 828,078 scf at an average flow rate of 7.9 scfm.

During this OM&M period, the SVE/IBT System operated in a manner consistent with design parameters and has effectively removed approximately 19,800 lbs (9,000 kg) of benzene via degradation (15,800 lbs [7,200 kg]) and adsorption (4,000 lbs [1,800 kg]). Table 8.0 provides the parameters and calculations used to estimate the total mass of benzene removed through degradation and adsorption. Based on in-line sensor treatment rate data, the SVE/IBT System is adsorbing approximately 19 lbs/day (8.5 kg/day) of benzene through the carbon beds, and is degrading approximately 44 lbs/day (20 kg/day) of benzene *insitu* (as measured by O_2 utilization).

Figure 14.0
SVE/IBT System Operation-
Total Benzene Removed



Approximately 7,313 lbs of VOCs (of which 95% is benzene) were absorbed on both the primary and secondary vessels. Nine carbon change-outs were conducted during this period for an average of 813 lbs of VOCs adsorbed per carbon change-out (see Table 9.0). The observed carbon usage during this period was approximately a 5:1 carbon to benzene ratio.

Since the startup of the SVE/IBT System on August 6, 2006, approximately 51,300 lbs of benzene have been removed from the Waste Pits (approximately 38,700 lbs through degradation and approximately 12, 600 lbs through adsorption to carbon) (see Figure 14.0).

4.0 INSPECTIONS

Quarterly inspections with the USEPA, DTSC, or their designee were conducted quarterly in accordance with the OM&M Manual (Section 4.0) on February 29, 2008, June 26, 2008, August 1, 2008 and December 30, 2008 for the cover system, the Cap Gas System, the SVE/IBT System, surface and subsurface water drainage systems, security fences, and access roads (see Appendix G).

Additionally, the SVE well heads, which are capped with blank tee flanges and are not currently connected to the SVE/IBT System, were inspected and monitored for leaks utilizing a PID calibrated to benzene. These inspections are conducted quarterly and will continue at this frequency throughout the SVE/IBT System's operations (see OM&M Manual, Section 6.2.1).

Finally, C2 REM conducted post rain inspection events on January 7, 2008, January 25, 2008, January 28, 2008, November 26, 2008, and December 16, 2008 to identify matters of concern and/or areas in need of repair. Post rain inspection events are conducted following periods of "heavy rainfall," defined as every rainfall of 1-inch or greater within a 24-hour period.

The completed inspection forms used during both quarterly and post rain inspection events are presented in Appendix G.

4.1 SUMMARY OF COVER SYSTEM INSPECTION EVENTS

During the cover system inspection events, no unusual or significant settlement, erosion, sediment build-up, slope instability, or shifting were observed. A few areas exhibited some evidence of burrowing animals and slight vegetation stress, vertical cracking, water ponding, and sediment build up, which were tended to during routine site maintenance. The temporary above-ground irrigation system, which was installed in July of 2007 to assist with re-establishing the cover system vegetation, has performed well in preventing excessive vegetation die-back. The results of the C2 REM cover system inspection events are presented in Table 10.0. Given that this is the ninth year of operation, a survey of the monuments will take place next year in 2010.

4.2 SUMMARY OF CAP GAS SYSTEM INSPECTION EVENTS

Inspection of the Cap Gas System included observations of the above ground components including: air intake and outlet collection headers, inlet and outlet valves, hoses and fittings, two 55-gallon carbon canisters, extraction blower, sampling ports, and a moisture separator canister. The results of the Cap Gas System inspection events are presented in Table 11.0. C2 REM did not observe any significant repair/maintenance issues with the Cap Gas System.

4.3 SUMMARY OF SURFACE AND SUBSURFACE DRAINAGE INSPECTION EVENTS

The concrete lined drainage swales, catch basins, and drainage culverts were checked by C2 REM to identify the presence of cracks, soil slumping, sediment build-up, separation, and the accumulation of vegetative debris (see Tables 12.0 and 13.0). The results of the surface and subsurface drainage inspection events show no significant issues with cracking, soil slumping, sediment build-up, separation, or the accumulation of vegetation.

4.4 SUMMARY OF SECURITY FENCE AND ACCESS ROAD INSPECTION EVENTS

Visual inspections of the security fence and gates were performed to identify breaks, settlement damage, loose tension, and corrosion (see Table 14.0). The gravel access road was inspected to identify dispersion of gravel, vegetation overgrowth, and excessive growth. C2 REM did not observe any significant repair issues regarding the access road (see Table 15.0). Breaks, damage, and general signs of deterioration of the perimeter fence were repaired as part of routine maintenance.

4.5 SUMMARY OF SVE/IBT INSPECTION EVENTS

Inspection of the SVE/IBT System included visual assessments of system conditions as well as mechanical assessments on an as-needed basis (see Table 16.0). Visual inspections were conducted on above ground components and included the following:

- SVE wellheads;
- Ball valves;
- Sampling ports;
- Fittings;
- Carbon absorber vessels;
- Blowers A & B;
- Oxygen generator; and,
- System in-line sensors.

C2 REM identified the need to replace the manifold component of the SVE/IBT System due to weathering, and deteriorating ball valves. The entire manifold was replaced and pressure tested from July 10, 2008 through July 16, 2008. No other significant repairs were made to the SVE/IBT System. Periodic calibration and maintenance was performed on the in-line sensors. Sensors that needed repair were retuned to the manufacturer and re-installed following corrective measures (note: due to the location and type of sensor, the SVE/IBT System remained operational during sensor repair periods).

5.0 ROUTINE MAINTENANCE

C2 REM conducted routine system maintenance to: 1) assure that the integrity of the completed containment system is maintained; 2) reduce the probability of malfunction; 3) provide a mechanism for early detection of system failures; 4) repair identified system failures; and 5) ensure the efficient management of OM&M activities (see Appendix B for Field Daily Reports/Completed Maintenance Forms). Repairs of failed and non-functional components of the Phase I and Phase II remedy were conducted pursuant to Section 10.0 of the OM&M Manual.

5.1 COVER SYSTEM

Routine maintenance of the cover system included control of weeds, vegetation (turf height), and burrowing animals. Regularly scheduled mowing of the California grass mix on the cap and the surrounding areas has maintained the required turf height (maximum grass height of one foot) and helped control potential fire outbreaks by eliminating the build-up of dry grass thatch. The occurrence of burrowing animals has been regulated via pest control companies in order to prevent damage to the cover system. Stressed vegetation has been addressed with the installation of an above-ground irrigation system, which was routinely operated by C2 REM field staff throughout 2008.

5.2 GAS COLLECTION AND TREATMENT SYSTEM

C2 REM conducted semi-monthly visual observations of the Cap Gas System's above ground components and onsite system enclosure to identify potential maintenance requirements and/or repairs. Routine maintenance items conducted on the Cap Gas System in 2008 included replacement of sample ports and change-out of both carbon canisters. Additionally, C2 REM staff routinely accessed and viewed the PLC viewer to assure that the mechanical components of the blower motor and control unit are operating as designed to reduce the probability of malfunction.

5.3 SVE/IBT SYSTEM

C2 REM conducted semi-monthly visual observations of the SVE/IBT System's above ground components and onsite system enclosure to identify potential maintenance requirements and/or repairs. Routine maintenance items conducted on the SVE/IBT System in 2008 included replacement of sample ports, change-out of carbon vessels, collection and disposal of condensate from the air-moisture separation tank and the calibration/repair of in-line sensors. C2 REM staff routinely accessed and viewed the PLC viewer to assure that the mechanical components of the blow motor, oxygen generator, automated check valves, and in-line sensors are operating as designed to reduce the probability of malfunctions. Additionally, during July 2008, the manifold piping going into the SVE/IBT System was replaced due to a deterioration of the ball valves that control the flow of vapors through the System.

5.4 SURFACE AND SUBSURFACE DRAINAGE SYSTEMS

As part of the scheduled landscape and maintenance of the site cover system, the surface and subsurface drainage systems were routinely inspected for any cracking, settlement, and/or debris build-up. C2 REM regularly cleaned the surface drainage swales and catch basins of any vegetative debris or sediment build-up. Minor caulking repairs were made to v-ditch joints that showed signs of weathering; however, no additional maintenance or repair of the surface and subsurface drainage systems was required in 2008.

5.5 ACCESS ROAD

The gravel access road was routinely inspected for the dispersion of gravel and/or vegetation overgrowth. The access road was regularly cleared of encroaching vegetative material during scheduled landscape maintenance activities. The existing gravel access road was well maintained and no repair was required in 2008.

5.6 SECURITY AND PERIMETER FENCE

The perimeter fence was routinely inspected for damage as part of the normal property maintenance. C2 REM regularly repaired sections of the perimeter fence exhibiting stress or structure damage in 2008.

5.7 ON-SITE TRAILERS AND STORAGE BIN

The on-site trailer and storage bin are routinely inspected for damage and incidents of vandalism. C2 REM did not observe any incidents of vandalism on the property in 2008.

6.0 MONUMENT SURVEY EVENT

After completion of the final cover, eight survey monuments were installed at various locations to monitor and track historical ground movement and settlement. The general location of each survey monument is provided on Figure 2.0. C2 REM conducted the last monument survey event on January 10, 2005. These results were compared to the baseline event conducted in 2000 and the comparison showed the cap did not undergo any significant settlement or grade adjustments. Pursuant to the OM&M Manual, after primary consolidation has been reached, the monument survey frequency shall be every 5 years. Therefore, the next monument survey event is scheduled for the first quarter of 2010.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Following the ninth year of operation of the Phase I remedy (e.g., multilayer cap, soil vapor monitoring probes) and the second year of operation of the Phase II remedy (i.e., SVE/IBT System), the Waste Pits are in good condition and the implemented remedies are functioning as designed.

The semi-monthly monitoring frequency of the Cap Gas System appears appropriate at this time and no modification is proposed. The cover system and the other associated systems have performed well during the ninth year of operation, and the required inspection requirements and monitoring frequency are adequate to assess whether the remedies for the Waste Pits are functioning as designed.

The analysis of the collected data indicates that the SVE/IBT System is performing at a level consistent with design parameters. Data collected from the PLC unit, laboratory data, and field data support the overall conclusion that the SVE/IBT System is effective and that biodegradation of Site COCs is occurring. The current estimate is that the SVE/IBT

System is degrading approximately 44 lbs (20 kgs) of benzene per day and adsorbing approximately 19 lbs (8.5 kgs) of benzene per day. To date, the SVE/IBT System has removed approximately 51,300 lbs of benzene from the Waste Pits (approximately 38,700 lbs through degradation and approximately 12, 600 lbs through adsorption to carbon)(see Figure 14.0).

The monitoring results from the SVE/IBT System show an increase in CO_2 concentrations with an increase in O_2 injection during this period. The increased operation time of the O_2 generator required to maintain the 15% optimal O_2 concentration and the continued increase of CO_2 concentrations in 2008 are strong indications of an increase in biodegradation and an increase of the microbial population (see Figure 13.0). The frequencies of field monitoring of the SVE/IBT System, lab sample collection, perimeter well monitoring, and full scale monitoring of cluster, vacuum performance, and SVE wells appear appropriate and no modification is proposed. Based on the results from 2008, the SVE/IBT System should continue to be operated to maintain the optimal O_2 concentration of approximately 15% (as measured at the inlet of the SVE/IBT System). C2 REM will continue to closely monitor the SVE/IBT System to assess and maintain optimal conditions for O_2 utilization.

Regularly scheduled maintenance and inspection activities have assisted in the early identification of possible repair issues with limited system operation interruption. Issues requiring action were quickly identified, assessed, and rectified in 2008. C2 REM will continue to closely monitor the Phase I and II remedy components in 2009 during routine and non-routine inspections.

Survey data suggests that primary consolidation has been reached; therefore, the next monument survey event is scheduled for the year 2010. Further inspections and monitoring activities for 2009 shall be conducted in accordance with the schedule provided in Table 17.0.

8.0 REFERENCES

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Table 1.0
2008 Semi-Monthly Cap Gas System Monitoring Results
Del Amo Waste Pits

Date	System Influent VOCs (ppm)	Effluent Lead Carbon Vessel VOCs (ppm)	Effluent Secondary Carbon Vessel VOCs (ppm)	System Effluent VOCs (ppm)	Lead Vessel Efficiency	System Efficiency Based on PID Readings
1/3/2008	0.2	0.8	0.7	0.5	0.0%	0%
1/17/2008	0.3	0.7	0.5	0.8	0.0%	0%
1/31/2008	0.2	0.6	0.5	0.4	0.0%	0%
2/20/2008	5.1	0.6	0.5	0.3	88.2%	94%
2/28/2008	8.5	0.4	0.4	0.4	95.3%	95%
3/14/2008	0.3	0.1	0.2	0.1	66.7%	67%
3/26/2008	2	0.1	0.1	0.1	95.0%	95%
4/16/2008	0.6	0.8	0.4	0.3	0.0%	50%
4/30/2008	0.6	0.6	0.2	0.2	0.0%	67%
5/8/2008	0.7	5.9	0.6	0.5	0.0%	29%
5/22/2008	0.4	3.4	1.5	2	0.0%	0%
6/5/2008	7.7	8.2	7.8	3.5	0.0%	55%
6/25/2008	1.7	1.7	1.7	1.6	0.0%	6%
7/30/2008	7.5	0	0	0	100.0%	100%
8/7/2008	1.2	0.3	0.2	0.1	75.0%	92%
8/21/2008	1.5	0.6	0.4	0.3	60.0%	80%
9/5/2008	4.2	0.1	0.2	0.1	97.6%	98%
9/19/2008	1.4	0.7	0.8	0.6	42.9%	57%
10/9/2008	0.9	2.8	1.7	0.1	0.0%	89%
10/23/2008	0.7	0.0	0.0	0.1	100.0%	86%
11/13/2008	0.2	0.2	0.2	0.1	0.0%	50%
11/25/2008	1.4	0.2	0.2	0.2	85.7%	86%
12/3/2008	1.1	0.1	0.2	0.0	81.8%	100%
12/19/2008	0.1	0.1	0.1	0.0	0.0%	100%

Table 2.0
Laboratory Data Summary for SVE/IBT System Enclosure (Sample Stations 1-4)
Del Amo Waste Pits

Date	Sample ID	Benzene (ppm)	Oxygen (%)	Carbon Dioxide (%)	Nitrogen (%)
1/31/2008	INLET	16000	11	9.4	79
1/31/2008	INLET DUP	18000	11	9.4	79
2/28/2008	INLET	34000	16	13	72
2/28/2008	INLET DUP	35000	16	11	73
4/4/2008	INLET	21000	15	12	73
4/4/2008	INLET DUP	20000	15	12	73
4/30/2008	INLET DUP	22000	16	12	72
5/27/2008	INLET	27000	17	13	71
5/27/2008	INLET DUP	17000	17	13	70
6/25/2008	INLET	23000	19	14	67
6/25/2008	INLET DUP	24000	19	13	67
7/30/2008	INLET	27000	13	15	72
7/30/2008	INLET DUP	32000	13	15	72
9/19/2008	INLET	19000	17	15	67
9/19/2008	INLET DUP	14000	17	15	68
10/23/2008	INLET	16000	18	10	70
10/23/2008	INLET (R)	22000	16	14	66
10/23/2008	INLET (R) Dup	27000	16	14	66
11/25/2008	INLET	31000	18	14	68
11/25/2008	INLET (R)	26000	18	14	68
11/25/2008	INLET (R) DUP	28000	17	15	67
12/19/2008	INLET	32000	17	14	69
12/19/2008	INLET DUP	29000	16	14	70
1/31/2008	Post Ambient Air	970	21	0.7	79
2/28/2008	Post Ambient Air	4900	21	1.5	78
4/4/2008	Post Ambient Air	4700	20	2.3	77
4/30/2008	Post Ambient Air	5300	20	3	77
5/27/2008	Post Ambient Air	4000	21	2.1	77
6/25/2008	Post Ambient Air	5700	21	1.4	77
7/30/2008	Post Ambient Air	3200	21	1.4	78
9/19/2008	Post Ambient Air	48	22	1.5	77
10/23/2008	Post Ambient Air	3400	21	1.8	76
11/25/2008	Post Ambient Air	2300	22	1.4	77
12/19/2008	Post Ambient Air	1800	22	1.4	77
1/31/2008	CARBON 1	8	21	0.66	78
1/31/2008	CARBON 1 DUP	ND	21	0.66	78
2/28/2008	CARBON 1	ND	21	1.3	78
4/4/2008	CARBON 1	180	21	0.47	79
4/30/2008	CARBON 1	1200	22	0.5	78
5/27/2008	CARBON 1	410	21	2	77
6/25/2008	CARBON 1	6200	21	1.4	77
7/30/2008	CARBON 1	ND	21	1.6	78
9/19/2008	CARBON 1	830	21	1.1	77
10/23/2008	CARBON 1	800	21	1.7	77
11/25/2008	CARBON 1	280	21	1.3	77
12/19/2008	CARBON 1	1600	22	1.4	77
1/31/2008	Effluent	ND	21	0.78	78
2/28/2008	Effluent	ND	21	1.7	78
4/4/2008	Effluent	ND	21	0.1	79
4/30/2008	Effluent	ND	20	2.8	77
5/27/2008	Effluent	ND	21	2.2	77
6/25/2008	Effluent	ND	21	1.5	77
7/30/2008	Effluent	ND	21	1.7	78
9/19/2008	Effluent	ND	21	1.6	77
10/23/2008	Effluent	0.015	21	1.6	76
11/25/2008	Effluent*	NA	21	1.3	77
12/19/2008	Effluent**	ND	22	1.4	77

ND: Analyte (benzene) not detected at or above the reporting limit of 1.6 ppm
DUP: Dupicate samples

***NA**: The effluent sample collected on 11/25/2008 was not reported due to suspected cross contaminated at the laboratory when the sample was loaded onto the instrument. The sample could have become contaminated due to use of the same syringe to load samples into the instrument that had been previously used to dilute the higher benzene concentration samples.

****ND**: The effluent sample collected 12/19/2008 originally detected 100 ppm benzene, but was re-run due to suspected cross contaminated at the laboratory. The re-analyzed sample outside of the 3-day hold time for tedlar bags was reported ND.

Table 3.0
Field Data Summary for Cluster Wells
Del Amo Waste Pits

Date	Well ID	VOCs (ppm)	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	Pressure (in. water)
3/27/2008	A"1	0.2	0	19.4	1.4	-0.05
6/26/2008	A"1	2.3	0	19.7	1.6	-0.02
9/30/2008	A"1	3	0	18.5	1.6	-0.05
12/10/2008	A"1	0.3	0	19.3	1.8	-0.1
3/27/2008	A"2	0.1	0	20.9	0	-0.05
6/26/2008	A"2	0	0	20.9	0	-0.02
9/30/2008	A"2	8.9	0	20.1	0	-0.05
12/10/2008	A"2	0.1	0	20.5	0.2	-0.1
3/27/2008	A"3	0.1	2.8	20.7	0.6	-0.05
6/26/2008	A"3	0	0	20.9	0	-0.02
9/30/2008	A"3	2.6	0	20.2	0	-0.05
12/10/2008	A"3	1.4	2.8	19.9	0.6	0
3/27/2008	B"1	1870	> 100	20.9	7.6	1
6/26/2008	B"1	> 9999	> 100	20.4	12.4	1
9/30/2008	B"1	> 15000	> 100	24	12.1	0.25
12/10/2008	B"1	> 15000	> 100	23.2	15	0
3/27/2008	B"2	3500	> 100	15.3	5.2	0.5
6/26/2008	B"2	> 9999	> 100	21.3	12.6	0.4
9/30/2008	B"2	> 15000	> 100	21.6	12.3	0
12/10/2008	B"2	11980	> 100	22.2	16.2	0
3/27/2008	B"3	2400	> 100	20.4	8	0.65
6/26/2008	B"3	> 9999	> 100	21.7	12.4	0.6
9/30/2008	B"3	> 15000	> 100	23.2	12.7	0
12/10/2008	B"3	> 15000	> 100	19.2	13.4	0
3/27/2008	C"1	340	2.8	19.4	0.6	-0.76
6/26/2008	C"1	75	50.4	19.7	4.4	-0.38
9/30/2008	C"1	4.7	1.68	19.8	0	-0.5
12/10/2008	C"1	1150	0	20.2	0	-0.2
3/27/2008	C"2	32	0	10	0	-0.14
6/26/2008	C"2	85	0	20.9	0	-0.19
9/30/2008	C"2	25.3	2.8	16.9	2	-0.25
12/10/2008	C"2	4	0	20.1	0	-0.2
3/27/2008	C"3	33.4	0	20	0.2	-0.16
6/26/2008	C"3	110	0	20.9	0	-0.24
9/30/2008	C"3	5201	1.12	19.9	0	-0.25
12/10/2008	C"3	450	0	19.6	0.4	-0.1
3/27/2008	D"1	3985	> 100	20	7.6	-0.48
6/26/2008	D"1	> 9999	> 100	0.7	15.2	-0.3
9/30/2008	D"1	> 15000	> 100	1.8	12	-1.5
12/10/2008	D"1	> 15000	> 100	9.7	9.4	-0.55
3/27/2008	D"2	21.5	5.6	20	0	-0.22
6/26/2008	D"2	67	98	17	0.8	-0.14
9/30/2008	D"2	121.8	1.96	19.7	0	-0.5
12/10/2008	D"2	25	> 100	16.5	1.8	0
3/27/2008	D"3	8.6	0	20.3	0	-0.2
6/26/2008	D"3	> 9999	> 100	0.7	13.6	-0.2
9/30/2008	D"3	> 15000	> 100	0	12.1	-0.25
12/10/2008	D"3	> 15000	> 100	3.4	17	-0.55
3/27/2008	E"1	0.1	0	20.1	1	-0.1
6/26/2008	E"1	12.3	0	20.9	0	-0.02
9/30/2008	E"1	0.1	0	16.2	3.8	-0.1
12/10/2008	E"1	0.1	0	20.6	0	0

Table 3.0
Field Data Summary for Cluster Wells
Del Amo Waste Pits

Date	Well ID	VOCs (ppm)	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	Pressure (in. water)
3/27/2008	E"2	0.1	0	17.8	1.2	-0.05
6/26/2008	E"2	103	0	20.9	1.2	-0.02
9/30/2008	E"2	0	0	19.1	0.5	-0.05
12/10/2008	E"2	0	0	19.9	0.6	0
3/27/2008	E"3	0.1	0	19.3	1	-0.05
6/26/2008	E"3	8	0	20.9	0	-0.03
9/30/2008	E"3	2.9	0	19.1	0.3	-0.35
12/10/2008	E"3	0.1	0	20.6	0	0
3/27/2008	F"1	0.2	0	20.9	0	-0.06
6/26/2008	F"1	7.5	0	20.9	0	-0.06
9/30/2008	F"1	0	1.12	21.3	0	0
12/10/2008	F"1	0.9	0	20.9	0	0
3/27/2008	F"2	18.5	0	20.9	0	-0.06
6/26/2008	F"2	47.7	0	20.9	0	-0.08
9/30/2008	F"2	30.2	1.12	21.1	0	0
12/10/2008	F"2	3.1	0	20.6	0	0
3/27/2008	F"3	19	0	20.9	0	-0.06
6/26/2008	F"3	25.4	0	20.9	0	-0.04
9/30/2008	F"3	7.2	1.12	21	0	0
12/10/2008	F"3	10.2	0	20.6	0	0
3/27/2008	G"1	0	0	18.4	0.6	-0.05
6/26/2008	G"1	5.6	0	17	4	-0.06
9/30/2008	G"1	0	0	19.5	0.1	-0.1
12/10/2008	G"1	0.1	0	16.4	4.2	0
3/27/2008	G"2	0	0	18	0.6	0
6/26/2008	G"2	322	2.8	20.5	1.4	-0.02
9/30/2008	G"2	0	0	19	0.6	0
12/10/2008	G"2	0	0	19.4	0.6	0
3/27/2008	G"3	0.2	0	19.6	1.2	0
6/26/2008	G"3	1.4	0	20.9	0.6	-0.08
9/30/2008	G"3	0.2	0	19.1	0.7	-0.05
12/10/2008	G"3	0.1	0	20.8	0	0
3/27/2008	H"1	0.1	0	20.9	0	-0.02
6/26/2008	H"1	25.1	0	20.9	0	-0.02
9/30/2008	H"1	0	0.84	20.8	0	-0.05
12/10/2008	H"1	0.1	0	20.4	0.2	0
3/27/2008	H"2	0.1	0	20.9	0	-0.02
6/26/2008	H"2	63.3	0	20.9	0	-0.02
9/30/2008	H"2	0	1.12	20.4	0	-0.01
12/10/2008	H"2	0.1	0	20.4	0	0
3/27/2008	H"3	0	0	11.1	9	-0.08
6/26/2008	H"3	61.7	0	13.7	7.4	-0.06
9/30/2008	H"3	0	0.84	13.1	6.2	-0.01
12/10/2008	H"3	0.5	0	12.4	7.4	0
3/27/2008	I"1	2611	> 100	0	16.4	-0.3
6/26/2008	I"1	2176	64.4	0	15.8	-0.14
9/30/2008	I"1	8420	7	0	14.1	-0.3
12/10/2008	I"1	4000	42	0	16.4	0
3/27/2008	I"2	3.2	0	20.9	0	-0.48
6/26/2008	I"2	31.2	0	20.9	0	-0.18
9/30/2008	I"2	1.1	0.84	21	0	-0.5
12/10/2008	I"2	1.5	0	19.9	0	0

Table 3.0
Field Data Summary for Cluster Wells
Del Amo Waste Pits

Date	Well ID	VOCs (ppm)	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	Pressure (in. water)
3/27/2008	I"3	0.3	0	15.5	2.6	-0.01
6/26/2008	I"3	71.9	0	18.1	1.4	-0.08
9/30/2008	I"3	201.8	0.84	17.5	1.4	-0.2
12/10/2008	I"3	38	2.8	18.4	1.2	0
3/27/2008	J"1	2.6	0	20.9	0	-0.02
6/26/2008	J"1	28.5	0	20.9	0	-0.02
9/30/2008	J"1	0.5	0.84	21	0	-0.025
12/10/2008	J"1	1.7	0	20	0.4	0
3/27/2008	J"2	3.1	0	20.9	0	-0.02
6/26/2008	J"2	16.5	0	20.9	0	-0.04
9/30/2008	J"2	2.3	1.12	21	0	0
12/10/2008	J"2	20.1	11.2	19.3	0.8	0
3/27/2008	J"3	0.2	0	20.9	0	-0.04
6/26/2008	J"3	281	0	18	2.6	-0.1
9/30/2008	J"3	3.5	0.84	16.8	2.6	-0.1
12/10/2008	J"3	1.1	2.8	16.6	2.8	0
3/27/2008	K"1	1.8	0	20.9	0	-0.02
6/26/2008	K"1	108	2.8	20.9	0	-0.02
9/30/2008	K"1	4.7	1.68	18.4	1.5	-0.05
12/10/2008	K"1	1.2	0	19.3	0.6	0
3/27/2008	K"2	610	86.8	7.5	14	-0.06
6/26/2008	K"2	1850	25.2	6	16.2	-0.05
9/30/2008	K"2	5946	2.24	2.8	16.4	-0.05
12/10/2008	K"2	1035	5.6	7	15	0.1
3/27/2008	K"3	41	2.8	20.7	0	-0.06
6/26/2008	K"3	136	0	20.9	0	-0.02
9/30/2008	K"3	8.9	1.68	20.6	0	-0.05
12/10/2008	K"3	13.6	0	20.6	0	0
3/27/2008	L"1	2600	> 100	6.7	14.2	1
6/26/2008	L"1	> 9999	> 100	7.5	15	1
9/30/2008	L"1	> 15000	> 100	4.6	15.6	0.05
12/10/2008	L"1	936	> 100	7.6	20.4	0
3/27/2008	L"2	3125	> 100	17.1	7.2	0.75
6/26/2008	L"2	1143	56	20.9	0	1
9/30/2008	L"2	> 15000	> 100	13.1	9	0
12/10/2008	L"2	4100	> 100	11.5	15.4	0
3/27/2008	L"3	2700	15.4	19.1	2.8	0.75
6/26/2008	L"3	44.3	42	20.9	0	0.42
9/30/2008	L"3	> 15000	22.12	15.1	6.8	0
12/10/2008	L"3	12090	> 100	19.7	2.2	0
3/27/2008	M"1	1600	42	7.2	10.4	-0.11
6/26/2008	M"1	1943	25.2	6.7	12	-0.05
9/30/2008	M"1	4479	1.96	10.9	7.7	-0.15
12/10/2008	M"1	1401	11.2	11.9	11	-0.1
3/27/2008	M"2	245	8.4	4.4	14.7	-0.07
6/26/2008	M"2	62	0	3.8	16.8	-0.04
9/30/2008	M"2	12.7	1.12	5.5	14.3	-0.25
12/10/2008	M"2	5.2	2.8	8.2	17.2	-0.2
3/27/2008	M"3	60.1	2.8	20.6	0.2	0
6/26/2008	M"3	27	0	20.9	0	-0.01
9/30/2008	M"3	8.7	0.84	19.7	0	-0.05
12/10/2008	M"3	44	0	20.9	0	0

Table 4.0
Field Data Summary for Vacuum Performance Wells
Del Amo Waste Pits

Date	Location ID	VOCs (ppm)	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	Pressure (in. water)
3/27/2008	A'	> 22	0	20.9	0.7	-0.3
6/26/2008	A'	> 9999	> 100	7.1	14.4	-0.56
9/30/2008	A'	14	10.64	9.4	10.6	-1
12/10/2008	A'	19.5	0	20.9	0	-0.75
3/27/2008	B'	0.1	0	6.8	16.2	0
6/26/2008	B'	342	0.56	8.9	15.8	-0.04
9/30/2008	B'	0	0	13.4	9.5	-0.05
12/10/2008	B'	0.2	0	11.6	13.8	0
3/27/2008	C'	> 3000	> 100	13.5	10.2	0.75
6/26/2008	C'	> 9999	> 100	15.6	13.6	0.94
9/30/2008	C'	150	> 100	10.7	13.8	0.025
12/10/2008	C'	6397	> 100	11.7	17.2	0
3/27/2008	D'	> 40.5	0	19.4	0.4	-0.28
6/26/2008	D'	13	0	20.9	0	0.38
9/30/2008	D'	> 15000	20.44	0.2	14.1	-0.5
12/10/2008	D'	1020	0	19.1	0.6	-0.35
3/27/2008	E'	15.9	0	20.9	0	-0.1
6/26/2008	E'	10.1	0	20.9	0	-0.09
9/30/2008	E'	4.2	0.28	21.5	0	-0.05
12/10/2008	E'	2.3	0	12.2	7	-0.05
3/27/2008	F'	0.3	0	20.9	0	-0.06
6/26/2008	F'	46.1	0	20.9	0	-0.06
9/30/2008	F'	0.8	1.68	21.1	0	0
12/10/2008	F'	1	0	20.8	0	-0.1
3/27/2008	G'	2.5	0	2.6	16.2	-0.06
6/26/2008	G'	32	0	20.9	0	-0.06
9/30/2008	G'	3.3	0.56	4.4	12.9	-0.05
12/10/2008	G'	0	0	20.6	0	0
3/27/2008	H'	0.1	0	12.2	9	0
6/26/2008	H'	34.5	0	20.7	8	-0.05
9/30/2008	H'	0.8	0.28	14.9	4.7	-0.01
12/10/2008	H'	0.3	0	17.2	3.2	0
3/27/2008	I'	4036	> 100	2.5	2.2	-0.06
6/26/2008	I'	1305	39.2	7.1	2.4	-0.02
9/30/2008	I'	> 15000	21	3.2	3.4	-0.1
12/10/2008	I'	13000	8.4	15.7	1.2	0
3/27/2008	J'	30	0	20.9	0	0
6/26/2008	J'	21.3	0	20.9	0	-0.07
9/30/2008	J'	9.8	0.56	18	1.8	-0.15
12/10/2008	J'	3.4	0	18.7	1.2	0
3/27/2008	K'	0.3	0	11.6	6.1	-0.12
6/26/2008	K'	31	0	7.6	10.2	-0.11
9/30/2008	K'	31.6	0.84	13.2	4.9	-0.1
12/10/2008	K'	1	0	20.6	0	0
3/27/2008	L'	1.2	0	3.4	18.2	-0.06
6/26/2008	L'	16.5	0	20.9	0	-0.08
9/30/2008	L'	20	1.12	20.6	0	0
12/10/2008	L'	2	2.8	20	0	-0.15
3/27/2008	M'	2200	> 100	14	4.2	0
6/26/2008	M'	> 9999	> 100	9.8	12.8	0.02
9/30/2008	M'	> 15000	> 100	6.8	15.1	0
12/10/2008	M'	3517	> 100	10.9	13.2	0
3/27/2008	N'	1839	> 100	16.8	7.6	0
6/26/2008	N'	1399	30.8	20.9	0.2	0.3
9/30/2008	N'	> 15000	72.8	21.3	10.4	0.05
12/10/2008	N'	8005	> 100	19.3	11.6	0

Table 5.0
SVE/IBT System ROI Calculations
Del Amo Waste Pits

Monitoring Well	P_{atm}	P_w (in H_2O) (1)	P_w (atm)	P_r (in H_2O) (1)	P_r (atm)	R_w (ft)	r (ft)	ROI (ft)
20a - I"-1	1	-6.70	1.016427	-0.185	1.000455	0.17	36.79	42.85
20a - J'	1	-6.70	1.016427	-0.055	1.000135	0.17	50.44	52.87

$(P^2_r - P^2_w) = (P^2_{atm} - P^2_w)*\{\ln(r/R_w)/\ln(ROI/R_w)\}$

$(P^2_r - P^2_w)/(P^2_{atm} - P^2_w) = \ln(r/R_w)/\ln(ROI/R_w)$

$\ln(ROI/R_w) = \ln(r/R_w)*(P^2_{atm} - P^2_w)/(P^2_r - P^2_w)$

$ROI/R_w = EXP\{\ln(r/R_w)*(P^2_{atm} - P^2_w)/(P^2_r - P^2_w)\}$

$ROI = R_w*EXP\{\ln(r/R_w)*(P^2_{atm} - P^2_w)/(P^2_r - P^2_w)\}$

P_{atm} = atmospheric pressure or a preset value

P_w = pressure at the vapor extraction well

P_r = pressure at a radial distance r from the vapor extraction well

r = radial distance from the vapor extraction well

R_w = well radius of the vapor extraction well

ROI = radius of influence where pressure is equal to preset value

(1) Pressure measurements are average during long-term OM&M period (January 1, 2008 - December 31, 2008)

Table 6.0
Field Data Summary for SVE Wells
Del Amo Waste Pits

Date	Location ID	VOCs (ppm)	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	Pressure (in. water)
3/27/2008	SVE 1	> 9999	> 100	9.9	8.8	-15
6/26/2008	SVE 1	> 9999	> 100	9.5	8.6	-2.5
9/30/2008	SVE 1	> 15000	> 100	6.8	8.8	-2
12/10/2008	SVE 1	> 15000	> 100	10.6	10.8	-20
3/27/2008	SVE 2	> 9999	> 100	18.9	11	-2
6/26/2008	SVE 2	> 9999	> 100	17.5	13.2	-4
9/30/2008	SVE 2	> 15000	> 100	15.9	14.8	-6.5
12/10/2008	SVE 2	5200	> 100	17.1	19	-4
3/27/2008	SVE 3	> 9999	> 100	25.5	9.8	4
6/26/2008	SVE 3	> 9999	> 100	25.5	11.6	5
9/30/2008	SVE 3	> 15000	> 100	19.7	0.1	4.5
12/10/2008	SVE 3	> 9999	> 100	30.6	12.2	4
3/27/2008	SVE 4	> 9999	> 100	32.7	8.6	4.5
6/26/2008	SVE 4	> 9999	> 100	26.7	11.2	6.5
9/30/2008	SVE 4	> 15000	> 100	20.7	12.8	9.5
12/10/2008	SVE 4	> 15000	> 100	27.7	13.2	6
3/27/2008	SVE 5	> 9999	> 100	19.6	13	-8
6/26/2008	SVE 5	> 9999	> 100	17.2	13.8	-11
9/30/2008	SVE 5	> 15000	> 100	11.3	16.4	-7.75
12/10/2008	SVE 5	> 15000	> 100	14.4	20.4	-4
3/27/2008	SVE 6	> 9999	> 100	11.1	7.6	-7
6/26/2008	SVE 6	> 9999	> 100	10.4	7.2	-4
9/30/2008	SVE 6	> 15000	> 100	3.6	7.9	-1
12/10/2008	SVE 6	> 9999	> 100	11	10.6	-20
3/27/2008	SVE 7	> 9999	> 100	10.1	16.6	-3
6/26/2008	SVE 7	> 9999	> 100	5.2	19.2	-1
9/30/2008	SVE 7	> 15000	> 100	5.9	16.8	-1
12/10/2008	SVE 7	> 11469	> 100	13.6	17.4	-3
3/27/2008	SVE 8	> 9999	> 100	28	9.4	6
6/26/2008	SVE 8	> 9999	> 100	24.9	0.6	6.5
9/30/2008	SVE 8	> 15000	> 100	21.8	11	9.5
12/10/2008	SVE 8	> 15000	> 100	27.7	12	5
3/27/2008	SVE 9	> 9999	> 100	23.5	10.2	5
6/26/2008	SVE 9	> 9999	> 100	24.3	11.4	5.5
9/30/2008	SVE 9	> 15000	> 100	24	11.1	2
12/10/2008	SVE 9	> 15000	> 100	24.3	13.2	6
3/27/2008	SVE 10	> 9999	> 100	10.6	12.2	-6
6/26/2008	SVE 10	> 9999	> 100	12.3	13.8	-4.5
9/30/2008	SVE 10	> 15000	> 100	13.4	14.1	-13
12/10/2008	SVE 10	> 13928	> 100	11.5	10.2	-18
3/27/2008	SVE 11	> 9999	> 100	24.1	11.2	-1
6/26/2008	SVE 11	> 9999	> 100	24.5	12.4	-4
9/30/2008	SVE 11	> 15000	> 100	20.5	13.6	-6.75
12/10/2008	SVE 11	8000	> 100	20.9	17	-4
3/27/2008	SVE 12	> 9999	> 100	20.9	7	-5
6/26/2008	SVE 12	> 9999	> 100	17.5	5.6	-0.5
9/30/2008	SVE 12	> 15000	> 100	19.5	4	0.5
12/10/2008	SVE 12	> 15000	> 100	20.9	9.2	-18

Table 6.0
Field Data Summary for SVE Wells
Del Amo Waste Pits

Date	Location ID	VOCs (ppm)	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	Pressure (in. water)
3/27/2008	SVE 13	> 9999	> 100	2.7	1.8	-0.1
6/26/2008	SVE 13	> 9999	0	2.7	1.8	-0.14
9/30/2008	SVE 13	> 15000	2.24	2.7	1.5	0
12/10/2008	SVE 13	> 15000	30.8	18.4	0.2	0
3/27/2008	SVE 14	1255	22.4	1	20.2	-0.12
6/26/2008	SVE 14	1163	22.4	2.8	17.4	-0.1
9/30/2008	SVE 14	914	> 100	1.9	17.1	-0.25
12/10/2008	SVE 14	960	22.4	2.4	20.4	0
3/27/2008	SVE 15A	2645	56	0	13.2	-0.02
6/26/2008	SVE 15A	1154	16.8	0.7	12.4	-0.14
9/30/2008	SVE 15A	1170	30.8	0	12.6	-0.25
12/10/2008	SVE 15A	2445	19.6	0.2	15.2	0
3/27/2008	SVE 15B	317	36.4	5.2	14	-0.2
6/26/2008	SVE 15B	240	8.4	5.1	14	-0.15
9/30/2008	SVE 15B	196	28	4.3	13.8	-0.5
12/10/2008	SVE 15B	169	5.6	2.9	17.6	0
3/27/2008	SVE 16	3724	98	0	11.2	-0.16
6/26/2008	SVE 16	2240	58.8	0	13.2	-0.14
9/30/2008	SVE 16	1362	61.6	0	12.6	0
12/10/2008	SVE 16	1300	19.6	0	4.6	0
3/27/2008	SVE 18	45.6	0	8.5	12	-0.08
6/26/2008	SVE 18	19.5	5.6	11.1	9.6	-0.06
9/30/2008	SVE 18	2.1	25.2	10.5	9.9	0
12/10/2008	SVE 18	0.3	0	10.5	12	0
3/27/2008	SVE 19	273	56	1.6	14.4	-0.08
6/26/2008	SVE 19	330	11.2	2.1	14	-0.09
9/30/2008	SVE 19	322	61.6	2	13.3	-0.25
12/10/2008	SVE 19	487.7	8.4	1.2	16.2	0
3/27/2008	SVE 20A	175	30.8	1.4	16	-9
6/26/2008	SVE 20A	854	28	2.1	14	-0.8
9/30/2008	SVE 20A	690	> 100	14.1	1.8	-15
12/10/2008	SVE 20A	1070	19.6	0	18.4	-2
3/27/2008	SVE 20B	1913	> 100	0	17.6	-0.05
6/26/2008	SVE 20B	1739	> 100	0.2	16.2	-0.16
9/30/2008	SVE 20B	1234	> 100	0	15.6	-0.5
12/10/2008	SVE 20B	7899	> 100	0.4	18.6	0
3/27/2008	SVE 21	577	25.2	9.7	9.8	-0.11
6/26/2008	SVE 21	472	25.2	6.9	7.8	-0.06
9/30/2008	SVE 21	428	> 100	5.9	11.8	0
12/10/2008	SVE 21	698	30.8	8	12	0

Table 7.0
Field Data Summary for Perimeter Wells
Del Amo Waste Pits

Date	Location ID	VOCs (ppm)	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	Pressure (in. water)
3/27/2008	A	0	0	20.9	0.4	-0.05
6/26/2008	A	0	0	20.9	0	-0.02
7/1/2008	A	0	0	20.9	0	NA
8/29/2008	A	0.2	0	20.9	0	NA
9/30/2008	A	0	0	19.7	0.4	-0.05
10/23/2008	A	0	0	20.3	0.6	0.04
12/10/2008	A	0.1	0	19.7	1	0
3/27/2008	B	0.3	0	11.1	8.4	-0.05
6/26/2008	B	30*	0	15.3	8.2	-0.02
7/1/2008	B	0.8	0	15.5	7.6	NA
8/29/2008	B	0.1	0	17.1	7.2	NA
9/30/2008	B	0	0	16.6	7	-0.05
10/23/2008	B	0	0	17.9	6.8	0
12/10/2008	B	0.2	0	17.2	6.2	0
3/27/2008	C	0.2	0	8.3	7.8	-0.05
6/26/2008	C	18*	0	12	10.2	-0.02
7/1/2008	C	0.2	0	12.7	9.2	NA
8/29/2008	C	0	0	15.1	8.4	NA
9/30/2008	C	0	0	16.2	8.7	-0.05
10/23/2008	C	0	0	16.5	8.4	0
12/10/2008	C	0	0	16.3	6.8	0
3/27/2008	D	0.1	0	20.2	0.6	0
6/26/2008	D	13.9*	0	20.9	0	-0.03
7/1/2008	D	0.1	0	20.9	0	NA
8/29/2008	D	0	0	NA	NA	NA
9/30/2008	D	0	0	18.5	1.3	0
10/23/2008	D	0	0	18.3	3	0
12/10/2008	D	0.1	0	18.9	1.2	0
3/27/2008	E	0.1	0	15.4	3.2	-0.01
6/26/2008	E	10.5*	0	17	4	-0.04
7/1/2008	E	0.1	0	17.4	3.8	NA
8/29/2008	E	NA	NA	NA	NA	NA
9/30/2008	E	0	0	16.6	3.5	0
10/23/2008	E	0	0	17.5	4.2	0.02
12/10/2008	E	0	0	17.4	4	0
3/27/2008	F	0.1	0	15.7	3.4	0
6/26/2008	F	11.9*	0	18	3.6	-0.02
7/1/2008	F	0.3	0	18.1	3.4	NA
8/29/2008	F	NA	NA	NA	NA	NA
9/30/2008	F	0	0	16.8	3.4	-0.05
10/23/2008	F	0	0	17.8	3.8	0.02
12/10/2008	F	0	0	17.4	3.6	0

Table 7.0
Field Data Summary for Perimeter Wells
Del Amo Waste Pits

Date	Location ID	VOCs (ppm)	LEL (%)	Oxygen (%)	Carbon Dioxide (%)	Pressure (in. water)
3/27/2008	G	0.1	0	15.2	1.8	-0.05
6/26/2008	G	5.2*	0	19.2	2.2	-0.03
7/1/2008	G	0.1	0	19.2	2.4	NA
8/29/2008	G	NA	NA	NA	NA	NA
9/30/2008	G	0.4	0	18.8	1.2	-0.05
10/23/2008	G	0	0	18.9	2.4	0
12/10/2008	G	0	0	18.5	2.4	0
3/27/2008	H	0.1	0	15.1	3.6	-0.1
6/26/2008	H	87*	0	17.1	3.4	-0.02
7/1/2008	H	0.5	0	16.4	3.8	NA
8/29/2008	H	0	0	16.8	4	0
9/30/2008	H	2.3	0	16.5	3.5	-0.05
10/23/2008	H	0	0	17.3	4	0
12/10/2008	H	0.3	0	17	4	0
3/27/2008	I	0.1	0	20.9	0	-0.05
6/26/2008	I	0	0	20.9	0	0
7/1/2008	I	0	0	20.9	0	NA
9/30/2008	I	0.5	0	19.2	1.6	0
10/23/2008	I	NA	NA	NA	NA	NA
12/10/2008	I	0.1	0	20.6	0	0
3/27/2008	J	0.1	0	15.5	2.8	0
6/26/2008	J	0	0	19.3	2.4	0
7/1/2008	J	0.6	0	18.2	3.2	NA
9/30/2008	J	0.1	0	18.5	2.5	0
10/23/2008	J	NA	NA	NA	NA	NA
12/10/2008	J	0.1	0	18.5	2.6	0
4/1/2008	K	0.1	0	16	3.8	0
6/26/2008	K	0.2	0	20.3	1.4	-0.05
7/1/2008	K	0.8	0	17.9	3.6	NA
9/30/2008	K	0.1	0	18.4	2.9	-0.05
10/23/2008	K	NA	NA	NA	NA	NA
12/10/2008	K	0	0	18.8	2.2	0
3/27/2008	L	0.1	0	20.9	0	0
6/26/2008	L	0.2	0	16.5	4.8	0
7/1/2008	L	0	0	15.5	5	NA
9/30/2008	L	0.1	0	20	0.2	0
10/23/2008	L	NA	NA	NA	NA	NA
12/10/2008	L	0	0	15.5	4.8	0

*The VOC concentrations observed on June 26, 2008 at perimeter monitoring well A, C, D, E, F, G, and H were abnormally high. The instrument was inspected and suspected to have dirty sensor module, excessive moisture and water condensation. The VOC concentrations detected at these perimeter monitoring wells during a re-monitoring event conducted on July 1, 2008 ranged from 0.0 to 0.8 ppm, most likely indicating that the observed June 26, 2008 concentrations were an anomaly.

Table 8.0
2008 SVE/IBT System Operation Summary
Comparison of Design to Actual Operations
Del Amo Waste Pits

Parameter	Original Design	Performance Based on Inline Monitoring Devices
Vapor Injection Rate (CFM)	50	40.8
System Operation Time (hours per day)*	8	7.31
O2 Injection Rate (CFM)	5	5.4
O2 Percentage (%)	100%	91%
O2 Utilization 1st Order Rate Constant (1/hr) **	0.0021	0.0021
Extracted Vapor Concentration (ppmv)	15,000	24,347
Extraction Rate (CFM) ***	60	43.3
Treatment Rate (CFM)	15	7.9
Time for Pore Volume (days)	7.09	8.69
Injected O2 Concentration 1st Order	27%	28%
Benzene Degradation (kg/day)	**20**	**19.6**
Benzene Degradation (kg/year)	7,355	7,173
Benzene Removal (kg/day)	**10**	**8.5**
Benzene Removal (kg/year)	3,626	1,851
Total Benzene Removed/Degraded (kg/day)	**30**	**28**
Total Benzene Removed/Degraded (kg/year)	10,981	9,024
Carbon to Benzene Ratio ****	4:1	5:1
Projected Carbon Required (lbs/day)	87	75
Projected Annual Carbon Required (lbs/year)	**31,906**	**16,290**

* System operation time (hours per day), is the average daily operation time including down time for maintenance activities and carbon change-out. Normal operation is 8 hours/day.
** 0.0021 of design value was used for oxygen utilization constant.
*** Extraction rate is derived from the sum of the treatment rate and the recycle rate.
**** Benzene to carbon ratio for the 2008 monitoring period is based on actual weight adsorbed to carbon (See Table 9.0)

The calculation used for this estimate

Q = (O2 Injection rate + Recycle rate)
$[O_2]$ = (Term1*0.20+Term2*0.91)/{1-Term3*Exp(-k*t_{pv})}
ŕ = 1-Exp(-k*t_{pv})
f_{bio} = 1-(0.0035/k)

Term1 = (Recycle rate)/Q*(Excess Vapor Extraction rate)/(Treatment rate + Recycle rate)
Term2 =O2 injection rate/Q
Term3 = Recycle rate/(Treatment rate + Recycle rate)
t_{pv} (Time for Pore Volume) = 8505/Q
k = 0.0021

[Benzene] = 23571

Mass Degraded = Q*$[O_2]$* ŕ* f_{bio}* 5.8864
Mass Treated = Treatment rate *[Benzene]*0.000044148
Mass Total = Mass Degraded + Mass Treated

Table 9.0
Carbon Change-Out
Del Amo Waste Pits

Date	Operational Hours Between Change-outs	Fresh Carbon (lb)			Spent Carbon (lb)			Weight Adsorbed (lb)			Ratio
		Primary	Secondary	Total	Primary	Secondary	Total	Primary	Secondary	Total	
2/22/2008	334	1974	2011	3985	2561	2128	4689	587	117	704	5.66
4/1/2008	190	2000	2000	4000	2690	2330	5020	690	330	1020	3.92
5/9/2008	210	2130	2130	4260	2552	2388	4940	422	258	680	6.26
5/30/2008	98.5	1826	1902	3728	2420	1935	4355	594	33	627	5.95
7/7/2008	194.5	2000	2025	4025	2456	2390	4846	456	365	821	4.90
8/20/2008	149.5	1890	1908	3798	2262	2361	4623	372	453	825	4.60
9/24/2008	187.5	1922	2133	4055	2485	2320	4805	563	187	750	5.41
11/13/2008	240	2005	2045	4050	2568	2470	5038	563	425	988	4.10
1/2/2009	195.5	2026	2037	4063	2547	2414	4961	521	377	898	4.52
Average	**200**	**1975**	**2021**	**3996**	**2505**	**2304**	**4809**	**530**	**283**	**813**	**5.04**
Total	**1799.5**	**17773**	**18191**	**35964**	**22541**	**20736**	**43277**	**4768**	**2545**	**7313**	

Table 10.0
Cover System Inspection Summary
Del Amo Waste Pits

Cover System									
Inspection Date	**January 7, 2008**	**January 25, 2008**	**January 28, 2008**	**February 29, 2008**	**June 26, 2008**	**August 1, 2008**	**November 26, 2008**	**December 16, 2008**	**December 30, 2008**
Inspection Type	Post Rain Inspection	Post Rain Inspection	Post Rain Inspection	1st Quarterly Inspection	2nd Quarterly Inspection	3rd Quarterly Inspection	Post Rain Inspection	Post Rain Inspection	4th Quarterly Inspection
Inspection Items									
Erosion	4	4	4	4	4	4	4	4	4
Stressed Vegetation (Plant Die-Back) [(1)]	4	4	4	4	3	3	4	4	4
Sediment Build-Up [(1)]	4	4	4	4	4	4	3	3	4
Local Subsidence or Loss of Grade	4	4	4	4	4	4	4	4	4
Water Ponding [(1)]	4	4	3	4	4	4	4	3	4
Turf Height	4	4	4	4	4	4	4	4	4
Burrowing Animals [(1)]	4	4	4	3	4	3	4	3	3
Weeds or Undesirable Vegetation	4	4	4	4	4	4	4	4	4
Evidence of Fires or Vandalism	4	4	4	4	4	4	4	4	4
Soil Quality Check	4	4	4	4	4	4	4	4	4
Unauthorized Traffic	4	4	4	4	4	4	4	4	4
Slope Instability or Sloughing	4	4	4	4	4	4	4	4	4
Survey Monuments	4	4	4	4	4	4	4	4	4
Vertical Cracking [(1)]	4	4	4	4	4	3	4	4	4
Intrusions	4	4	4	4	4	4	4	4	4
Evidence of Waste Pit Materials	4	4	4	4	4	4	4	4	4

[(1)] Area of concern was repaired during routine property maintenance and/or addressed through ongoing monitoring/observation.

Conditions/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Repair)
1 = Poor (Needs Immediate Repair)

Table 10.0
Cover System Inspection Summary
Del Amo Waste Pits

Cover System									
Inspection Date	**January 7, 2008**	**January 25, 2008**	**January 28, 2008**	**February 29, 2008**	**June 26, 2008**	**August 1, 2008**	**November 26, 2008**	**December 16, 2008**	**December 30, 2008**
Inspection Type	Post Rain Inspection	Post Rain Inspection	Post Rain Inspection	1st Quarterly Inspection	2nd Quarterly Inspection	3rd Quarterly Inspection	Post Rain Inspection	Post Rain Inspection	4th Quarterly Inspection
Inspection Items									
Erosion	4	4	4	4	4	4	4	4	4
Stressed Vegetation (Plant Die-Back) [(1)]	4	4	4	4	3	3	4	4	4
Sediment Build-Up [(1)]	4	4	4	4	4	4	3	3	4
Local Subsidence or Loss of Grade	4	4	4	4	4	4	4	4	4
Water Ponding [(1)]	4	4	3	4	4	4	4	3	4
Turf Height	4	4	4	4	4	4	4	4	4
Burrowing Animals [(1)]	4	4	4	3	4	3	4	3	3
Weeds or Undesirable Vegetation	4	4	4	4	4	4	4	4	4
Evidence of Fires or Vandalism	4	4	4	4	4	4	4	4	4
Soil Quality Check	4	4	4	4	4	4	4	4	4
Unauthorized Traffic	4	4	4	4	4	4	4	4	4
Slope Instability or Sloughing	4	4	4	4	4	4	4	4	4
Survey Monuments	4	4	4	4	4	4	4	4	4
Vertical Cracking [(1)]	4	4	4	4	4	3	4	4	4
Intrusions	4	4	4	4	4	4	4	4	4
Evidence of Waste Pit Materials	4	4	4	4	4	4	4	4	4

[(1)] Area of concern was repaired during routine property maintenance and/or addressed through ongoing monitoring/observation.

Conditions/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Repair)
1 = Poor (Needs Immediate Repair)

Table 11.0
Cap Gas Collection Treatment System Inspection Summary
Del Amo Waste Pits

Cap Gas Collection Treatment System									
Inspection Date	**January 7, 2008**	**January 25, 2008**	**January 28, 2008**	**February 29, 2008**	**June 26, 2008**	**August 1, 2008**	**November 26, 2008**	**December 16, 2008**	**December 30, 2008**
Inspection Type	Post Rain Inspection	Post Rain Inspection	Post Rain Inspection	1st Quarterly Inspection	2nd Quarterly Inspection	3rd Quarterly Inspection	Post Rain Inspection	Post Rain Inspection	4th Quarterly Inspection
Inspection Items									
Collection System Valves									
Adequate Free Movement	4	4	4	4	4	4	4	4	4
Seals-Complete	4	4	4	4	4	4	4	4	4
Signs of Rust/Corrosion [(1)]	4	3	4	4	4	4	4	4	4
Condensate Collection									
Air Moisture Separator [(1)]	4	4	4	4	4	4	3	4	4
Carbon Adsorbers-Vessels									
Exterior Damage	4	4	4	4	4	4	4	4	4
FRP Grating and Mesh	4	4	4	4	4	4	4	4	4
Blower [(2)]									
General Motor Maintenance	4	4	4	4	4	4	4	4	4
Drive Maintenance	4	4	4	4	4	4	4	4	4
Bearing Maintenance	4	4	4	4	4	4	4	4	4
Lubrication	4	4	4	4	4	4	4	4	4
Structural Maintenance	4	4	4	4	4	4	4	4	4

[(1)] Area of concern was repaired during routine property maintenance and/or addressed through ongoing monitoring/observation.
[(2)] Blower and motor are permanently lubricated and sealed units.

Conditions/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Repair)
1 = Poor (Needs Immediate Repair)

Table 12.0
Surface Water Drainage Inspection Summary
Del Amo Waste Pits

Surface Water Drainage									
Inspection Date	**January 7, 2008**	**January 25, 2008**	**January 28, 2008**	**February 29, 2008**	**June 26, 2008**	**August 1, 2008**	**November 26, 2008**	**December 16, 2008**	**December 30, 2008**
Inspection Type	Post Rain Inspection	Post Rain Inspection	Post Rain Inspection	1st Quarterly Inspection	2nd Quarterly Inspection	3rd Quarterly Inspection	Post Rain Inspection	Post Rain Inspection	4th Quarterly Inspection
Inspection Items									
Washouts or Erosion of Contoured Grade	4	4	4	4	4	4	4	4	4
Ponding on Contoured Grade [(1)]	4	4	4	4	4	4	4	3	4
Gullies and Ruts on Contoured Grade	4	4	4	4	4	4	4	4	4
Plugging of Drainage Culverts [(1)]	4	4	4	4	4	4	4	3	4
Holes and Cracks in Swales or Catch Basins	4	4	4	4	4	4	4	4	4
Sediment Build-Up in Swales or Catch Basins [(1)]	3	4	4	4	4	4	4	4	4
Surface Cracking of Swales/Catch Basins [(1)]	4	4	4	4	4	3	4	4	4
Spalling of Swales/Catch Basins	4	4	4	4	4	4	4	4	4
Structural Failure of Swales/Catch Basins	4	4	4	4	4	4	4	4	4

[(1)] Area of concern was repaired during routine property maintenance and/or addressed through ongoing monitoring/observation.

Conditions/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Repair)

1 = Poor (Needs Immediate Repair)

Table 13.0
Subsurface Drainage Inspection Summary
Del Amo Waste Pits

Subsurface Drainage									
Inspection Date	**January 7, 2008**	**January 25, 2008**	**January 28, 2008**	**February 29, 2008**	**June 28, 2008**	**August 1, 2008**	**November 26, 2008**	**December 16, 2008**	**December 30, 2008**
Inspection Type	Post Rain Inspection	Post Rain Inspection	Post Rain Inspection	1st Quarterly Inspection	2nd Quarterly Inspection	3rd Quarterly Inspection	Post Rain Inspection	Post Rain Inspection	4th Quarterly Inspection
Inspection Items									
Holes and Cracks in Swales, Catch Basin [(1)]	4	4	4	4	4	3	4	4	4
Plugging of Drainage Inlets	4	4	4	4	4	4	4	4	4
Sediment Build-Up or Debris in Catch Basin [(1)]	3	4	4	4	4	4	3	4	4
Structural Failure of Catch Basin	4	4	4	4	4	4	4	4	4

[(1)] Area of concern was repaired during routine property maintenance and/or addressed through ongoing monitoring/observation.

Conditions/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Repair)

1 = Poor (Needs Immediate Repair)

Table 14.0
Security Fence Inspection Summary
Del Amo Waste Pits

Security Fence									
Inspection Date	**January 7, 2008**	**January 25, 2008**	**January 28, 2008**	**February 29, 2008**	**June 28, 2008**	**August 8, 2008**	**November 26, 2008**	**December 16, 2008**	**December 30, 2008**
Inspection Type	Post Rain Inspection	Post Rain Inspection	Post Rain Inspection	1st Quarterly Inspection	2nd Quarterly Inspection	3rd Quarterly Inspection	Post Rain Inspection	Post Rain Inspection	4th Quarterly Inspection
Inspection Items									
Perimeter Fence									
Breaks and Holes [(1)]	3	4	4	4	4	4	4	4	4
Settlement Damage	4	4	4	4	4	4	4	4	4
Loose Posts/Tension	4	4	4	4	4	4	4	4	4
Rust/Corrosion [(1)]	4	4	3	4	4	4	4	4	4
Ruts and Burrows Beneath Fence [(1)]	4	4	4	4	4	4	4	3	4
Vegetation Overgrowth	4	4	4	4	4	4	4	4	4
General Signs of Deterioration	4	4	4	4	4	4	4	4	4
Vandalism/Animal/Wind Damage	4	4	4	4	4	4	4	4	4
Gates									
Adequate Movement of Hinges and Gates	4	4	4	4	4	4	4	4	4
Proper Function of Lock(s)	4	4	4	4	4	4	4	4	4

[(1)] Area of concern was repaired during routine property maintenance and/or addressed through ongoing monitoring/observation.

Conditions/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Repair)
1 = Poor (Needs Immediate Repair)

Table 15.0
Access Road Inspection Summary
Del Amo Waste Pits

Access Road									
Inspection Date	**January 7, 2008**	**January 25, 2008**	**January 28, 2008**	**February 29, 2008**	**June 28, 2008**	**August 1, 2008**	**November 26, 2008**	**December 16, 2008**	**December 30, 2008**
Inspection Type	Post Rain Inspection	Post Rain Inspection	Post Rain Inspection	1st Quarterly Inspection	2nd Quarterly Inspection	3rd Quarterly Inspection	Post Rain Inspection	Post Rain Inspection	4th Quarterly Inspection
Inspection Items									
Holes and Cracks	4	4	4	4	4	4	4	4	4
Vegetation Overgrowth	4	4	4	4	4	4	4	4	4
Settlement [(1)]	4	4	4	4	4	4	3	4	4
Excessive Dispersion of Gravel	4	4	4	4	4	4	4	4	4
General Signs of Deterioration	4	4	4	4	4	4	4	4	4

[(1)] Area of concern was repaired during routine property maintenance and/or addressed through ongoing monitoring/observation.

Conditions/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Repair)

1 = Poor (Needs Immediate Repair)

Table 16.0
SVE/IBT System Inspection Summary
Del Amo Waste Pits

SVE/IBT SYSTEM INSPECTION									
Inspection Date	**January 7, 2008**	**January 25, 2008**	**January 28, 2008**	**February 29, 2008**	**June 26, 2008**	**August 1, 2008**	**November 26, 2008**	**December 16, 2008**	**December 20, 2007**
Inspection Type	Post Rain Inspection	Post Rain Inspection	Post Rain Inspection	1st Quarterly Inspection	2nd Quarterly Inspection	3rd Quarterly Inspection	Post Rain Inspection	Post Rain Inspection	4th Quarterly Inspection
Inspection Items									
Manifold									
Adequate - Free Movement	4	4	4	4	4	4	4	4	4
Seals - Complete	4	4	4	4	4	4	4	4	4
Visible Damage	4	4	4	4	4	4	4	4	4
Condensate Collection									
AirMoisture Separator	4	4	4	4	4	4	4	4	4
Additional System Components									
Carbon Adsorber Vessels									
Exterior Damage	4	4	4	4	4	4	4	4	4
Blowers									
General Motor Maintenance	4	4	4	4	4	4	4	4	4
Drive Maintenance	4	4	4	4	4	4	4	4	4
Bearing Maintenance	4	4	4	4	4	4	4	4	4
Osygen Generator									
Signs of Rust/Corrosion	4	4	4	4	4	4	4	4	4
Mechanical Functioning	4	4	4	4	4	4	4	4	4
Oxygen Purity	4	4	4	4	4	4	4	4	4
System Sensors									
Visible Damage	4	4	4	4	4	4	4	4	4
Mechanical Functioning [(1)]	3	3	4	4	4	4	4	4	4
SVE Wellheads									
Tee Flanges	4	4	4	4	4	4	4	4	4
Valves	4	4	4	4	4	4	4	4	4
Sniff for signs of leaks	N/A	N/A	N/A	4	4	4	N/A	4	4

[(1)] Sensors needing repair or calibration were calibrated in the field or returned to manufacturer and re-installed following corrective measures.

N/A-Not Available

Conditions/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Repair)

1 = Poor (Needs Immediate Repair)

Table 17.0
Proposed Monitoring and Inspection Activities
Del Amo Waste Pits

EVENT	FREQUENCY	METHOD OF DOCUMENTATION
Cover System	Quarterly and after heavy rains [(1)] for the Seventh Year of Operation	Cover System Inspection Form
Cap Gas Collection and Treatment System	Quarterly and after heavy rains [(1)] for the Seventh Year of Operation	Cap Gas System Inspection Form
Surface Water Drainage System	Quarterly and after heavy rains [(1)] for the Seventh Year of Operation	Surface Water Drainage Inspection Form
Subsurface Drainage Systems	Quarterly and after heavy rains [(1)] for the Seventh Year of Operation	Subsurface Drainage Inspection Form
Security Fences	Quarterly and after heavy rains [(1)] for the Seventh Year of Operation	Security Fence Inspection Form
Access Road	Quarterly and after heavy rains [(1)] for the Seventh Year of Operation	Access Road Inspection Form
SVE/IBT System	Quarterly and after heavy rains [(1)] for the Seventh Year of Operation	SVE/IBT System Inspection Form
Perimeter Well Monitoring Event (wells A, B, C, D, H)	Monthly	Perimeter Soil Vapor Monitoring Form
Perimeter Well Monitoring Event (wells E, F, G, I, J, K L)	Quarterly	Perimeter Soil Vapor Monitoring Form
Full Scale Field Monitoring (cluster, vacuum performance, SVE)	Quarterly	Quarterly Field Monitoring Form
SVE/IBT System Field Monitoring	Bi-monthly	SVE/IBT System Monitoring Form
SVE/IBT System Lab Sampling	Monthly	Laboratory Analytical Report
Cap Gas Collection and Treatment System Monitoring	Bi-monthly	Cap Gas System Monitoring Form
Cap Gas Collection and Treatment Confirmation Sampling Event	Once every 5 years [(2)]	Laboratory Analytical Report
Monument Survey Event	Once every 5 years [(2)]	Monument Survey Record
Repairs	As Required	Maintenance/Corrective Work Report

[(1)] Defined as precipitation events with intensity exceeding 1.0 inches over a 24-hour period.
[(2)] Next scheduled monument survey event to be conducted in the year 2010.
[(3)] Next scheduled confirmation sampling event to be conducted in the year 2010.

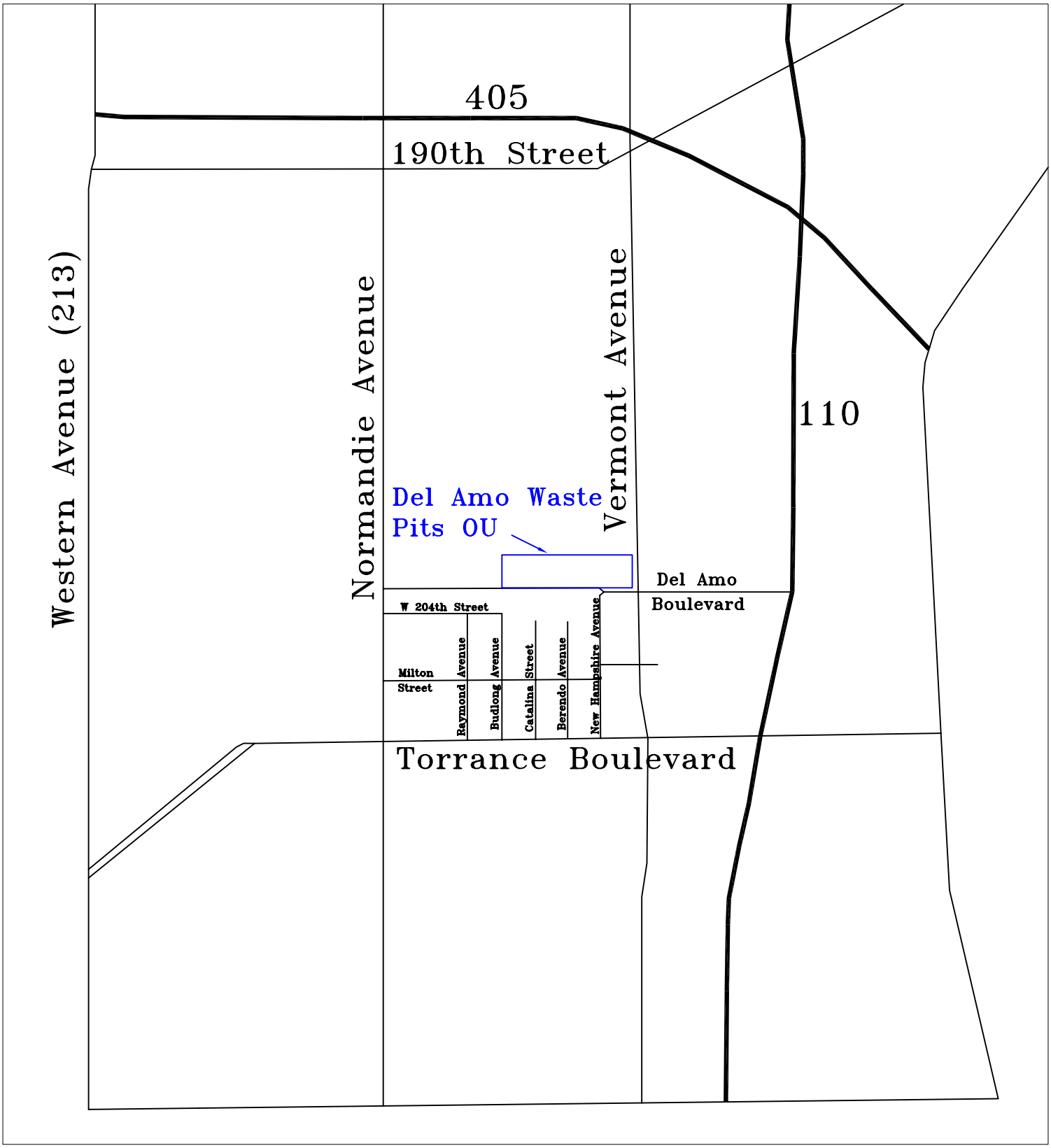
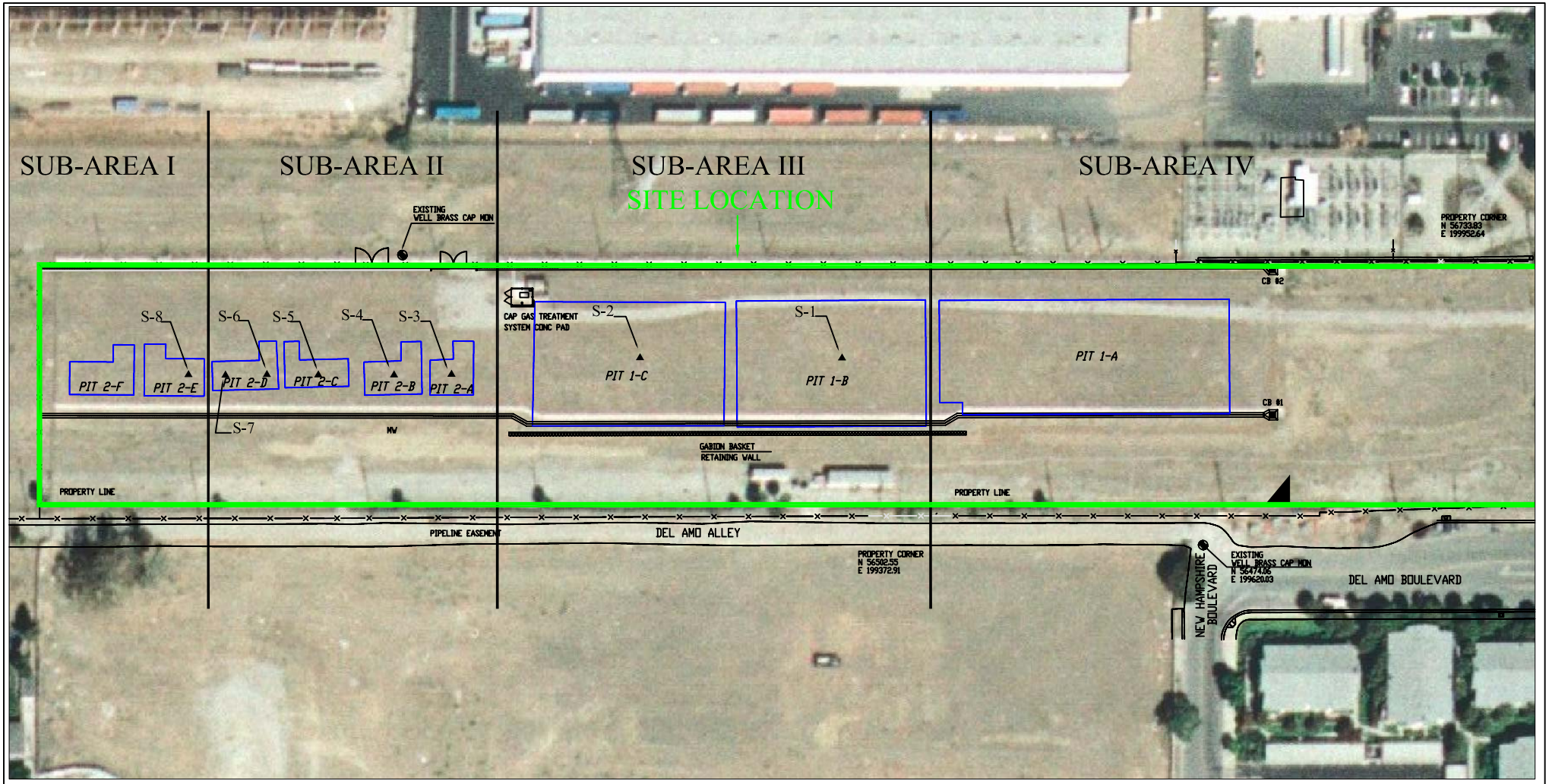


FIGURE 1.0
Site Vicinity Map
DEL AMO WASTE PITS OU

AN ENVIRONMENTAL MANAGEMENT
& DEVELOPMENT COMPANY
NEWPORT BEACH, CALIFORNIA 949.261.8098



Reference: Final Design Report Drawings - Appendix C, Parsons Engineering Science, April 9, 1999

LEGEND

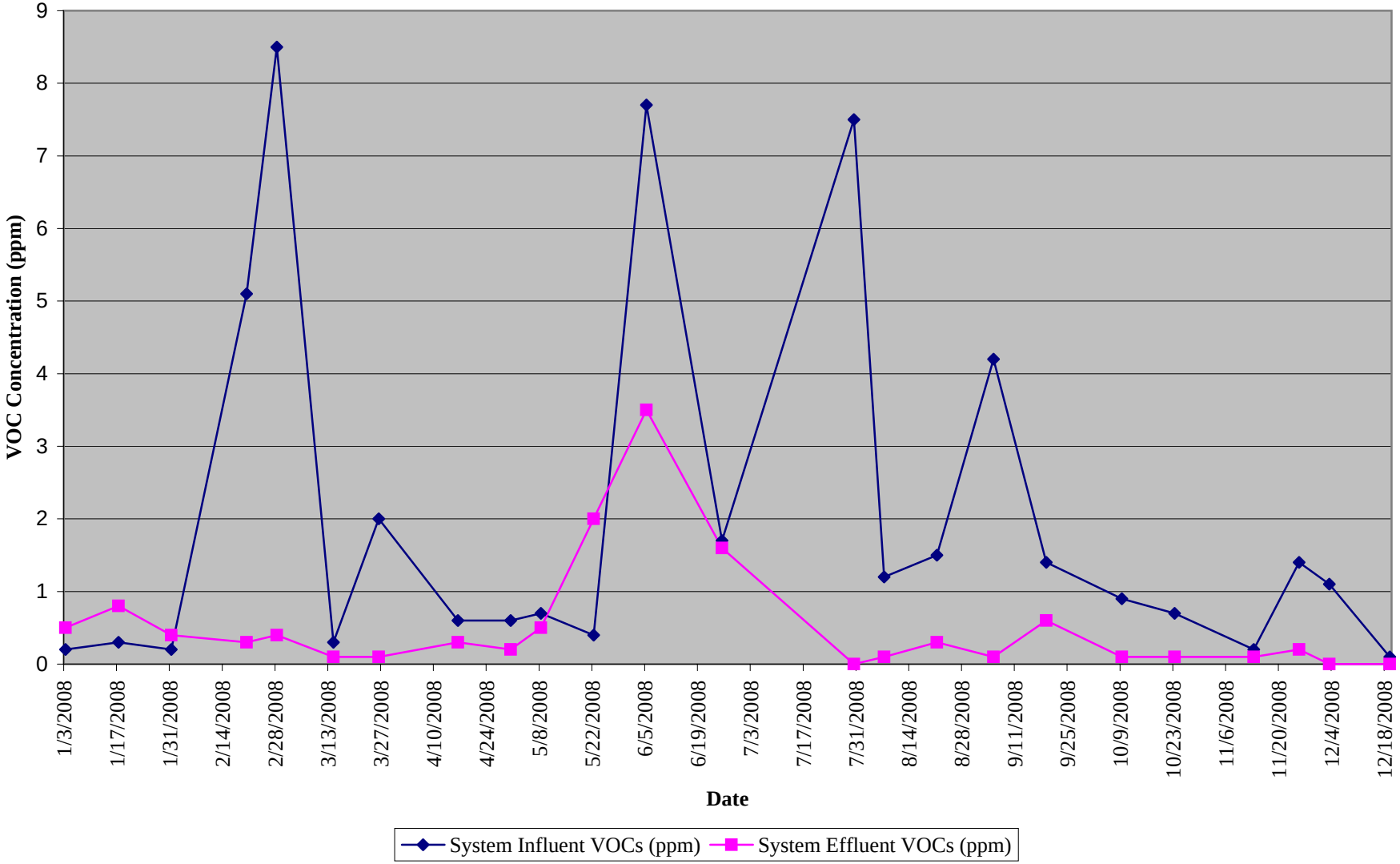
- Pit 1-C — Estimated Extent of Subsurface Impoundment
- Site Location
- Sub-Area Delineations
- Survey Monument Marker
- Existing Monument Marker

N

FIGURE 2.0
PROPERTY MAP
DEL AMO WASTE PITS OU

C2REM
AN ENVIRONMENTAL MANAGEMENT & DEVELOPMENT COMPANY
NEWPORT BEACH, CALIFORNIA 949.261.8098

Figure 3.0
Cap Gas Treatment System
2008 Semi-Monthly Field Monitoring Results (Influent vs. Effluent)



Note: VOC concentrations measured with a PID calibrated to benzene

Figure 4.0
Cap Gas Treatment System
Carbon Replacement Protocol
Del Amo Waste Pits

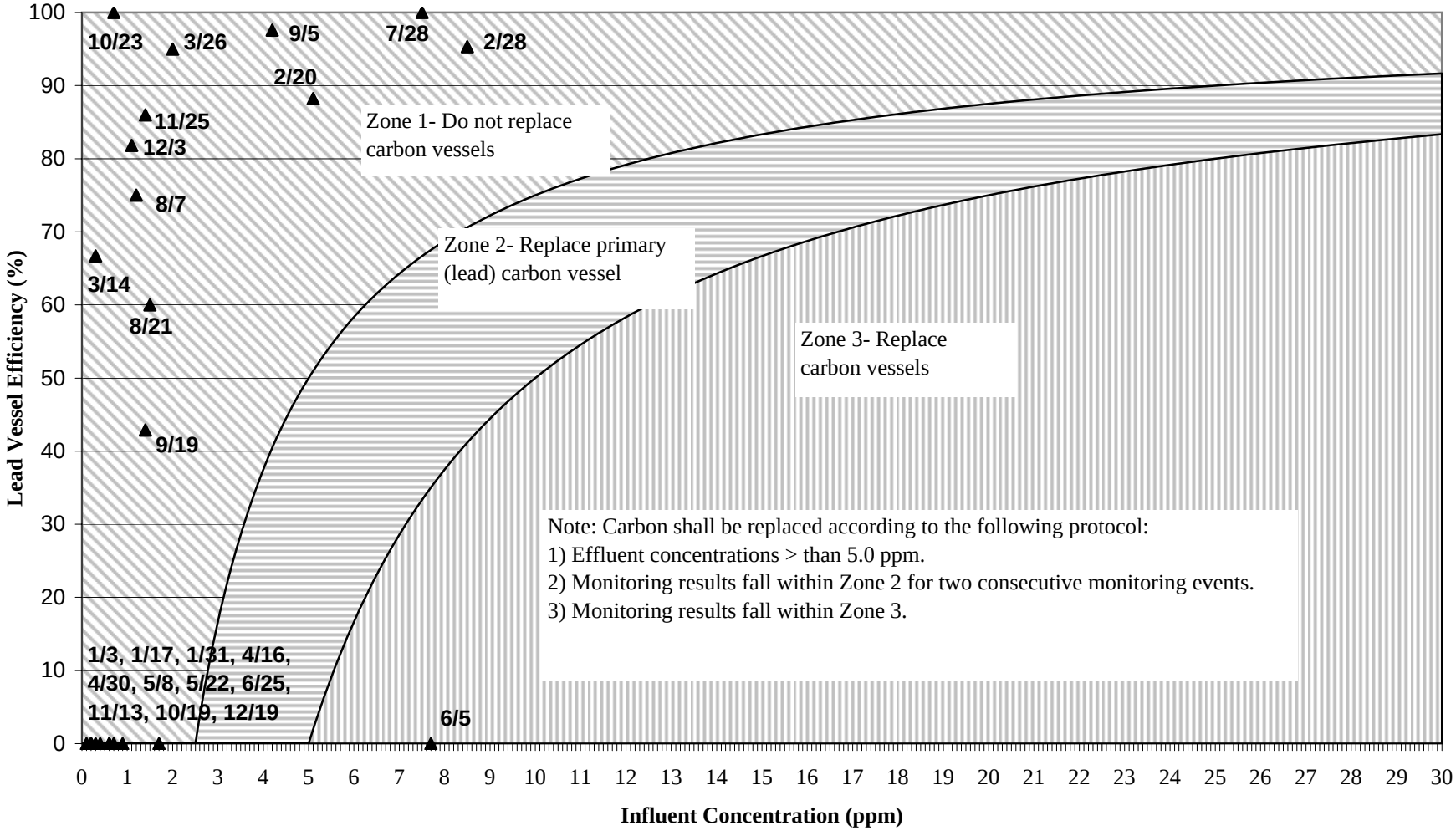


FIGURE 6.0

2008 Annual Averages of System Inline Sensors

DEL AMO WASTE PITS

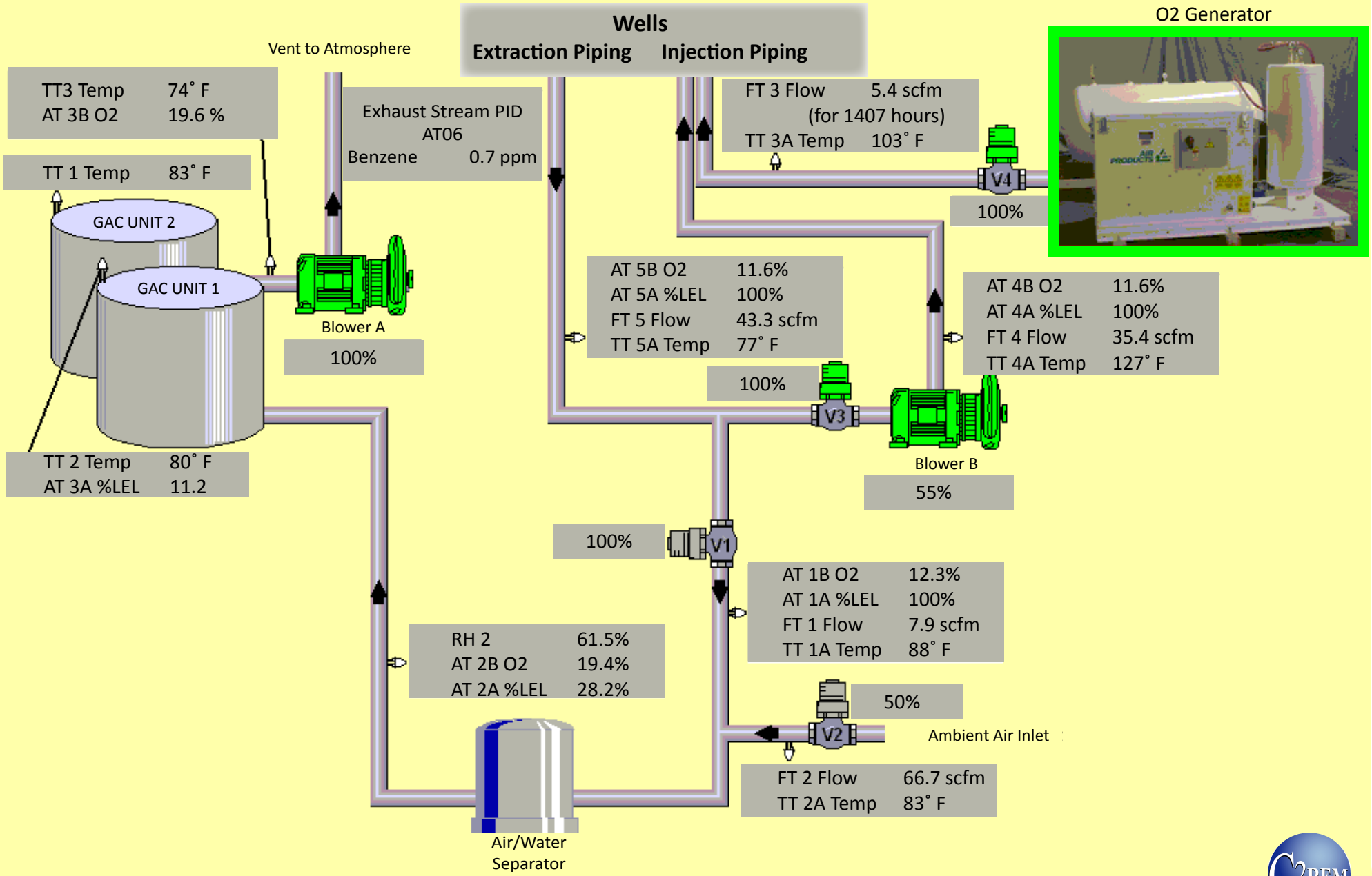


Figure 7.0
Section 1-4, Laboratory Data Summary for Benzene
Del Amo Waste Pits

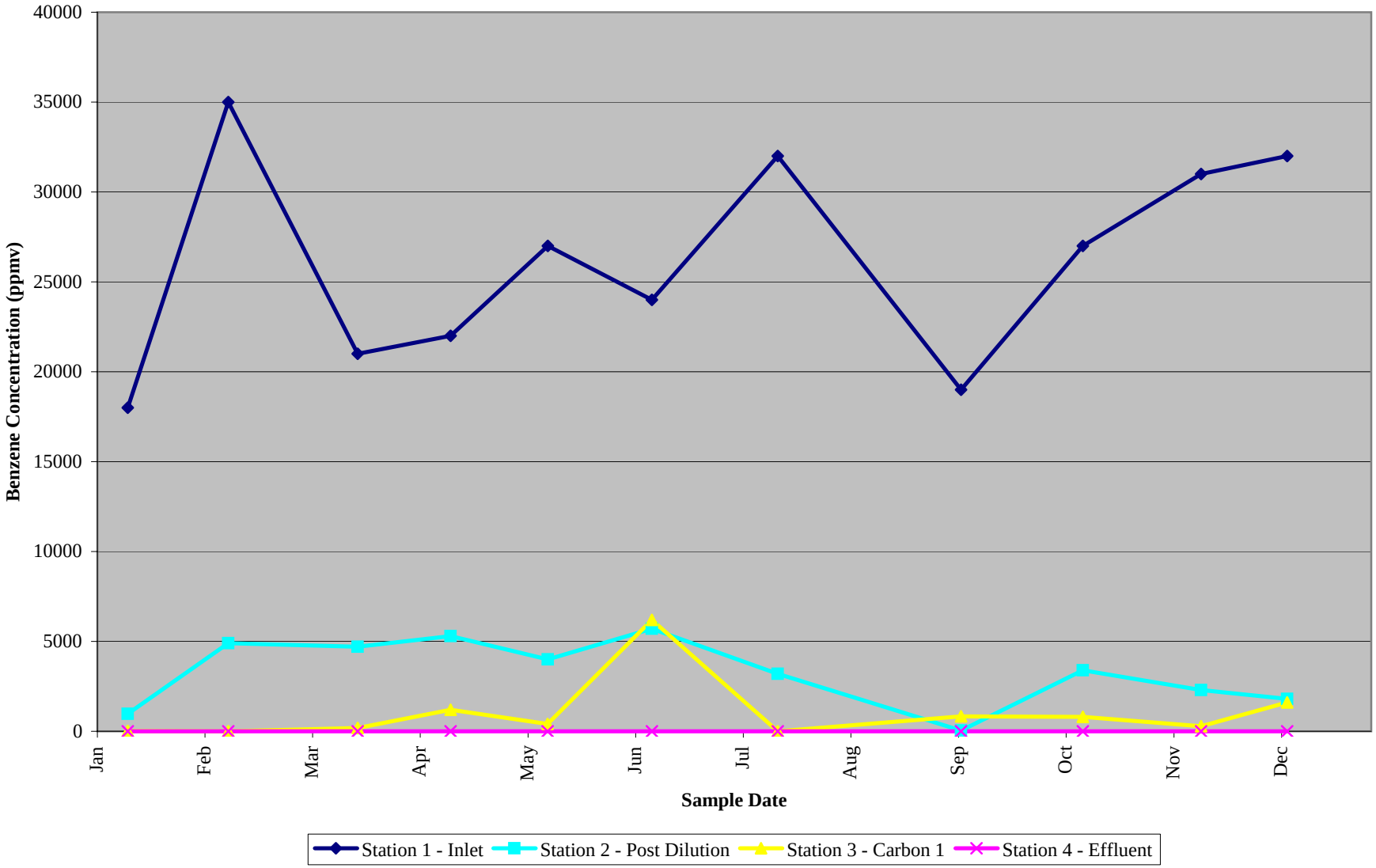
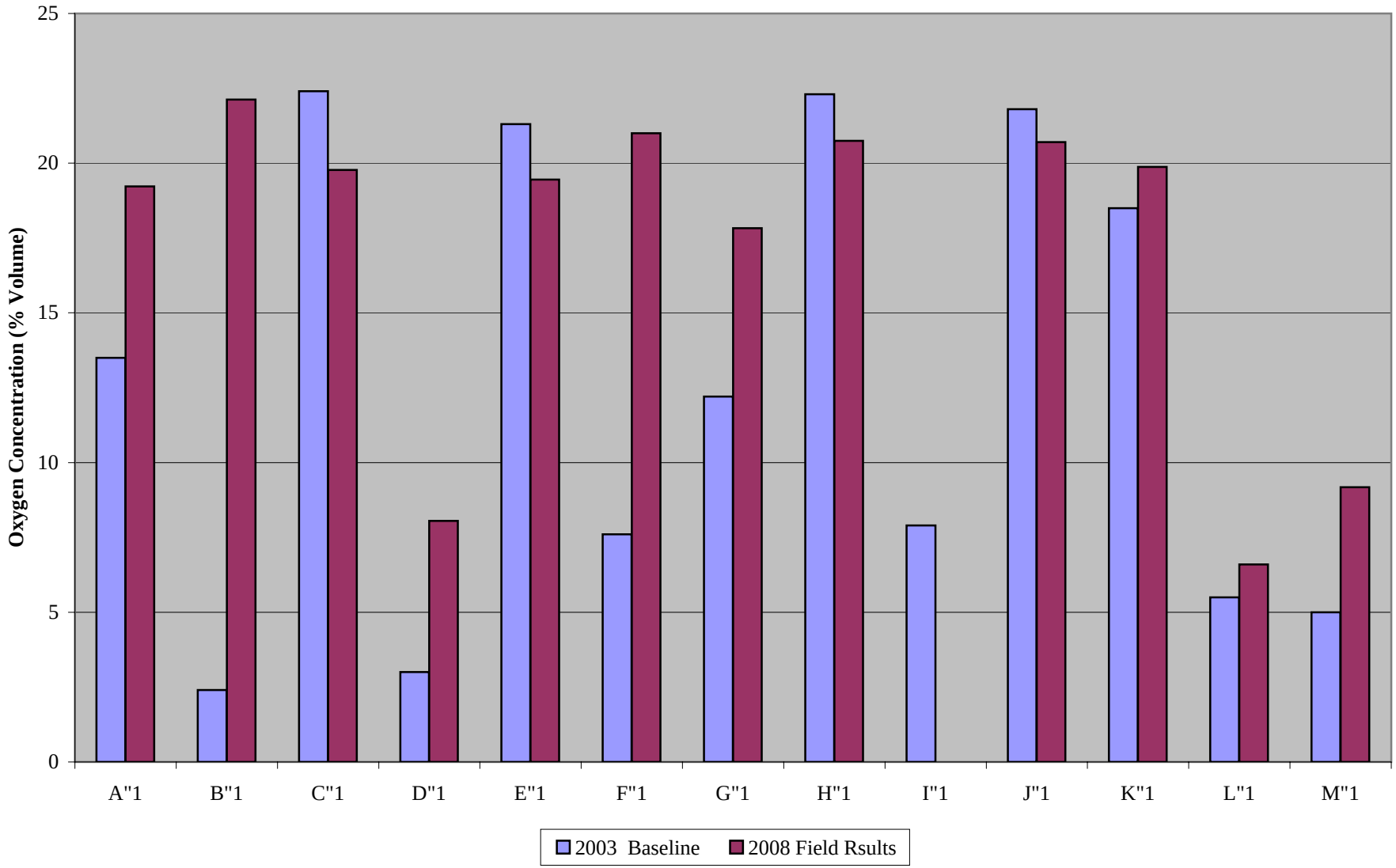
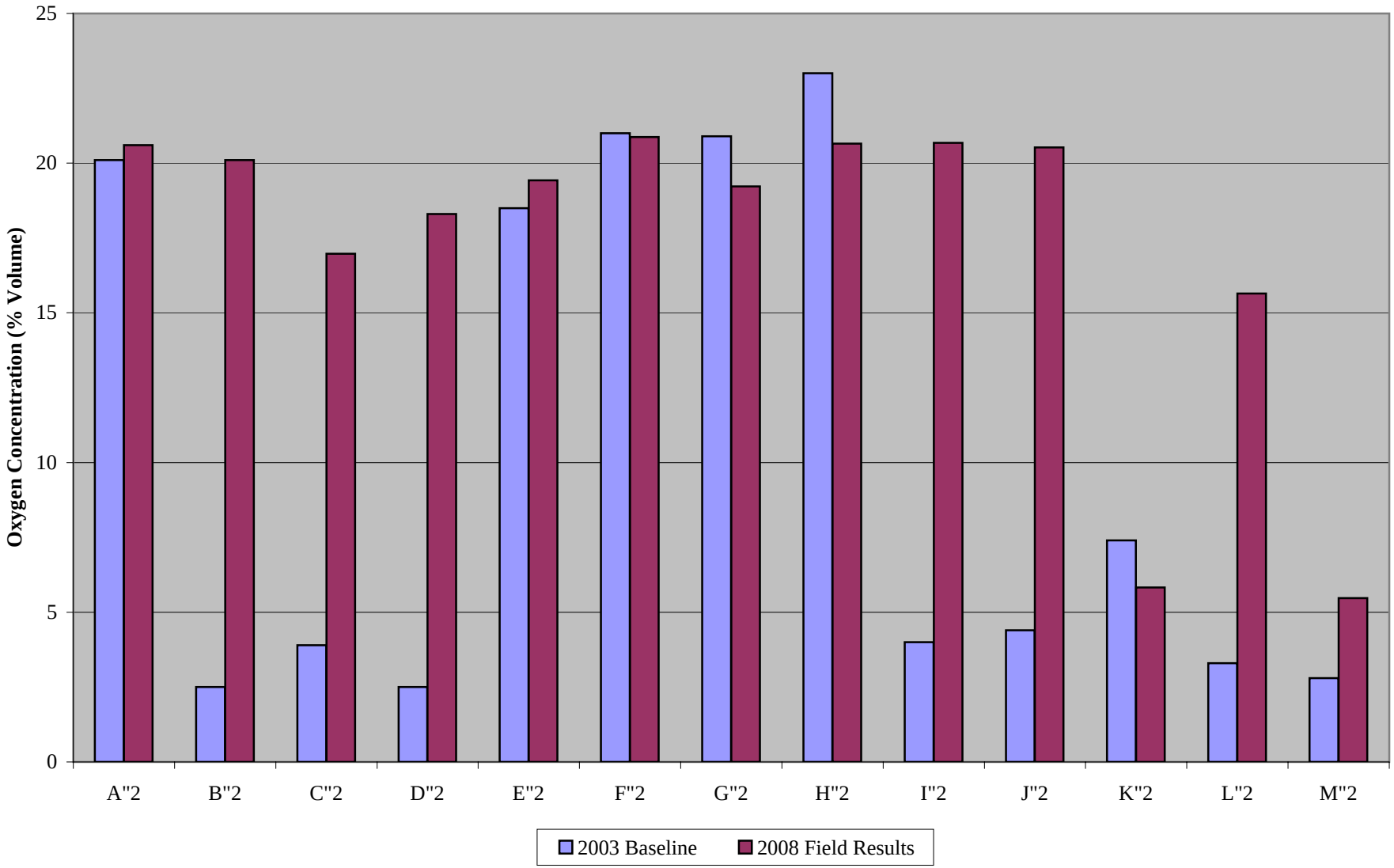


Figure 8.0
Oxygen Concentration at Cluster Wells +10 MSL
Del Amo Waste Pits



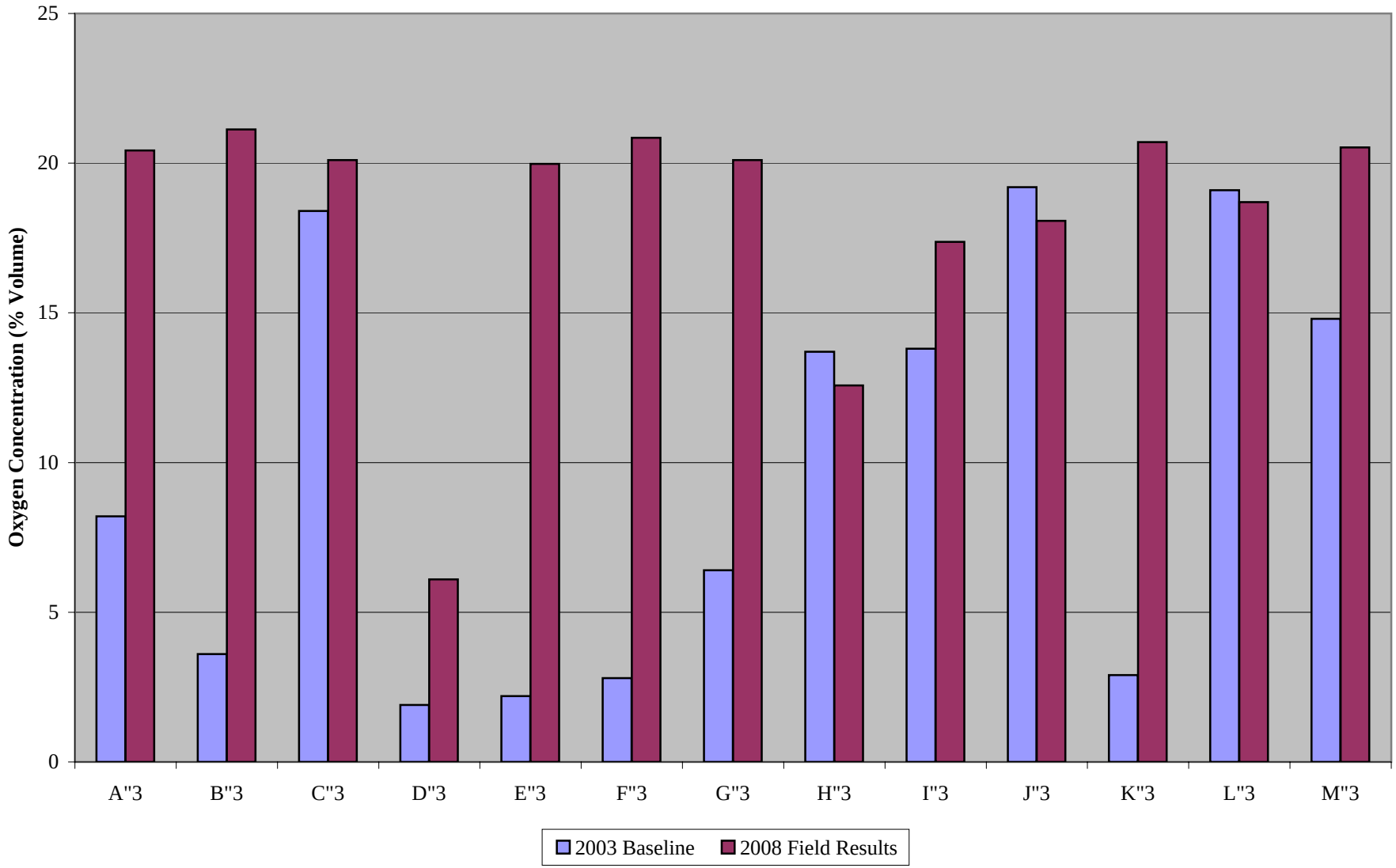
Note: 2003 results are from confirmation laboratory sampling events.
2008 results are the average from quarterly field monitoring events.

Figure 9.0
Oxygen Concentration at Cluster Wells +/- 0 MSL
Del Amo Waste Pits



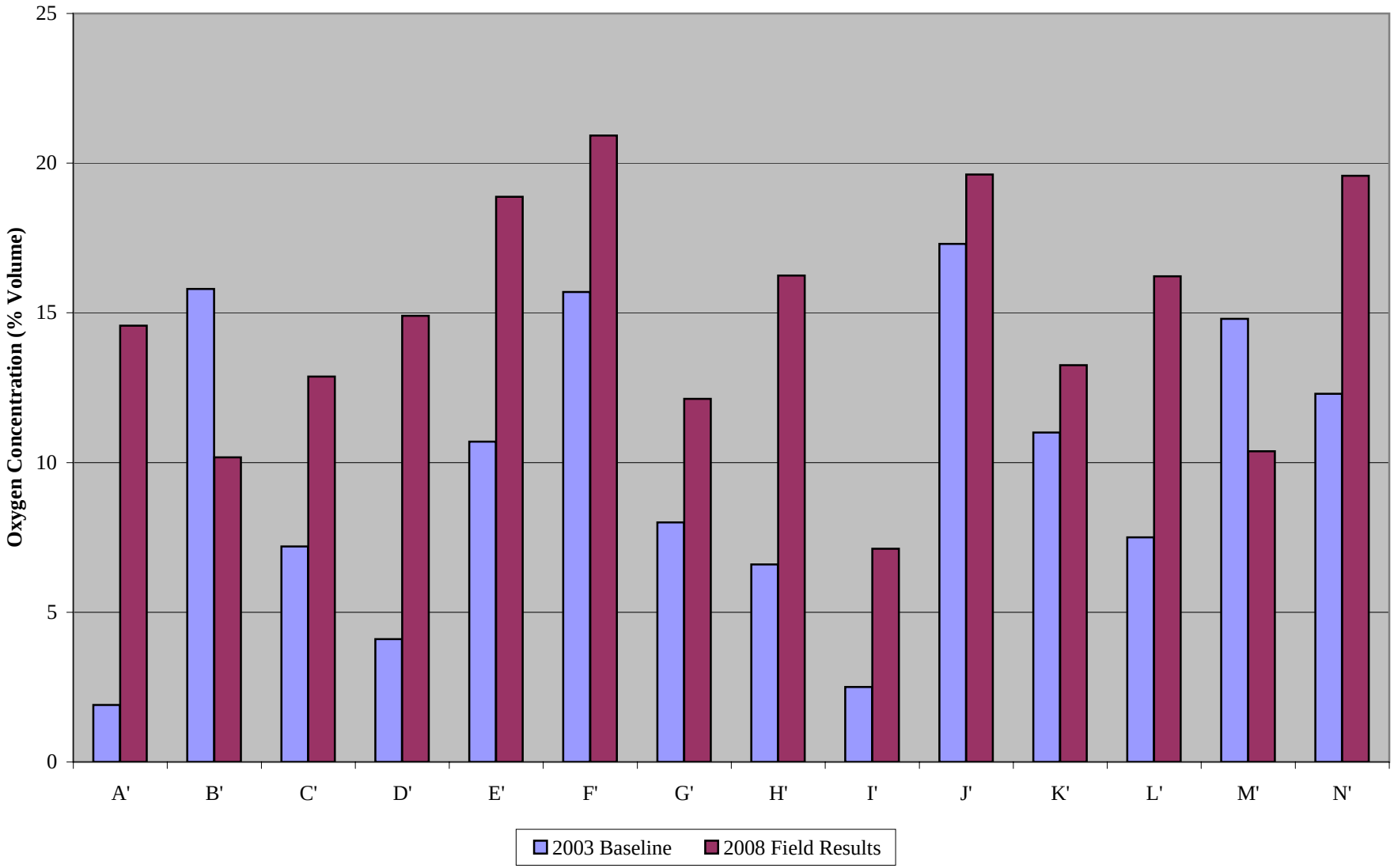
Note: 2003 results are from confirmation laboratory sampling events.
2008 results are the average from quarterly field monitoring events.

Figure 10.0
Oxygen Concentration at Cluster Wells -10 MSL
Del Amo Waste Pits



Note: 2003 results are from confirmation laboratory sampling events.
2008 results are the average from quarterly field monitoring events.

Figure 11.0
Oxygen Concentration at Vacuum Performance Wells
Del Amo Waste Pits



Note: 2003 results are from confirmation laboratory sampling events.
2008 results are the average from quarterly field monitoring events.

Figure 12.0
Perimeter Well Field Monitoring Results
Del Amo Waste Pits

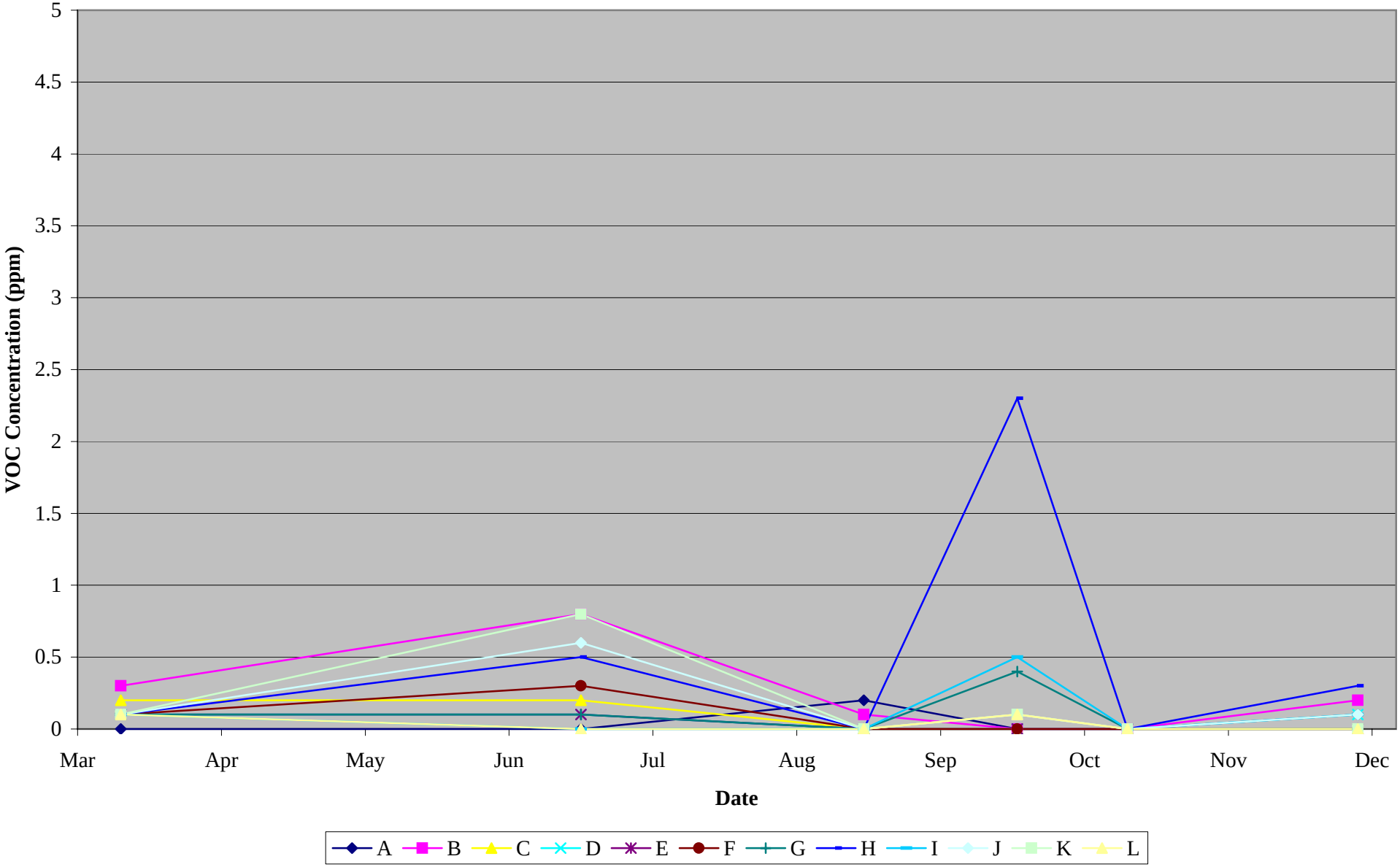


Figure 13.0
O_2 vs CO_2 at System Inlet
Del Amo Waste Pits

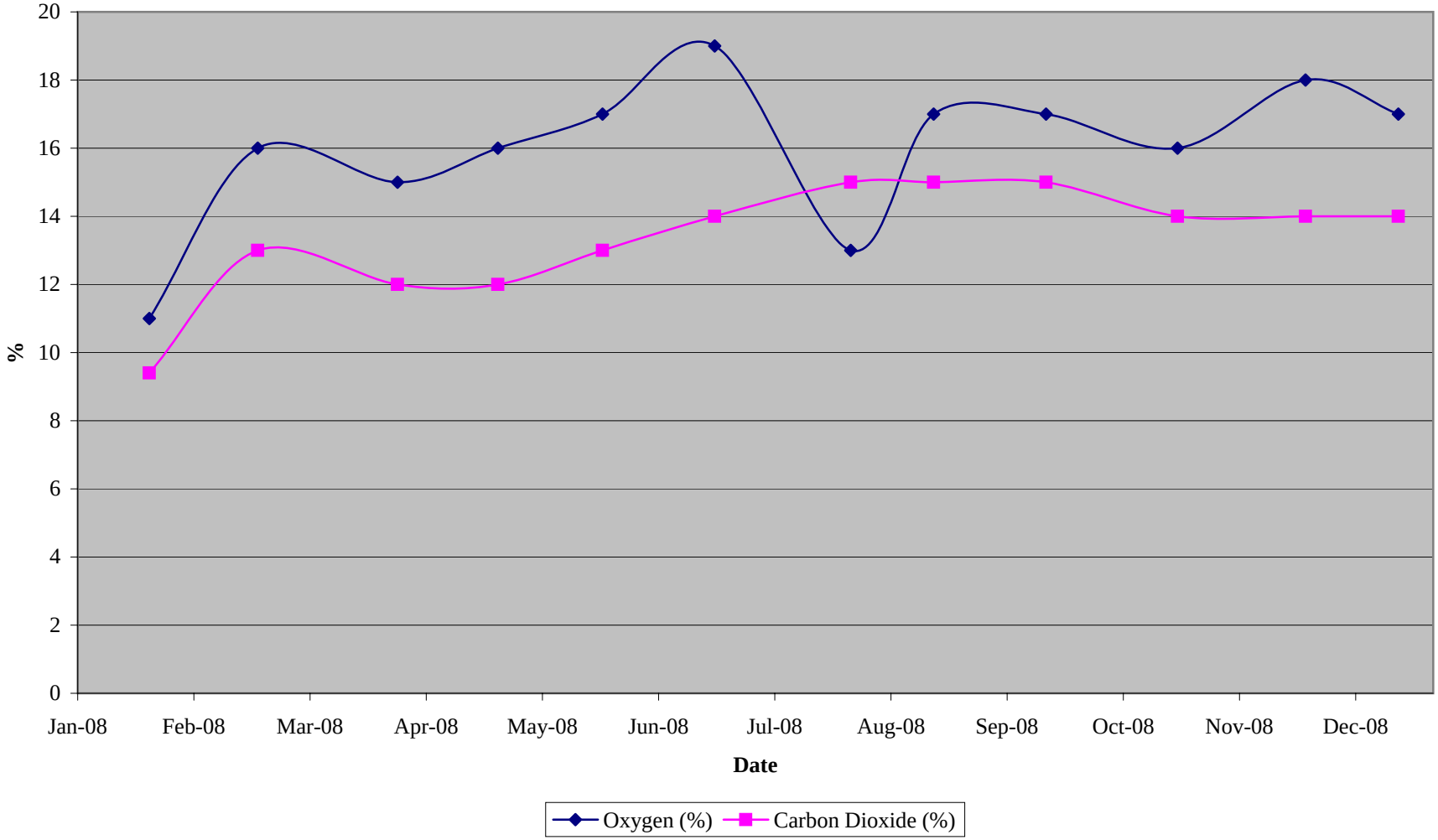
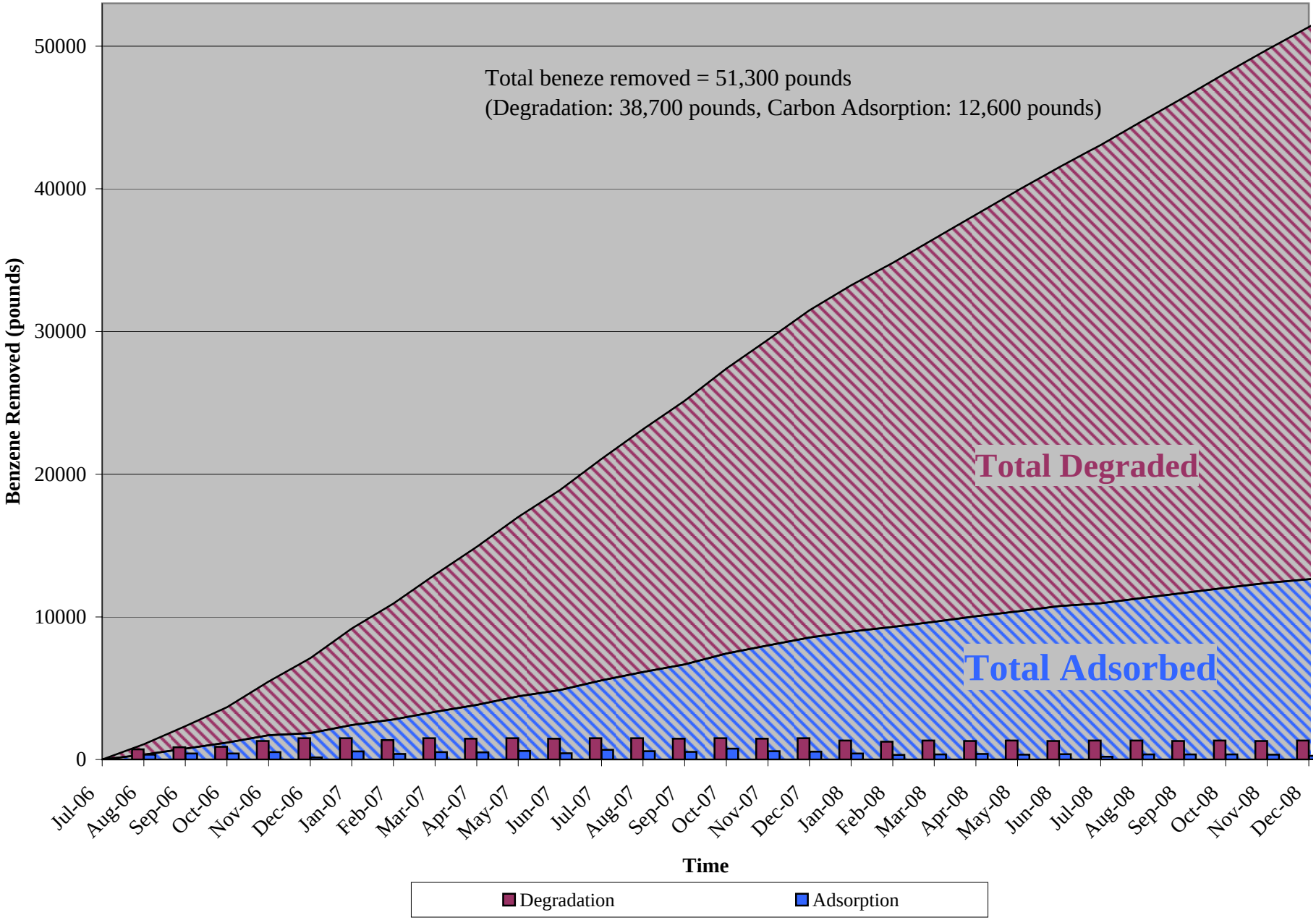


Figure 14.0
SVE/IBT System Operation - Total Benzene Removed
Del Amo Waste Pits



APPENDIX A

2008 SEMI-MONTHLY CAP GAS SYSTEM MONITORING FORM

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: S. Mc Cleary
Title:

Sheet 1 of 1
Date: 1-3-08
Time: 10AM

Verified By: TRi TRin
Title:

Date: 1-3-08

(X) Type of Monitoring Devices: VelociCalc, PID
Weather Conditions: Cloudy Barometric Pressure:

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(X) Other Frequency (explain) Bi Monthly

Vessel Operation:

(X) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.2
2.	Outlet, Carbon Adsober Vessel A	0.8
3.	Outlet, Carbon Adsorber Vessel B	0.7
4.	System Effluent	0.5

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	60°	148.7
Effluent	102.	198.7

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: TT / EY
Title: FIELD TECH / Engineer

Sheet 1 of 1
Date: 1/17/08
Time: _____

Verified By: _____
Title: _____

Date: 1/17/08

( ) Type of Monitoring Devices: VelociCalc, PID
Weather Conditions: Sunny Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(X) Other Frequency (explain) Bi-monthly

Vessel Operation:

(X) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.3
2.	Outlet, Carbon Adsober Vessel A	0.7
3.	Outlet, Carbon Adsorber Vessel B	0.5
4.	System Effluent	0.8

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	60	155
Effluent	116	180

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: TRI TRAN
Title: FIELD TECH

Sheet 1 of 1
Date: 1/30/08
Time: 11AM

Verified By: Seamus M. Jennell
Title: PROJECT Engineer

Date: 1-31/08.

( ) Type of Monitoring Devices: _____
Weather Conditions: _____ Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
( ) Other Frequency (explain) ~~BI~~ MONTHLY

Vessel Operation:

( ) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.2
2.	Outlet, Carbon Adsober Vessel A	0.6
3.	Outlet, Carbon Adsorber Vessel B	0.5
4.	System Effluent	0.4

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	60°	157
Effluent	107°	171

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: Shinta Aizawa
Title: Project Engineer / Staff Scientist

Sheet 1 of 1
Date: 2/20/2008
Time: _____

Verified By: Ian Yusko
Title: Project Engineer / Staff Scientist

Date: 2/20/2008

( ) Type of Monitoring Devices: MiniRae 2000 PID.
Weather Conditions: _____ Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(X) Other Frequency (explain) Bi-monthly.

Vessel Operation:

(X) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	5.1
2.	Outlet, Carbon Adsober Vessel A	0.6
3.	Outlet, Carbon Adsorber Vessel B	0.5
4.	System Effluent	0.3

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	60	152
Effluent	108	165

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: TRI TRAN
Title: FIELD TECH

Sheet 1 of 1
Date: 2/28/08
Time: _____

Verified By: _____
Title: _____

Date: _____

( ) Type of Monitoring Devices: PUMP LUNG, PID, VEL CAL
Weather Conditions: Sunny Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
( ) Other Frequency (explain) _____

Vessel Operation:

(✓) Series, Vessel A to Vessel B
(X) Series, Vessel B to Vessel A
(X) Parallel
(X) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	8.5
2.	Outlet, Carbon Adsober Vessel A	~~0.4~~ 52
3.	Outlet, Carbon Adsorber Vessel B	0.4
4.	System Effluent	0.4

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	62°	139
Effluent	118	~~178~~ 179

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Sue/Lisa
Tyler
52.5

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: Tri Tran
Title:

Sheet ____ of ____
Date: 3/14/08
Time:

Verified By: Shinta Arzawa
Title:

Date:

( ) Type of Monitoring Devices:
Weather Conditions: Barometric Pressure:

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(✓) Other Frequency (explain) 31 - Monthy

Vessel Operation:

( ) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.3
2.	Outlet, Carbon Adsober Vessel A	0.1
3.	Outlet, Carbon Adsorber Vessel B	0.2
4.	System Effluent	0.1

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	~~118~~ 61°	138
Effluent	118	170

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: SHINTA
Title:

Sheet ____ of ____
Date: 3-26-08
Time: 10.30

Verified By: SAMUS
Title:

Date: 3-26-08

( ) Type of Monitoring Devices: PID, Velocicalc.
Weather Conditions: 65°
Barometric Pressure:

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(✓) Other Frequency (explain) Bi Monthly

Vessel Operation:

( ) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	2.0
2.	Outlet, Carbon Adsober Vessel A	0.1
3.	Outlet, Carbon Adsorber Vessel B	0.1
4.	System Effluent	0.1

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	~~107~~ 68°	~~148~~ 140.5
Effluent	107°	189

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: TT/SM/IY
Title:

Sheet 1 of 1
Date: 4/16/08
Time: 10:00 AM

Verified By: TT/SM/IY
Title:

Date: 4/16/08

( ) Type of Monitoring Devices: VEL CAL, PID, PUMP LIAIG
Weather Conditions: 78°, SUNNY Barometric Pressure:

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(X) Other Frequency (explain) Bi-Monthly

Vessel Operation:

(✓) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.6
2.	Outlet, Carbon Adsober Vessel A	0.8
3.	Outlet, Carbon Adsorber Vessel B	0.4
4.	System Effluent	0.3

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	70°	153* SCFM
Effluent	110°	182 SCFM

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: Seamus Mc Geough
Title: Project Engineer.

Sheet ____ of ____
Date: 4/30/08
Time: 10.45AM

Verified By: S A
Title: PROJECT SCIENTIST

Date: 4/30/08

( ) Type of Monitoring Devices: PID, Velocicalc.
Weather Conditions: 59° WINDY Barometric Pressure: ____

Type of Inspection (check only one):

( ) Daily ( ) Weekly (✓) Monthly
( ) Other Frequency (explain) ____

Vessel Operation:

(✓) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.6
2.	Outlet, Carbon Adsober Vessel A	0.6
3.	Outlet, Carbon Adsorber Vessel B	0.2
4.	System Effluent	0.2

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	60°	142
Effluent	124°	165

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: SA
Title: PROJECT SCIENTIST

Sheet 1 of 1
Date: 5/8-08
Time: 10:30

Verified By: SM
Title: PROJECT Engineer

Date: 5/8/08

( ) Type of Monitoring Devices: PID, Velocicalc.
Weather Conditions: _____ Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
( ) Other Frequency (explain) Bi Monthly

Vessel Operation:

(✓) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.7
2.	Outlet, Carbon Adsober Vessel A	5.9
3.	Outlet, Carbon Adsorber Vessel B	0.6
4.	System Effluent	0.5

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	76.3	145.0
Effluent	113	162.5

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: TRI TRAN
Title: FIELD TECH

Sheet 1 of 1
Date: 5/22/08
Time: 10:10

Verified By: _____
Title: _____

Date: _____

( ) Type of Monitoring Devices: _____
Weather Conditions: _____ Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(✓) Other Frequency (explain) _____

Vessel Operation:

( ) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.4
2.	Outlet, Carbon Adsober Vessel A	3.4
3.	Outlet, Carbon Adsorber Vessel B	1.5
4.	System Effluent	2.0

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	78°	135
Effluent	129°	167

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: S A
Title: Project Scientist

Sheet 1 of 1
Date: 6-5-08
Time: 10-20 Am

Verified By: S M
Title: Project Engineer

Date: 6-5-08

( ) Type of Monitoring Devices: PID, Velocalc.
Weather Conditions: _____ Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(✓) Other Frequency (explain) Bi monthly.

Vessel Operation:

( ) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	7.7
2.	Outlet, Carbon Adsober Vessel A	37.8 / 8.2
3.	Outlet, Carbon Adsorber Vessel B	7.8
4.	System Effluent	3.5

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	78°	142.5
Effluent	119	158.5

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: SA.
Title: PE.

Sheet 1 of 1
Date: 6/25/08
Time: 12:30

Verified By: SM/TT
Title: PEs.

Date: 6/25/08

( ) Type of Monitoring Devices: Mini Rae 2000 PID, Velocicalc.
Weather Conditions: Sunny. Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(X) Other Frequency (explain) Bimonthly.

Vessel Operation:

(X) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:	**VOCs (ppm)**
1. System Inlet	1.7
2. Outlet, Carbon Adsober Vessel A	1.7
3. Outlet, Carbon Adsorber Vessel B	1.7
4. System Effluent	1.6

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	83	135
Effluent	140	160

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: SA
Title: PE

Sheet 1 of 1
Date: 7/24/08
Time: _____

Verified By: SM
Title: PE

Date: 7/24/08

( ) Type of Monitoring Devices: _____
Weather Conditions: _____ Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
( ) Other Frequency (explain) Bi-monthly

Vessel Operation:

( ) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:

		VOCs (ppm)	
			2nd
1.	System Inlet	14.7	13.2
2.	Outlet, Carbon Adsober Vessel A	14.4	7.1~8.6
3.	Outlet, Carbon Adsorber Vessel B	7.7	4.9~5.1
4.	System Effluent	5.5	5.3

	Temperature (^{0}F)	Air Flow (scfm)
Influent	82	150
Effluent	138	170

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: SA
Title: ~~PM~~ PE.

Sheet 1 of 1
Date: 7/28/08
Time: 2:00 PM

Verified By: SM
Title: PE

Date: 7/28/08

(X) Type of Monitoring Devices: PID 1. Velocicalc.
Weather Conditions: _____ Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(X) Other Frequency (explain) Bi-monthly (Supplemental) For 7/24

Vessel Operation:

( ) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:

VOCs (ppm)

			2nd	3rd
1.	System Inlet	15.6	10.3	NA
2.	Outlet, Carbon Adsober Vessel A	23.4	5.2	NA
3.	Outlet, Carbon Adsorber Vessel B	9.4	NA	NA
4.	System Effluent	9.3	4.4	6.8

	Temperature (^{0}F)	Air Flow (scfm)
Influent	85	162
Effluent	142	170

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: TT /SM
Title: _____

Sheet 1 of 1
Date: 7-30/08
Time: _____

Verified By: _____
Title: _____

Date: _____

( ) Type of Monitoring Devices: _____
Weather Conditions: _____ Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(✓) Other Frequency (explain) Bimonthly

Vessel Operation:

( ) Series, Vessel A to Vessel B
(✓) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0 7.5
2.	Outlet, Carbon Adsober Vessel A	0
3.	Outlet, Carbon Adsorber Vessel B	0
4.	System Effluent	0

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	87°	~~161~~ 150
Effluent	140°	~~150~~ 161

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: SA
Title: PE

Sheet 1 of 1
Date: 8/7/08
Time: _____

Verified By: TT.
Title: Field Tech.

Date: 8/7/08.

( ) Type of Monitoring Devices: PID. Velocicalc.
Weather Conditions: Sunny, hot. Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(x) Other Frequency (explain) Bimonthly.

Vessel Operation:

(x) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:	**VOCs (ppm)**
1. System Inlet	1.2
2. Outlet, Carbon Adsober Vessel A	0.3
3. Outlet, Carbon Adsorber Vessel B	0.2
4. System Effluent	0.1

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	85	138
Effluent	142	170

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: SA
Title: PE

Sheet ____ of ____
Date: 8/21/08
Time: _____

Verified By: SM
Title: PE

Date: _____

( ) Type of Monitoring Devices: PID, velocicale.
Weather Conditions: Sunny. Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(x) Other Frequency (explain) Bimonthly.

Vessel Operation:

( ) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	1.5
2.	Outlet, Carbon Adsober Vessel A	0.6
3.	Outlet, Carbon Adsorber Vessel B	0.4
4.	System Effluent	0.3

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	86	130.5
Effluent	143	144.5

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: TT
Title:

Sheet 1 of 1
Date: 9/5/08
Time: 10:30

Verified By: SA
Title: PE.

Date:

( ) Type of Monitoring Devices: PID, Velocical,
Weather Conditions: Sunny, Barometric Pressure:

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
( ) Other Frequency (explain) Bi-monthly.

Vessel Operation:

( ) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	4.2
2.	Outlet, Carbon Adsober Vessel A	0.1
3.	Outlet, Carbon Adsorber Vessel B	0.2
4.	System Effluent	0.1

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	~~73~~ 84	142
Effluent	135	173

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: TT
Title: Field Tech

Sheet ____ of ____
Date: 9/19/08
Time: ____

Verified By: SA
Title: Project Engineer

Date: 9/19/08

( ) Type of Monitoring Devices: VEL CAL, PID
Weather Conditions: ____ Barometric Pressure: ____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(✓) Other Frequency (explain) Bimonthly

Vessel Operation:

( ) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	1.4
2.	Outlet, Carbon Adsober Vessel A	0.7
3.	Outlet, Carbon Adsorber Vessel B	0.8
4.	System Effluent	0.6

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	80	165
Effluent	135	170

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: IY
Title: Project Engineer

Sheet 1 of 1
Date: 10-9-08
Time: 12:50 pm

Verified By: SA
Title: Project Engineer

Date: _____

(X) Type of Monitoring Devices: PID 2000
Weather Conditions: 82°F, Sunny Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(X) Other Frequency (explain) Bi-Monthly

Vessel Operation:

(X) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.9
2.	Outlet, Carbon Adsober Vessel ~~A~~ 1	2.8
3.	Outlet, Carbon Adsorber Vessel ~~B~~ 2	1.7
4.	System Effluent	0.1

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	80°F	140
Effluent	136°F	152

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: IY
Title: PE

Sheet 1 of 1
Date: 10/23/08
Time: 11:15 AM

Verified By: SM
Title: PE

Date: _____

(X) Type of Monitoring Devices: PID 3000, VELOCICALC
Weather Conditions: 88 °F, SUNNY Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(X) Other Frequency (explain) BI-MONTHLY

Vessel Operation:

(X) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.7
2.	Outlet, Carbon Adsober Vessel A	0.0
3.	Outlet, Carbon Adsorber Vessel B	0.0
4.	System Effluent	0.1

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	79°	149
Effluent	134°	145

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: S Mc Gough
Title: PE

Sheet ____ of ____
Date: 11/13/08
Time: 11:06 AM

Verified By: TT + IY
Title: EE PE

Date: 11-13-08

( ) Type of Monitoring Devices: PID Velocalc
Weather Conditions: 80° Sunny Barometric Pressure: ____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(✓) Other Frequency (explain) Bi Monthly

Vessel Operation:

(✓) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.2
2.	Outlet, Carbon Adsober Vessel A	0.2
3.	Outlet, Carbon Adsorber Vessel B	0.2
4.	System Effluent	0.1

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	72° F	156
Effluent	120° F	166

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: SM / IY
Title: PROJECT ENGINEER

Sheet 1 of 1
Date: 11/25/08
Time: _____

Verified By: TT
Title: _____

Date: 12/1/08

( ) Type of Monitoring Devices: _____
Weather Conditions: _____ Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(✓) Other Frequency (explain) Bi-monthly

Vessel Operation:

( ) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:

		VOCs (ppm)
1.	System Inlet	1.4
2.	Outlet, Carbon Adsober Vessel A	0.2
3.	Outlet, Carbon Adsorber Vessel B	0.2
4.	System Effluent	0.2

	Temperature (^{0}F)	Air Flow (scfm)
Influent	70° F	156
Effluent	116°	168

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: IY
Title: PE

Sheet 1 of 1
Date: 12/3/08
Time: 12:30 pm

Verified By: TT
Title: PE

Date: _____

(X) Type of Monitoring Devices: _____
Weather Conditions: SUNNY 78° F Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(X) Other Frequency (explain) BI-MONTHLY

Vessel Operation:

(X) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	1.1
2.	Outlet, Carbon Adsober Vessel A	0.1
3.	Outlet, Carbon Adsorber Vessel B	0.2
4.	System Effluent	0.0

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	69	155
Effluent	112	180

Comments, Maintenance or Corrective Action (attach additional sheets if required):

Del Amo Waste Pits Superfund Site
Gas Collection and Treatment System
Torrance, California

Completed By: IY
Title: PE

Sheet 1 of 1
Date: 12/19/08
Time: 2200

Verified By: SA
Title: PE

Date: 12/19/08

( ) Type of Monitoring Devices: PID, Velocicalc.
Weather Conditions: cloud Barometric Pressure: _____

Type of Inspection (check only one):

( ) Daily ( ) Weekly ( ) Monthly
(x) Other Frequency (explain) BiMonthly.

Vessel Operation:

(x) Series, Vessel A to Vessel B
( ) Series, Vessel B to Vessel A
( ) Parallel
( ) One Vessel (A) or (B)

Sample Ports:		**VOCs (ppm)**
1.	System Inlet	0.1
2.	Outlet, Carbon Adsober Vessel A	0.1
3.	Outlet, Carbon Adsorber Vessel B	0.1
4.	System Effluent	0.0

	Temperature (^{0}F)	**Air Flow (scfm)**
Influent	60	160
Effluent	105	180

Comments, Maintenance or Corrective Action (attach additional sheets if required):

APPENDIX B

FIELD DAILY REPORTS/
COMPLETED MAINTENANCE FORMS

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: BEL AMO
PAGE 1 of 1
OJECT NUMBER: 97-101
DATE: 1-3-08
WEATHER: Temperature: 60 Winds: Light Precipitation: 0
DESCRIPTION OF THE WORK: Bi Monthly Maintenance.

Time Line	
8:00 AM	
9:00 AM	9.30 SM + TT arrive on Site.
10:00 AM	CONDUCT SVE/IBT + GCTS MONITORING
	Using PID, ~~RKI~~ Q RAE, VELOCICARC + Magnelic.
11:00 AM	
12:00 PM	Walked Site to make sure all
	Ditches + Drains were Clear in
1:00 PM	
	Preparation for upcoming STORM.
2:00 PM	1.30 pm TT + SM off Site.
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	

Prepared by: S. Mc GEOUGH

Signed: Seamus McGeough

C_2 REM
FIELD DAILY REPORT

OJECT NAME: DEL AMO WASTE PITS PAGE 1 of 1

PROJECT NUMBER: 97-101 DATE: 1/7/2008

WEATHER: Temperature: 70 Winds: Light Precipitation: None

DESCRIPTION OF THE WORK: Post Rain Inspection

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	TT/SA arrived on site
	Checked and walked along the V-Ditch, Storm Drainage (good condition)
11:00 AM	
	Cut and Picked some of undesire wild grass in the back of enclosure are
12:00 PM	
	Checked the SVE/IBT nd GCTS sys (good working condition)
1:00 PM	Closed us and left the site
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	

Special Notes

pared by: TRI TRAN
Shinta Aizawa

Signed:

C_2 REM
FIELD DAILY REPORT

JECT NAME: DEL AMO WASTE PITS | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 1/10/2008

WEATHER: Temperature: 75 Winds: Light Precipitation: None

DESCRIPTION OF THE WORK: Site Maintained: Fix the broken fence and reinstall O2 sensor

Time Line	
8:00 AM	
9:00 AM	TT / SA arrived at site
	Conducted enclosure area entry
	conducted quick check on the SVE/IBT and GCTS system (no leaking detected)
10:00 AM	Shut the system down and purged it for 10 mintues
	Shut the electric power main control down
	Began O2 sensor installation
11:00 AM	Continued on O2 installation
	Finished O2 installation and turned the system back on
	Fixed the broken fence (attached new metal wire to close up the hole)
12:00 PM	
	Closed up and left site.
1:00 PM	
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	

Special Notes

pared by: TRI TRAN

Signed: [signature]

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 1/17/2008

WEATHER: Temperature: 74 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Routine GCTS & SVE/IBT Monitoring, Download PLC data

Time Line	
8:15 AM	Arrive on-site (Unlock trailer & sea train)
	Expected pick-up of water equipment by Arrowhead between 8:30-Noon
10:00 AM	TT arrives on-site to assist with monitoring & download PLC data
	Prepare instrumentation for monitoring of SVE/IBT & GCTS systems
10:00 AM	Before entering enclosure, TT dawns respirator & inspects inside of enclosure using PID (no
	leaks detected)
	Unlock PLC cabinet and check VNC viewer screen on PLC computer (functioning normal)
	Plug USB flash drive into computer and download data
11:00 AM	Begin GCTS monitoring first
	Take flow with Velocicalc as well as inline temperature readings from inlet and outlet of GCTS
	Pull bag samples from Inlet, C1, C2, and Outlet of GCTS using pump-lung device
	Monitor bags using calibrated PID for VOCs (see attached results)
11:45 AM	Begin SVE/IBT monitoring
	Take pressure readings where applicable using magnahelic, take flow readings using
	Velocicalc, pull bag samples from Inlet, Post Ambient, C1, and Outlet using pump-lung device,
	Monitor bags using calibrated PID for VOCs & RKI Eagle for O2, LEL, CO2, and H2S (see
	attached results)
12:30 PM	Load equipment into truck, store used tools back in sea train, lock-up
1:00 PM	IY/TT depart from site
Special Notes	
	Arrowhead was unable to make it to site, must reschedule pick-up of equipment

Prepared by: Ian Yusko
Tri Tran

Signed: Ian Yusko

C_2 REM
FIELD DAILY REPORT

.OJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 1/21/2008

WEATHER: Temperature: 66 Winds: Slight Precipitation: Light

DESCRIPTION OF THE WORK:____ Expected oversight, take pictures of vegetation, troubleshoot PLC

Time Line	
10:15 AM	Arrive on-site (Unlock trailer & sea train)
	Expected oversight of Chevron sub-contractor performing pipeline expansion around & possibly on-site with URS to be on-site as well
	Field staff in office reported being unable to connect to VNC viewer from the office
11:00 AM	Cleaned trash out of sea train and trailer for waste management pick-up
11:45 AM	Unlocked enclosure, dawned respirator, and inspected enclosure with PID (enclosure clear)
	Unlocked and opened PLC cabinet to inspect VNC viewer connection or any visable error messages on computer (no visual evidence regarding lose of connection)
	Reboot firewall and DSL modem on-site, try to connect to VNC viewer via site staff computer (error message states failed to connect to server)
12:15 PM	Contact Akins Consulting to assist in connection problems
	Found that VPN tunnel was down due to a device (firewall) that malfunctioned @ C2 REM office), Akins was installing & reconfiguring a new device, also found that PLC computer's preferred DNS server as well as its alternate DNS server were still linked to old server (able to change that on-site to bring back online in order to allow Akins to log into it
1:30 PM	Wrap-up with Akins and take pictures of cover system & vegetation growth for update to Shell
1:50 PM	Lock-up & Depart from site

Special Notes

Follow-up from Chevron informed C2 REM that pipeline expansion activities were postponed due to permitting issues

pared by:_____ Ian Yusko

Signed: Ian Yusko

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Waste Pits **PAGE** 1 of 1

PROJECT NUMBER: 97-101 **DATE:** 1/25/2008

WEATHER: Temperature: 62 **Winds:** Slight **Precipitation:** Slight Showers

DESCRIPTION OF THE WORK: Post-Rain Inspection

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
12:00 PM	
1:00 PM	
1:30 PM	Arrive on-site with SK
	Conduct Post-Rain Inspection on-site
2:00 PM	Inspect Access Road, Perimeter fence, & Drainage, Cover, GCTS and SVE/IBT systems
2:30 PM	Lock-up & Depart from site with SK

Special Notes

Did not find any areas of concern during inspection

Notice that property to the west (Waste Management) has installed a perimeter fence that restricts access to Perimeter and Cluster well A (must resolve before next quarterly event)

ared by: Ian Yusko

Stefan Klemm

Signed: Ian Yusko

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: DEL AMO PITS.
PROJECT NUMBER: 97-101
PAGE 1 of 1
DATE: 1-28-08
WEATHER: Temperature: 58° Winds: LIGHT Precipitation: 0
DESCRIPTION OF THE WORK: POST RAIN INSPECTION

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
12:00 PM	
1:00 PM	
2:00 PM	
3:00 PM	SM + TT ONSITE. Walked entire Site, Inspected CAP, DRAINS WELLS, FENCE, ACCESS ROAD + ENCLOSURE.
4:00 PM	THERE WAS WATER PONDING by the FRONT GATE, but NOTHING ELSE of NOTE.
5:00 PM	4PM TT + SM off SITE.

Special Notes

Prepared by: S. Mc GEOUGH

Signed: [signature]

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 1/29/2008

WEATHER: Temperature: 67 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Sensor Installation, Meet with Subcontractor

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
12:00 PM	
12:30 PM	Arrive on-site with BW Unlock trailer & sea train, prepare equipment for installation of flow sensors FT1 and FT5, which were returned by the manufacturer, check system operations (visually good)
1:00 PM	Perform shut-down & lock-out procedures, Re-wire both receiver boxes into electrical cabinet
2:15 PM	Gary from All-Pro Fencing arrives on-site Show Gary western border of property where Waste Management installed new fence Discussed gate installation options, also show Gary broken weld on front gate
2:50 PM	BW continues work on flow sensors while Gary and IY drive off-site to Undeveloped Parcel to evaluate damage to fence, afterward IY goes to Home Depot for a few installation tools
4:00 PM	IY arrives back on-site with tools, BW and IY complete sensor install but are unable to test due to time and day-light restrictions
4:30 PM	Turn system back into Auto start-up mode, turn on O2 generator, lock-up & Depart from site
Special Notes	Follow-up with Gary of All-Pro (says he'll provide quote for work soon via fax) Must return to site to test the newly-installed flow sensors to ensure proper functioning

ared by: Ian Yusko
Bill White

Signed: Ian Yusko

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: DEL AMO PITS. PAGE 1 of 1
PROJECT NUMBER: 97-101. DATE: 1-31-08.
WEATHER: Temperature: 62° Winds: Light Precipitation: 0
DESCRIPTION OF THE WORK: Bi Monthly Monitoring & Maintenance on O^2 & Flow Sensors

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	TT, SA, SM ON SITE TO CONDUCT BI-MONTHLY SVE/IBT & OCTS MONITORING. TAKE MONTHLY LAB SAMPLES.
11:00 AM	STAFF CONDUCTED MONITORING & TOOK LAB SAMPLES.
12:00 PM	SHUT OFF SYSTEM (SVE) & PURGE. 12.30 STAFF off Site for Lunch.
1:00 PM	1.30 RETURN TO SITE.
2:00 PM	SA & SM CALIBRATED O2 SENSORS.
3:00 PM	TT REPLACED NEWLY Recalibrated Flow SENSORS. FLOW SENSORS NOT READING at PLC. STAFF checked WIRING, No faults found.
4:00 PM	4.pm SM, TT, SA off Site.
5:00 PM	
Special Notes	

Prepared by: SEAMUS Mc GEOUGH Signed: Seamus McGeough

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/1/2008

WEATHER: Temperature: ~55 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: Troubleshooting inline flow sensor and oxygen sensor

Time Line	
9:30 AM	IY/SA arrived on-site
9:45	Troubleshooting inline flow sensor FT5
	FT5 was not reading flow both in the box and PLC.
	IY called Sage Metering Inc and figured wiring order.
	FT5 was re-wired, and it started reading flow.
11:00 AM	Troubleshooting Inline O_2 sensors
	The readings of O_2 sensors AT1B, AT4B, and AT5B were different from ones shown in VNC viewer
	IY called Marc Smith, Prime System.
	Marc fixed off set value for these sensors and the problems were solved.
1:00 PM	Off-site

Prepared by: Shinta Aizawa

Ian Yusko

Signed:

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/5/2008

WEATHER: Temperature: ~65 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: Adustment of the system manifold and the system Blowers and valves

11:30 IY/SA arrive on-site

The valves at manifold for each extraction wells were opened to allow more flows into the system.
The system pulled lots of moisture and flow sensor was not able to read flow rates.

FT4 flow meter started to fail reading due to moisture, and it's reading 225 scfm and not responding at all.

Relative humidity was ~20% and went up to ~95% when the flow increased

Blower B = 70%, V2 (Dilution Air) = 30% --> Flow at Inlet with velocicalc = 21 scfm
Blower B = 50%, V2 (Dilution Air) = 30% --> Flow at Inlet with velocicalc = 16.5~17 scfm
Blower B = 50%, V2 (Dilution Air) = 40% --> Flow at Inlet with velocicalc = 13.4~13.6 scfm

3:00 PM Off-site

ared by: Shinta Atsawa
IAN YUSKO

Signed: Shinta Atsawa
Ian Yusko

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/6/2008

WEATHER: Temperature: 70 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Non-Routine Maintenance - SVE/IBT System Testing

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
10:30 AM	Arrive on-site with BW, unlock trailer & sea-train
	Prepare necessary equipment for purging water from extraction wells at back of manifold
11:30 AM	Shutdown SVE/IBT system to conduct purging of trapped water inside extraction piping
	Attempt to pump as much water from each extraction well as possible and collect purged
12:00 PM	water into sealed carbon bucket (for removal off-site by Baker Filtration on later date)
1:15 PM	Complete purging of wells, properly decon pump and tools used during the process
	Turn SVE/IBT system back on, observe functioning of all system sensors (visually good)
1:45 PM	Assist BW in removing non-flammable items from fire cabinet and placing all flammable items
	stored on-site into fire cabinet inside trailer, organize some of the tools inside sea-train
2:30 PM	Lock-up site, Depart from site
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	Respirators, rubber gloves, and splash gear were worn at all times during purging process
	Baker Filtration will be notified about the necessary removal of the purge water during next
	carbon change-out

ared by: Ian Yusko
Bill White

Signed: Ian Yusko

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/7/2008

WEATHER: Temperature: 72 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Non-Routine Maintenance - Fence Repair & manifold leak testing

Time Line	
8:00 AM	
9:00 AM	
9:30 AM	SA and IY arrive at Home Depot to pick-up locks for gates and few other items
10:00 AM	Arrive on-site with SA, All-Pro Fencing already at front gate finishing repairs on entrance gate
10:30 AM	Unlock trailer & sea-train, prepare PID for leak-testing on + pressure side of manifold
11:00 AM	Perform leak test, find several small leaks, seal areas with silicone sealant
12:00 PM	Oversight of All-Pro Fencing installing new man-gate on west-side of property in order to
12:00 PM	access cluster and perimeter well A, document work with pictures also, put lock on gate
1:00 PM	All-Pro Fencing finishes up on-site and departs for repairs on adjacent Undeveloped Parcel
1:15 PM	SA & IY discover problem with PLC computer display, reboot computer, sounds like it's starting up but the screen will not show anything, use air compressor to blow dust out, leave computer unplugged for night (may be overheating or hardware issue)
1:45 PM	Lock-up, Depart from site
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	Need to follow-up with Marc Smith (Prime Systems) re: troubleshooting PLC computer screen

Prepared by: Ian Yusko
Shinta Aizawa

Signed: Ian Yusko

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/8/2008

WEATHER: Temperature: 70 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Site walk with client, Troubleshoot PLC screen

Time Line	
8:00 AM	Arrive on-site with SA, unlock trailer & sea-train
	Prepare Health & Safety PPE for C2 REM staff & client arriving on-site shortly for site walk
	SA (respirator on) performs enclosure safety check with PID (no VOC detections)
8:45 AM	Ed Bourke, Stefan Klemm, & George Landreth arrive on-site
	Conduct tailgate H&S meeting & discuss health and safety issues
	SA and IY administer site walk with them around outer boundary of property, show client
	newly installed man-gate on west side of property for access to cluster & perimeter well A
9:15 AM	Everyone puts on hard hats, ear plugs, and eye protection before entering the enclosure
	Staff & client look over the SVE/IBT & GCTS system (SVE/IBT system is ON & GCTS
	system is OFF)
9:45 AM	Ed, Stefan, & George depart from site
10:00 AM	SA and IY try troubleshooting faulting PLC screen, contact Marc Smith of Prime Systems
	to assist in troubleshooting process, seems as though PLC may have a hardware issue
11:00 AM	SA & IY put all H&S PPE away and lock-up enclosure, sea-train, & trailer
11:30 AM	Lock-up front gate and depart from site
12:00 PM	
1:00 PM	
2:00 PM	
3:00 PM	
4:00 PM	
Special Notes	Marc Smith (Prime Systems) is contacting Allen Bradley re: PLC screen
	Client & Ed pointed out some small maintenance issues that will be completed in future

Prepared by: Ian Yusko
Shinta Aizawa

Signed: Ian Yusko

C2 REM
FIELD DAILY REPORT

JECT NAME: DEL AMO PITS
PAGE 1 OF 1
PROJECT NUMBER: 97-101
DATE: 2-11-2008
WEATHER: Temperature 70° Winds: 0 Precipitation: 0
DESCRIPTION OF THE WORK: Set up assemblies for Pressure Test.

10am SM & BW on Site.

We Shut Down the System & Prepared pressure test assemblies.

Assemble test equipment.

Restart System.

SM & BW did a Site Walk to attempt to determine the Source of the Water ponding @ the Front Gate.

No Source found. Keep checking to observe drainage.

12.15. SM & BW off Site.

pared by: Seamus Mc Gough
Signed: Seamus McGough

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/13/2008

WEATHER: Temperature: 60 Winds: light Precipitation: 0

DESCRIPTION OF THE WORK: Pressure test the extraction and Injection manifold/Site maintenance.

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	SM & TT onsite, followed by BW, IY & SA
	Field staff had site safety meeting led by BW to plan the pressure test of the manifold and determine the PPE required.
11:00 AM	TT & SA remove gravel from the V ditch and redistribute it around the enclosure.
	BW, IY & SM set up pressure test mechanism and began the test.
12:00 PM	Ponding at the front gate seems to be getting worse. BW noticed a disused faucet in the vicinity of the water. Recent activity in the URS enclosure may have contributed to water accumulation.
1:00 PM	
	Some leaks were found on both the extraction and injection portions of the manifold. These areas were marked for repair. The pressure test also reveald some loss of pressure
2:00 PM	at the valves.
	BW tried to troubleshoot the PLC system to restart the system
3:00 PM	IY & SA assist BW with troubleshooting the system with help from Prime Systems. System was restarted. TT & SM off site.
4:00 PM	IY, BW & SA offsite.
5:00 PM	
Special Notes	

Prepared by: Seamus McGarry
Bill White
IAN YUSKO
TRI TRAN
Shinta Aizawa

Signed: Seamus McGarry
William White
Ian Yusko
Tri Tran
Shinta Aizawa

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/14/2008

WEATHER: Temperature: 66 Winds: None Precipitation: Light drizzle

DESCRIPTION OF THE WORK: Purge water from SVE piping, take water sample, repair leaks at manifold

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
12:00 PM	
1:00 PM	
2:00 PM	Arrive on-site with SM, unlock site
	System down due to a few small leaks found on injection side of manifold during recent pressure tests, prepare diaphram pump with connections for tubing to purge SVE wells
2:30 PM	SM & IY put on necessary PPE (tyvek suits, splash guards, respirators, and latex gloves)
	Perform purging of each SVE well behind manifold, pull sample of leachate into glass jar for lab analysis, containerize additional leachate, complete pumping, decon pump
3:30 PM	SM & IY identify all markings placed where leaks were found during pressure testing, apply sealant to those areas
4:15 PM	Clean up equipment, Lock up site, Depart from site
	Take leachate sample to Test America for analysis
5:00 PM	
Special Notes	SVE/IBT & GCTS Bi-monthly monitoring rescheduled to Monday the 18th due to repairs
	SVE/IBT system to remain off to allow sealant ample time to set
	Follow-up visit to turn system back on and monitor prior leaking areas with PID
	Security camera computer was off, rebooted and got cameras back online for remote access

Prepared by: Ian Yusko

Seamus McGeough

Signed: Ian Yusko

Seamus McGeough

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/15/2008

WEATHER: Temperature: ~65° Winds:Slight Precipitation: None

DESCRIPTION OF THE WORK: System Maintenance: Purging liquid accumulation in the manifold.

11:30 AM	SA/ IY arrive on-site
	The system was off
	IY entered the enclosure with a respirator and PID, and no leaks or concentration found.
	SA/IY closed all SVE wells except for one. Flow sensors were taken out before this operation.
	The system was manually operated.
	V1 (recirculation valve) was completely closed, and all extracted vapor was sent to the carbon vessel. Concentrations at post ambient air were controlled with dilution air (adjusting V2) and maintained under 75% LEL.
	IY/SA can hear large amount of liquid runnning in the pipes.
	Finally, the system was purged with ambient air and about 3 gallons of moisture was trraped in the air/moisture separater. Some of liquid was dropped through the dilution pipe when the sytem was turned off with dilution valve opened.
	IY painted GCTS secondary carbon vessel, air/water separator, and electrical panel.
4:50 PM	SA/IY found a pad lock at the main gate was stolen, and new pad lock was put on.
5:00 AM	SA/IY off-site

Prepared by: Shinta Aizawa
IAN YUSIKO

Signed: Shinta Aizawa
Ian Yusiko

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/18/2008

WEATHER: Temperature: ~65° Winds:Slight Precipitation: None

DESCRIPTION OF THE WORK: System Maintenance: Purging liquid accumulation in the manifold.

11:30 AM	SA/ IY arrive on-site
	The system was off
	SA entered the enclosure with a respirator and PID, and no leaks or concentration found.
	SA/IY closed all SVE wells except for one. Flow sensors were taken out before this operation.
	The system was manually operated.
	V1 (recirculation valve) was completely closed, and all extracted vapor was sent to the carbon vessel. Concentrations at post ambient air were controlled with dilution air (adjusting V2) and maintained under 75% LEL.
	After 10-15 min purge, all liquid was flashed with ambient air, and this procedure was repeated 2 or 3 times for each wells.
	Finally, the system was purged with ambient air and flows were monitored for extraction rate and treatment rate with velocicalc. (inlet = ~78, treatement rate = ~88)
1:00 PM	SK arrive on site
	SK prepare a pump system for the pond in the east side of the property.
	The pond water was partially pumped, but lots of water stil remained in the pond.
2:00 PM	SK off-site
4:15 PM	SA/IY off-site

Prepared by: Shinta Aizawa

IAN Yusko

Signed: Shinta Aizawa

Ian Yusko

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/19/2008

WEATHER: Temperature: 66 Winds: Slight Precipitation: Light drizzle

DESCRIPTION OF THE WORK: Turn SVE/IBT system back on, return to original design parameters

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
12:00 PM	
12:30 PM	Arrive on-site with SA, unlock site, SA performs enclosure check with PID (respirator on) Prepare equipment & instrumentation for troubleshooting of SVE/IBT system
2:00 PM	Crack open ball valves at each extraction well inside enclosure slightly, fully open ball valves at each injection well (3,4,8, & 9), turn SVE/IBT system back on Blower A - 100%, Blower B - 40%, and post ambient - 50% (system inlet flow measured with velocicalc = 28 scfm)
2:45 PM	SA measured flow behind manifold with velocicalc to determine which extraction wells to open more, after repeating this process once more, flows seemed fairly balanced across wells, flow was still lower than designed, increased Blower B - 50% (inlet flow with velocicalc = 54 scfm)
3:40 PM	SA took flows once more behind manifold, minor adjustments were made to extraction & injection wells (final inlet flow = 62 scfm with velocicalc) the post ambient valve was decreased to 46% to create desired treatment rate and a modest LEL concentration going into carbon
4:15 PM	Past injection leak areas where repairs were made were checked periodically with PID (all areas had no detections to negligible readings of about 0.1-0.3 ppm
4:30 PM	Lock-up site, Depart from site
Special Notes	SVE/IBT & GCTS Bi-monthly monitoring will be conducted on Wednesday the 20th

Prepared by: Ian Yusko
Shinta Aizawa

Signed:

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97--101 | DATE: 2/20/2008

WEATHER: Temperature: Sunny ~60 windy Precipitation: none

DESCRIPTION OF THE WORK: SVE/IBT Enclosure Monitoring, GCTS Monitoring, Adjustment of flows,

Time Line	
12:30 PM	SA/IY arrive on-site
	the system was running
	Preared monitoring equipments
	GCTS Monitoring
	Samples were taken from inlet, C1, C2, and Effluent, using pump lung and 1L of tedlar bags.
	VOCs were monitored with PID calibrated to 50 ppm benzene
	Flows and Temperature were monitored at inlet and effluent.
	Please see the monitoring form for results.
	SVE/IBT Enclosure Monitoring
	Samples were taken from inlet, Post Ambient Air, C1, and Effluent, using pump lung and 1L of tedlar bags.
	LEL Methane, O2, and CO2 were monitored with RKI Eagle
	VOCs were monitored with MiniRae 2000 PID (1) calibrated to 50 ppm of benzene
	Flows were monitored with Velocicalc.
	O2, VOCs (LEL), Flow and relative humidity and were monitored with inline sensors where its installed. FT5, AT1A, and AT1B were not functioning.
	Pressures were monitored with Magnehelic
	Small portion of liquid was pulled with the vapor samles in the tedlar bagas from inlet and post ambient air.
	Please see the monitoring form for results.
	Flows, Blower, and Dilution Adjustments
	Flows at the manifold were monitored with velocicalc (see moitoring form), and flows at SVE 1, 10,
	Inlet flow was monitored with velocicalc. (58~60 scfm)
	Dilution valve was adjusted to control LEL at post ambient air.
4:00 PM	SA/IY Off-site

ared by: Shinta Aizawa
IAN Yusko

Signed: [signature]

Monitoring of ~~Perimeter~~ Wells during long term operations

Monitored by: IV/SA
Date: 2/20/08
Weather: RAIN, COLD

Well ID	Flow - 1st	Flow - 2nd
1	5.0	
2	14.0	
3	18.0	
4	7 - 9	
5	11.0	
6	9.0	
7	21.0	
8	12.5	
9	15.0	
10	7.0	
11	18.0	
12	6.0	
20A	10.0	

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Waste Pits **PAGE** 1 of 1

PROJECT NUMBER: 97-101 **DATE:** 2/21/2008

WEATHER: Temperature: 67 **Winds:** Slight **Precipitation:** Possible showers

DESCRIPTION OF THE WORK: Oversight of Avenue 2 performing landscaping duties

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
12:00 PM	
1:00 PM	Arrive on-site with SK, Avenue 2 already on-site
	Oversight of Avenue 2 performing landscaping duties on-site, speak with employee & give him new code to combination lock on the Undeveloped Parcel so they can perform duties there
2:00 PM	Depart from site, Avenue 2 to lock-up site when tasks have been completed
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	Need to follow-up with Avenue 2 re: their on-site schedule and modifying their contract during the summer months to once a month site visits

ared by: Ian Yusko

Stefan Klemm

Signed: Ian Yusko

SK

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/22/2008

WEATHER: Temperature: 66 Winds: Slight Precipitation: Light showers

DESCRIPTION OF THE WORK: Oversight of Baker performing carbon changeout, Troubleshoot sensors

Time Line	
8:00 AM	
9:00 AM	Arrive on-site with SA, Baker Corp. already on-site
9:30 AM	Conduct brief safety tailgate meeting with both Baker Corp. employees, sign safety sheet
	Baker Corp. begins setting up equipment and 2,000 lb. carbon bags off truck with tractor lift
10:00 AM	SA and IY go down to West end of property to set-up sump pump connected to generator to
	pump water from area of ponding to other dry areas around the West end of property
10:30 AM	Oversight of Baker Corp. filling emptied SVE/IBT carbon vessels with re-activated carbon
	Baker Corp. finished duties on-site (taking spent carbon back to headquarters to weigh both),
	returned tractor lift to front of site for later pick-up
11:30 AM	Baker Corp. departed from site, SA and IY begin troubleshooting the LEL and O2 sensor at
	the diversion location that have malfunctioned recently
12:00 PM	Remove excess sampling fixtures & ports from system inlet, diversion, and post ambient; and
	replace with simplified port for greater accuracy and ease of sampling
12:30 PM	Finish up on-site, put away equipment & instruments, depart from site
1:00 PM	
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	LEL sensor was pulled to send back to manufacturer (unable to calibrate), O2 sensor needs
	new sensorhead (contact Conspec & order a couple sensorheads)
	Follow-up with Baker Corp. re: spent carbon weights from change-out

Prepared by: Ian Yusko
Shinta Aizawa

Signed:

BakerCorp

FIELD SERVICE REPORT DATE: 02.23.08 WORK ORDER NO.: 1196930

CUSTOMER: C2 Rem

TYPE OF SERVICE: EXCHANGE ✓ DELIVERY ___ PICK-UP ___ RE-WORK ___ OTHER ___

QUANTITY / TYPE OF UNITS SERVICED: 2 2,000 each

SITE NAME / CITY: CARSON CA TRUCK NO: Y 123

SITE CONTACT: PHONE / PAGER NO:

BAKER FILTRATION TECHNICIANS: STEVE & CITO

SPECIAL INFORMATION:

TIME:
DEPART TIME: 8:30am
ARRIVE TIME: 9:00am
DEPART TIME: 11:00am
E TIME:

CARBON USAGE:
TYPE OF MEDIA USED: R 4X8
AMOUNT USED: 4480 lbs
LOT / PID #'S 2400 34.00
2 lbs 2 lbs

PACKAGING:
TYPE USED: C/S
GENERATED:
LEFT AT SITE: YES NO
TOTAL AT SITE:

JOBSITE SAFETY REVIEW

NONE	UNSAFE CONDITIONS:
NONE	AT - RISK BEHAVIOR:
	PPE REQUIREMENTS: Hard Hat, Glasses, Dust mask
	SAFE JOB PROCEDURES: Normal.
	SAFETY SUGGESTIONS:

RENTAL EQUIP. ORDERED FROM: Herc PHONE NO:

EQUIPMENT TERMINATION NO: FROM:

DEPARTED TO ANOTHER JOB SITE FROM HERE: IF YES, WRITE NAME / CITY:

CUSTOMER COMMENTS:

CUSTOMER SIGNATURE: [signature] DATE: 2/25/08

BAKERCORP™

4306 W. 190TH STREET
TORRANCE, CA 90504

PHN# 310-303-3700 FAX# 310-406-3001

Remit To:
BAKERCORP
P.O. Box 513967
LOS ANGELES, CA 90051-3967

Job Site:
C2 REM- CARSON JOB SITE
20245 S. VERMONT AVE.
DEL AMO, CA 99999

C#: 949-261-8098 J#:

S A L E S O R D E R

Order #..... 1196930-000
System date. 2/21/08
Terms..... Net 30
Order date.. 2/21/08
Job Loc..... 20245 S. VERMONT AVE., DEL AMO
Job No..... 1 - C2 REM- CARSON J
P.O. #..... VERBAL
Ordered By.. EDWIN
Reference #.

Quote.....
Reservation.

Customer #: 223098
C2 REM
2382 Southeast Bristol
Suite B
Newport Beach, CA 92660

Qty	Description	Unit
1	**TURNKEY** 101 TURNKEY SERVICE OF (2) KA2000S WITH 2000 LBS EACH OF BF R4X8 ACTIVATED VAPOR PHASE CARBON.	AT
1	**FORKLIFT RENTAL** 600	AT
4180	**REACTIVATED CARBON 4X8** R4X8	LB
1	**KAW 55 GALLON UNIT** KAW55	EA
4	**SUPERSACK BLACK NON-DOT** SUPERSACK	EA
1	**NOTE:** NOTE: WE WANT A TOTAL WEIGHT OF FRESH CARBON GOING IN TO EACH VESSEL, AND A TOTAL WEIGHT OF SPENT COMING OUT OF EACH VESSEL. PLEASE CALL C2REM WITH ALL WEIGHTS ONCE COMPLETE. DELIVERY INSTRUCTIONS: PLEASE WEIGH BAGS GOING OUT AND DOCUMENT TO ASSIGNED VESSEL. DOCUMENT SPENT TO SPECIFIC VESSEL AND WEIGH EACH BAG ON RETURN TO BF YARD.	EA

continued...

DAMAGES /CLEANING Y / N _____ DELIVERY TIME AND/OR SET UP CHARGES: _____

READ BEFORE SIGNING: Customer agrees to rent the Baker Equipment described in this Rental Agreement under the terms and conditions set forth on the face and on the reverse side hereof, which the undersigned has read and understands, for a term beginning on the date hereof and ending on written or oral notice of termination given by either party to the other before 5:00pm on or before the last business day of each rental cycle. Spent carbon in rental equipment will only be picked up along with the rental equipment if the spent carbon is profiled and approved, as non-hazardous, ahead of the equipment pick up date. Notice of termination shall only terminate Customer's right to continue in possession of the Equipment. Customer shall continue to be responsible to Baker for all obligations under this Agreement. The Customer has inspected the Equipment rented pursuant to this Rental Agreement after their installation by BakerCorp and acknowledges that the Equipment is in good condition and that the installation is accepted by the Customer. Rental Agreement is not transferable. Details of the Customer's obligations and responsibilities are contained in the terms and conditions on the reverse side of this document. The individual signing below as or on behalf of the Customer agrees to all of the terms and conditions on the reverse side of this rental agreement, acknowledges receipt of the equipment in good working order and is fully familiar with its operation and use.

BY _____ TITLE _____ FOR _____
COMPANY NAME

PRINT NAME _____ DATE _____

SCHEDULED DELIVERY DATE/TIME _____ ACTUAL DELIVERY DATE/TIME _____ DRIVER INITIALS _____ CUSTOMER INITIALS _____

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo I | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/25/2008

WEATHER: Temperature: ~65 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: Troubleshooting and calibration of effluent PID

Time Line	
11:30 AM	IY/SA arrive on-site
	SA/IY called the manufacturer to ask for changing span gas value and calibration procedures.
	The effluent PID was inspected, and no visible damage was observed.
	The PID was calibrated with zero gas and 50 ppm of benzene.
	Span gas value was changed from 10 to 50.
	Lower alarm lmint is set to 25 and higher alarm limit was set to 50.
	The effluent PID was inspected, and no visible damage was observed.
	The PID was calibrated with zero gas and 50 ppm of benzene.
	Span gas value was changed from 10 to 50.
	Lower alarm lmint is set to 25 and higher alarm limit was set to 50.
	The system was back on, and dilution valve was adujusted to control treatment rate and LEL at post ambient air.
2:30 PM	Off-site

Prepared by: Shinta Aizawa

Ian Yusko

Signed: Shinta Aizawa

Ian Yusko

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/28/2008

WEATHER: Temperature: 70 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Bi-monthly monitoring of GCTS & SVE/IBT, oversight of Avenue 2

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	Arrive on-site with SA and TT, unlock site Perform tailgate safety meeting, prepare instruments & equipment for monitoring
10:40 AM	Conduct bi-monthly GCTS monitoring using pump lung to collect tedlar bag samples from system inlet, C1, C2, and system outlet, velocicalc to measure flow at inlet and outlet, and inline gauges for temperature (see results in GCTS monitoring section of log book) Note: measure field samples with PID for VOCs
11:10 AM	Conduct bi-monthly SVE/IBT monitoring using pump lung to collect tedlar bag samples from system influent, post ambient air, C1, and system effluent (also collect lab samples), use velocicalc to measure flow at influent, post ambient air, and effluent, and measure pressure at each station using 0-100 in. of H2O magnahelic (take corresponding readings from system sensors using the VNC display), (see results in SVE/IBT monitoring section of log book) Note: measure field samples with PID and RKI for VOCs, O2, CO2, and LEL
11:50 AM	Clean out some debris from v-ditches, level out mounding gravel in roadway
12:20 PM	Finish up on-site, put away equipment & instruments, depart from site
4:00 PM	Return on-site to meet with Avenue 2 re: some landscaping issues that need to be resolved Oversight and coordination of Avenue 2 re: site duties
4:30 PM	Depart from site with SA and TT
5:00 PM	
Special Notes	

Prepared by: Ian Yusko, Tri Tran, Shinta Aizawa

Signed: Ian Yusko

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 2/29/2008

WEATHER: Temperature: 66 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Site walk with EPA, DTSC, and client

Time Line	
8:00 AM	Arrive on-site with TT, unlock site
	Perform sweep of enclosure with PID (wearing respirator) to ensure no leaks are present,
	SVE/IBT system is ON and operating as designed
8:25 AM	TT sweeps some gravel out of the v-ditches, IY sweeps the front access gate road of gravel
	and dirt, TT and IY set-up H&S PPE for arriving on-site visitors including hard hats, hearing
	protection, and safety glasses
9:00 AM	Visitors arrive on-site (Dante of EPA, George of Shell Chemical, Safouh of DTSC, and
	Ed & Stefan of C2 REM
9:15 AM	Conduct site walk with visitors around perimeter of property and inside enclosure to observe,
	and answer any questions or concerns
10:45 AM	Visitors depart from site
11:00 AM	TT and IY clean-up equipment and lock-up site, Depart from site
12:00 PM	
1:00 PM	
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	Visitors made a few comments re: the ponding issue on the East end of the property, also on
	re-caulking of some of the v-ditches, and installing safety cages for the injection wellheads for
	H&S reasons

Prepared by: Ian Yusko

Tri Tran

Signed: Ian Yusko

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 3/5/2008

WEATHER: Temperature: 75° Winds: 0 Precipitation: 0

DESCRIPTION OF THE WORK: Install Emergency Eyewash/Shower Station-Pump Water from Ponding Area

Time Line	Adjust Flow & Purge Water from System
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	BW, SA, TT on Site
11:45AM	SM on Site with water pump, TT, BW & SA set up water pump & began pumping water
11:50 AM	out of the pond. SM dug trench for water pumping to new emergency eyewash & shower
	SA adjusting flows at the system manifold
12:00 PM	
1:00 PM	
1:30 PM	Lunch Break
2:00 PM	Quality rental packed up water pump. Pond almost dry
3:00 PM	BW & SM installed water piping, tested & filled in trench.
	TT anchored emergency shower to enclosure floor.
4:00 PM	SA & SM assembled shower unit, BW cleaned up tools & debris
4:30 PM	All staff off site
5:00 PM	

Special Notes

pared by:_____ Signed:_____

C_2 REM
FIELD DAILY REPORT

OJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 3/6/2008

WEATHER: Temperature: ~65 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: Installation of eye wash station/Safety shower in enclosure

Time Line	
11:00 AM	TT/SA arrived on-site
	SA monitored flow at inlet and the post divergence.
	Inlet flow = 53~56, Divergent flow = 11~13
	SA could hear liquid from the SVE7 & SVE 5 at the manifold
	TT/ SA assembled eye wash station/safety shower, and took measurements
1:00PM	TT/SA left the site for lunch
	TT/SA went to Home Depot and Grainger to buy galvanized pipes
2:30 PM	TT/SA came back to the site, met BW
	small leaks were found from assembled eye wash station/safety shower
	need to come back to re-assemble leaking part.
4:30 PM	TT/SA off-site

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 3/13/2008

WEATHER: Temperature: 62 Winds: 0 Precipitation: 0

DESCRIPTION OF THE WORK: Re-caulk ditches on the park side .

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	10-15am SM SA onsite.
	Re-caulk ditch on the park side
11:00 AM	
	Meet with friends2friends landscaping to explain scope of landscaping needed at the site.
	Avenue2 onsite, Bugman onsite.
12:00 PM	
	11-30am SM and SA offsite.
1:00 PM	
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	More re-caulking needed on the enclosure side.
	Water ponding has almost dried up completely.

Prepared by: Seamus McGeough

Signed: Seamus McGeough
Shoto Sizara

C_2 REM
FIELD DAILY REPORT

OJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 3/14/2008

WEATHER: Temperature: ~65 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: SVE/IBT Enclosure Monitoring, GCTS Monitoring

Time Line	
11:00 AM	SA/TT arrived on-site
11:30 AM	GCTS Monitoring
	Samples were taken from inlet, carbon 1, carbon 2, and effluent.
	VOCs were monitored with MiniRae 2000 PID
	Flows were monitored with velocicalc and inline sensors.
	See monitoring form for the results.
12:00 PM	Enclosure Monitoring
	Samples were taken from inlet, post ambient air, carbon 1, and effluent.
	VOCs were monitored with MiniRae 2000 PID
	O2, CO2 and LEL methane were monitored with RKI Egle
	Flows were monitored with velocicalc and inline sensors.
	Pressures weree monitored with Magnehelic
	See monitoring form for the results
12:45	Troubleshooting inline flow sensor FT5
	Flows were monitored from the VNC viewer and the box.
	FT 5 seems not match while other sensors are matching.
	When the system shut down, FT5 shows zero in the box, but 45 in the VNC viewer.
	(it increased from 35-38 to 45 scfm when the system shut down, and it decreased to 35-38 again when the system back up)
1:15	Off-site

..epared by: Shinta Arawa

Signed: Shinta Arawa

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 3/18/2008

WEATHER: Temperature: 78 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Install O2 sensor & calibrate LEL sensor, check SVE/IBT ops, run sprinklers

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
12:00 PM	
12:30 PM	Arrive on-site with SM, unlock site and turn sprinklers on
	SM performs enclosure leak check with PID (respirator on) - no leaks detected
1:00 PM	IY and SM repair AT1B O2 meter by installing O2 sensor then recalibrate meter
1:45 PM	IY and SM recalibrate AT3A LEL meter to ensure an more accurate reading between the carbon vessels
2:15 PM	Check SVE/IBT system ops & check the effluent concentration with PID (0 ppm)
2:30 PM	Pack up equipment, lock-up site, turn off all sprinklers, depart from site
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	Need to follow-up with Conspec re: the status of AT1A LEL meter & need to follow-up with Sage Metering, Inc. re: options with faulty FT05 FLOW meter
	Need to begin routine watering of site to ensure vegetation growth during dry, hot months

Prepared by: Ian Yusko

Seamus McGeough

Signed: Seamus McGeough

Ian Yusko

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: | DATE: 3/26/2008

WEATHER: Temperature: ~70 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: GCTS Monitoring, Maintenance of in-linse sensors, and sampling of liquid for disposal, Irrigation of the property

Time Line	
10:00 AM	SM/SA arrived on site
	prepared monitoring equipments, SM meet one landscaper to get estimate
	GCTS Monitoring
	SA took samples from inlet, carbon vessel 1, carbon vessel 2, and effluent, using punp/lung system.
	SM took flows with velocicalc and temperatures from the gauges at inlet and effluent.
	VOCs were monitored with MiniRae 2000 PID (1)
	See the monitoring form for the results.
11:00 AM	**Sensor replacement and calibration**
	Oxygen sensor AT5B was replaced with new sensor and calibrated.
	Oxygen sensor AT4B was calibrated.
	LEL sensor AT5A and AT4A were calibrated, however, these sensors don't have PT1and PT2 to adjust output mA, and limited its calibration.
	SM meet another landscaper to get estimate
1:30	SK/IY arrived on site
	Sampling of liquid for disposal
	SK/IY sampled liquid from air/moisture separator for lab analysis for its disposal
	Samples were collected and sent to the Calscience lab.
	The property was irrigated through out the day.
4:00	SM/SA/SK/IY off-site

Prepared by: Shinta Aizawa

Signed: Seamus McLaughlin
Shinta Aizawa

C_2 REM
FIELD DAILY REPORT

JECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 3/27/2008

WEATHER: Temperature: 70 Winds: Light Precipitation: 0

DESCRIPTION OF THE WORK: 1st Quarterly Full Scale Monitoring

Time Line	
8:00 AM	SA, TT, IY, SM onsite. System running.
	Team prepared and calibrated equipment for monitoring.
9:00 AM	We split into 2 teams to take the pressures at all of the monitoring and extraction wells.
10:00 AM	After taking the pressure readings the system was turned off.
	Each team then purged their assigned wells and took PID and RKI readings.
11:00 AM	
12:00 PM	
	All lids on the perimeter wells were replaced.
	Break for lunch.
1:00 PM	
	After Lunch IY and SA set up purging system for SVE wells.
	TT and SM went to the park property to monitor the 4 wells. SM & TT could not locate
2:00 PM	well "K" due to overgrowth and mud, need to locate on next visit.
	IY and SA purged the SVE wells.
3:00 PM	SM & TT monitored the SVE wells with PID and RKI,
4:00 PM	Team took apart SVE purging system and packed up all equipment.
	IY turned O2 generator off.
	4.35 all staff offsite.
5:00 PM	
Special Notes	

Prepared by: Seamus Mc Gough

Signed: Seamus McGough

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: 97-101 PAGE 1 of 1
PROJECT NUMBER: DATE: 4/1/2008
WEATHER: Temperature: 60 Winds: light Precipitation: 0
DESCRIPTION OF THE WORK: Oversee Carbon Changeout.

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	10.20 SA & SM onsite. Baker filtration waiting at the front gate.
	System off.
	We held a short safety meeting and tagged out the power source for the SVE system
11:00 AM	Baker waiting for forklift to arrive.
	We drained about 3 gals of liquid from the knock out tank, about 1 gal left in tank.
	SA, SM went to find perimeter well K, in the undveloped parcel
12:00 PM	Lel =0, O2 = 16, CO2 = 3.8, VOC's = 0.1 , pressure = 0.
	12.30 forklift arrived, Baker performed the carbon change
1:00 PM	
	1.30 Carbon change completed, SA restarted the system
	1.40 SM, SA off site for lunch & visit to other site.
2:00 PM	
	3.00pm SM & SA return to site, system running, however SA noticed that blower A was
	not working properly, we attempted to troubleshoot the problem but were unable to find the
4:00 PM	problem. SM checked injecion wells for leaks at the well heads, no leaks detected.
	4pm SA & SM offsite
5:00 PM	
Special Notes	

Prepared by: Seamus Mc Geough Signed: Seamus Mc Geough

BAKERCORP™

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LOS ANGELES, CA 90051-3967

PAGE: 1

Job Site:
C2 REM- CARSON JOB SITE
20245 S. VERMONT AVE.
DEL AMO, CA 99999

C#: 949-261-8098 J#:

S A L E S O R D E R

Order #..... 1200162-000
System date. 3/26/08
Terms..... Net 30
Order date.. 3/26/08
Job Loc..... 20245 S. VERMONT AVE., DEL AMO
Job No..... 1 - C2 REM- CARSON J
P.O. #..... VERBAL
Ordered By.. EDWIN
Reference #.

Quote.....
Reservation.

Customer #: 223098
C2 REM
2382 Southeast Bristol
Suite B
Newport Beach, CA 92660

Qty	Description	Unit
1	NOTE: NOTE: PLEASE WEIGH BAGS GOING OUT AND DOCUMENT TO ASSIGNED VESSEL. DOCUMENT SPENT TO SPECIFIC VESSEL AND WEIGH EACH BAG ON RETURN TO BF YARD. PLEASE CALL C2 REM WITH ALL WEIGHTS ONCE COMPLETE.	EA
1	TURNKEY 101 ON MARCH 31, 2008: TURNKEY SERVICE OF (2) KA2000S WITH 2000 LBS EACH OF BF R4X8 ACTIVATED VAPOR PHASE CARBON.	AT
1	FORKLIFT RENTAL 600	AT
~~4,000~~ 4,260	REACTIVATED CARBON 4X8 R4X8	LB
4	SUPERSACK BLACK NON-DOT SUPERSACK	EA

Primery In 2,130

Secondary 2,130

Out

2 5g Pail
with 19 LBS of R4X8

Pick up One KA55

DAMAGES /CLEANING Y / N _____ DELIVERY TIME AND/OR SET UP CHARGES: _____

READ BEFORE SIGNING: Customer agrees to rent the Baker Equipment described in this Rental Agreement under the terms and conditions set forth on the face and on the reverse side hereof, which the undersigned has read and understands, for a term beginning on the date hereof and ending on written or oral notice of termination given by either party to the other before 5:00pm on or before the last business day of each rental cycle. Spent carbon in rental equipment will only be picked up along with the rental equipment if the spent carbon is profiled and approved, as non-hazardous, ahead of the equipment pick up date. Notice of termination shall only terminate Customer's right to continue in possession of the Equipment. Customer shall continue to be responsible to Baker for all obligations under this Agreement. The Customer has inspected the Equipment rented pursuant to this Rental Agreement after their installation by BakerCorp and acknowledges that the Equipment is in good condition and that the installation is accepted by the Customer. Rental Agreement is not transferable. Details of the Customer's obligations and responsibilities are contained in the terms and conditions on the reverse side of this document. The individual signing below as or on behalf of the Customer agrees to all of the terms and conditions on the reverse side of this rental agreement, acknowledges receipt of the equipment in good working order and is fully familiar with its operation and use.

BY _____ TITLE _____ FOR _____
COMPANY NAME

PRINT NAME _____ DATE _____

SCHEDULED DELIVERY DATE/TIME | ACTUAL DELIVERY DATE/TIME | DRIVER INITIALS | CUSTOMER INITIALS

BKRF-158 Rev. 02/07

BakerCorp

ELD SERVICE REPORT DATE: WORK ORDER NO.:

STOMER:

PE OF SERVICE: EXCHANGE X DELIVERY ___ PICK-UP ___ RE-WORK ___ OTHER ___

ANTITY / TYPE OF UNITS SERVICED: 1 AP 10 with 2,000 x 12 HX8

E NAME / CITY: Del Amo TRUCK NO: 5

E CONTACT: PHONE / PAGER NO:

KER FILTRATION TECHNICIANS: Steve, Ricardo

CIAL INFORMATION:

E:
ART TIME: 1:30
IVE TIME: 1:20
ART TIME: 1:28
TIME:

CARBON USAGE:
TYPE OF MEDIA USED: 12 HX8
AMOUNT USED: 11,260
LOT / PID #'S

PACKAGING:
TYPE USED:
GENERATED:
LEFT AT SITE: YES / NO
TOTAL AT SITE:

SITE SAFETY REVIEW

	UNSAFE CONDITIONS:
	AT - RISK BEHAVIOR:
	PPE REQUIREMENTS: Hard Hat, shoes, dust Mask
X	SAFE JOB PROCEDURES:
	SAFETY SUGGESTIONS:

TAL EQUIP. ORDERED FROM: PHONE NO:

PMENT TERMINATION NO: FROM:

RTED TO ANOTHER JOB SITE FROM HERE: IF YES, WRITE NAME / CITY:

OMER COMMENTS:

OMER SIGNATURE: DATE: 4/1/08

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 4/3/2008

WEATHER: Temperature: 66 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Troubleshoot blower A, restart security camera computer

Time Line	
8:00 AM	BW arrived on-site, unlocked trailer and enclosure
	Accessed computer cage to get processmeter and reboot security camerca computer
8:15 AM	BW opens valve on SVE/IBT knock-out tank to drain into drum for future off-site removal
8:30 AM	Hook processmeter to blower A and run electrical and signal tests on blower to verify the blower is cranking at the correct level (all seems fine with electrical and blower output; however BW found through a couple of flow tests that the blower is not generating the flow it should be -- speculates that there may be a blockage of some kind somewhere or a blower component such as the veins are not undeperforming)
9:30 AM	Calls IY to have him contact BakerCorp. to see about scheduling a tech. to come out and further troubleshoot the blower
9:45 AM	BW put tools and instruments away
	Then BW finished draining of knock-out tank into drum, closed tank valve & sealed drum
10:10 AM	BW locks site and departs
11:00 AM	
12:00 AM	
1:00 PM	
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	Contact BakerCorp. re: tech. visit to further troubleshoot blower A

Prepared by: Ian Yusko

Signed: Ian Yusko

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 4/4/2008

WEATHER: Temperature: ~65 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: Identifying potential causes of system malfunctioning after carbon change-out / Enclosure Monitoring with lab samples

Time Line	
10:30 AM	IY/SA arrive on-site and meet Baker Filtration
	Turn the system back on to monitor the pressure and flows at effluent and post ambient air with v1 closed , v2 100% opened, and not through tha carbon vessels.
	Pressures and flows were still lower than what its normally expected.
	IY/SA took out a flame arrestor installed right before Blower A and found it was completely filled with carbon.
	Baker Filtration probably loaded too much carbon and some of carbon near outlet stack were sucked up and clogged in the flame arrestor.
	IY/SA removed those carbon from the flame arrestor and re-installed.
	Baker Filtration moved carbon in the vessel 1 and 2 so that there is such space between top of the carbon and outlet stack.
	IY/SA turned the system back on and normal pressure and flows were obtained.
1:30 PM	SVE/IBT Enclosure Monitoring.
	Samples were taken from inlet, post ambient air, carbon 1, and effluent.
	VOCs were monitored with MiniRae 2000 PID
	O2, CO2 and LEL methane were monitored with RKI Egle
	Flows were monitored with velocicalc and inline sensors.
	Pressures weree monitored with Magnehelic
	See monitoring form for the results
	Monthly Lab samples were also collected. (This is for March)
	IY/SA took out LEL sensor AT4A to return the manufacturer to get it fixed.
2:30 PM	IY/SA Off-site

Prepared by: Shinta Aizawa
IAN Yuske

Signed: Shinta Aizawa
Ian Yuske

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1
PROJECT NUMBER: 97-101 | DATE: 4/9/2008
WEATHER: Temperature: 65 Winds: Moderate Precipitation: 0
DESCRIPTION OF THE WORK: Install injection well cages, meet Prime systems to download data.

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	IY & SM onsite. BW and Marc Smith from prime systems already onsite.
	BW and Mark Smith worked on PLC
	SM turned on irrigation system.
11:00 AM	IY and SM place landscape membrane and gravel around the 4 injection wells in preperation for installation of injection well cages.
12:00 PM	BW, offsite, IY, and Mark offsite for lunch, SM remained onsite.
	SM continued to irrigate the entire cap, one section at a time.
1:00 PM	
	IY contacted All Pro, they did not have the cages ready as promised.
2:00 PM	IY and Prime systems worked on equations for sve system.
	SM put away all tools and turned off the irrigation system
3:00 PM	
	3:15 IY, SM and Prime systems offsite.
4:00 PM	
5:00 PM	
Special Notes	Landscapers have been onsite, cap looks good, drains have been cleared.
	South side of the site along the park fence has not been cut.

Prepared by: Seamus Mc Geough
IAN YUSKO

Signed: Seamus McGeough
Ian Yusko

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 4/16/2008

WEATHER: Temperature: 70 Winds: moderate Precipitation: 0

DESCRIPTION OF THE WORK: GCTS/SVE monitoring, irrigation of cap, install well cages.

Time Line	
8:00 AM	
9:00 AM	
	9.30am IY, TT and SM onsite
10:00 AM	IY, TT monitored GCTS system
	10.30 am IY and TT monitored SVE system
11:00 AM	
	SM began irrigating the cap at the front of the site, and set up equipment for installing cages.
12:00 PM	Staff took 30minute lunch break.
	12.30pm staff offsite.
1:00 PM	
2:00 PM	2.15pm Staff back onsite and began digging foundations for cages and setting forms.
	2.45pm All pro delivered 3 of the 4 cages.
3:00 PM	Staff installed one of the cages using concrete anchors.
	3.45pm staff cleaned up equipment and stored tools in the seatrain.
4:00 PM	
	4.10pm all staff offsite.
5:00 PM	
Special Notes	Cap is starting to dry out due to heat and wind, irrigate as often as possible to avoid all vegetation dying out. Cages are very heavy and safety precautions should be taken when staff need to lift the cages. Follow up with All-Pro about 4th and final cage delivery.

Prepared by: Seamus McGeough.
IAN YUSKO
TRI TRAN

Signed: Seamus McGeough

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits PAGE 1 of 1

PROJECT NUMBER: DATE: 4/21/2008

WEATHER: Temperature: 62 Winds: light Precipitation: 0

DESCRIPTION OF THE WORK: Install 2 injection cages, irrigate the cap.

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	11.30 TT & SM onsite, we checked the cage that was installed last week. It is anchored well with the way we set it.
12:00 PM	SM irrigated the front end of the cap. Turning each sprinker on for 30-45 mins TT set up equipment and materials for installing the other 2 cages. 12.30 staff took lunch.
1:00 PM	
	1.30 staff began to install the 2 cages.
2:00 PM	
3:00 PM	3.30pm both cages were installed, the remaing cage had not been delivered. Staff packed up all equipment. We attempted to pack the liquid drum in a secondary drum. The drum for secondary containment was too small for the drum containing liquid.
4:00 PM	Staff offsite.
5:00 PM	
Special Notes	Staff irrigated the east end of the cap and ran last sprinker on west end. We did not run the other sprinklers as we were working in the area. Recommend running these sprinklers at the next site visit as it is very dry and all vegetation is dying.

Prepared by: Seamus Mc Geough. Signed: Seamus McGeough

TRI TRAN

REM
ILY REPORT

PROJECT NAME: Del Amo Waste Pits **PAGE** 1 of 1

JECT NUMBER: 97-101 **DATE:** 4/25/2008

WEATHER: Temperature: 84 **Winds:** None **Precipitation:** None

DESCRIPTION OF THE WORK: H&S meeting with All-Star landscaping, maintenance performed

Time Line	
8:00 AM	
9:00 AM	
9:30 AM	Arrive on-site with SK
	Unlock site trailer & prepare for health & safety meeting with All-Star Landscaping
10:00 AM	All-Star employees arrive on-site
	Conduct health & safety meeting with landscaping employess (discuss site specific hazards,
	on-site safety requirements, contact information, job specifications & duties, etc.)
11:00 AM	Perform site walk with landscapers to point-out well-heads, conveyance piping, sprinklers, etc.
	Answer any questions or concerns the new landscaping crew may have
11:30 AM	All-Pro fencing drops off last security cage to be installed over injection well
	Lock-up & all parties depart from site to show conduct additional site visits with landscapers
	other contracted sites, then go to lunch
2:00 PM	IY, SM, & TT arrive back on-site after lunch break, SK returned to office
	Unlock enclosure and trailer
	SM & TT work on installing last injection well security cage while IY uninstalls AT05 LEL
	meter to send back to manufacturer for calibration, then reinstalls newly sent, factory-
	calibrated AT04 LEL meter into inlet location (AT04 meter appears to be functioning well)
4:00 PM	Finish maintenance work, put tools away
4:30 PM	Lock-up site and Depart from site
Special Notes	All-Star Landscaping scheduled to make early site visit to perform duties on Monday,
	April 27th. C2 REM field staff will follow-up on their performed work.

Prepared by: Ian Yusko, Tri Tran, Stefan Klemm, Seamus McGeough

Signed: Ian Yusko, Seamus McGeough

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 4/30/2008

WEATHER: Temperature: 65 Winds: Moderate Precipitation: 0

DESCRIPTION OF THE WORK: Bi-monthly monitoring, site maintenance.

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	SA, TT SM onsite. System running. Staff began irrigating the cap.
	SA, SM began by monitoring the GCTS system.
	TT worked on compacting the dirt around the new injection well cages.
11:00 AM	SM/SA monitored the SVE/IBT system and took lab samples.
12:00 PM	Staff took lunch break, onsite.
	12.30 SA went to airgas to replace nitrogen cylinder.
1:00 PM	
	TT SM repaired caulking in V ditch at rear of trailer. Put some more gravel around the injection wells.
2:00 PM	
	2.30 staff put container of liquid into secondary container and labeled it.
	All sprinklers were run for 30minutes or more.
3:00 PM	Staff off site.
4:00 PM	
5:00 PM	

Special Notes

Prepared by: Seamus Mc Geough.

Signed: Seamus Mc Geough

PRAXAIR

FREIGHT CHARGES	NO. OF PIECES	PULLED BY

WARNING: Transporting flammable gases and/or hazardous materials in an enclosed van, automobile or automobile trunk is very dangerous because it can cause a fire or explosion resulting in serious injury or death. Read cylinder label warnings, Material Safety Data Sheets (MSDSs) and/or safety booklet P-3499.

P I C K I N G T I C K E T

Sold by: To Place Orders call Sales Dept. at: 1-888-935-3353

Cust # : DU218

Order # : 06084556-00

Ship to: C2REM INC
EDMOND BOURKE
2382 SE BRISTOL ST STE B
NEWPORT BEACH CA 92660
949-261-8090

Order Date 04/30/08
Ship Date: 04/30/08
Page : 001 OF 001

NAME : C2REM INC
PO # : 9711
REL# :
PHONE#: 949-261-8090

TER: 255
SLS: 268
BRN: 238

SHIP VIA: CUST PICKUP -NONE-
OTH ZONE: 62 UPS: 0
COL/PPD : PPD&Add
ROUTE # :

INITIALS: CL1
ORD TYPE: CHRG
TIME : 30-APR-08 04:43PM
CRT : TNA7025

QTY SHIP	UNIT	HM	DESCRIPTION & HAZARD CLASS	ID NUMBER	LINE NO	ITEM NUMBER	LOC	QTY ORDER	CYLINDERS SHIP	CYLINDERS RETN	VOL/ WT	UNIT AMOUNT	EXTENDED AMOUNT
1	CL	X	NITROGEN, COMPRESSED, 2.2 NON-FLAMMABLE GAS (NITROGEN T)	UN1066	1	NI T	238	1	1	1	304 165.0		

Bin Locs: A0

QTY SHIP	UNIT	HM	DESCRIPTION & HAZARD CLASS	LINE NO	ITEM NUMBER	LOC	QTY ORDER	QTY BKORD	BIN LOC	WT	UNIT AMOUNT	EXTENDED AMOUNT
1	EA		HAZARDOUS MATERIAL CHARGE	2	ZZZ HM	238	1	0	ZZZZZZ	.0		

Contact Person: KRISTEN URIAS/AP EDMOND BOURKE/PRES 949-261-8090
Total Weight: 165.0

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

EMERGENCY RESPONSE TELEPHONE NUMBER:
CALL 1-800-424-9300

Authorized Signature

Received by

DATE SHIPPED:

PLACARDS OFFERED: ☐ ACCEPTED ☐ REJECTED

CONTINUOUS SHIPPER 2PT

CUSTOMER'S COPY

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits PAGE 1 of 1

JECT NUMBER: 97-101 DATE: 5/8/2008

WEATHER: Temperature: 62 Winds: Light Precipitation: 0

DESCRIPTION OF THE WORK: Bi-monthly monitoring, clean flame arrestor at effluent stack

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	10.30am SA & SM on site
	SM began irrigating the cap
	SA calibrated the PID. SM entered the enclosure.
11:00 AM	SM & SA monitored the GCTS system.
	Before monitoring the SVE/IBT the effluent PID gave a high benzene alarm. The system
	was shut down and staff called Baker filtration to schedule a carbon change for the
12:00 PM	next day
1:00 PM	Staff off site for lunch
2:00 PM	Staff return to site. Removed the effluent flame arrestor to clean and check flows with/ and
	without the flame arrestor in line. Flow was 150 scfm without the flame arrestor.
	140 scfm with the flame arrestor.
3:00 PM	Staff offsite.
4:00 PM	
5:00 PM	

Special Notes

ared by: Seamus Mc Geough

Signed:

C_2 REM

FIELD DAILY REPORT

.OJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 5/9/2008

WEATHER: Temperature: ~65 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: Carbon Change-out & SVE/IBT Enclosure Monitoring

Time Line	
10:00 AM	SM/SA arrived on-site
	met with Baker Filtration
	Baker started carbon change-out
	The both primary and secondary vessels were emptied out.
	SM/SA conducted flow test at effluent.
	1. Removed flame arrester at Blower A and cleaned the element with a compressor.
	2. the flame arrester was placed back in the system and purged the sytem with fresh air.
	3. flow rate was monitored at effluent with velocicalc (~140 scfm)
	SM/SA changed carbon vessle configuration. Vessel A is now lead vessel.
	Baker started to fill fresh carbon in the vessels.
1:30 PM	Baker finished change-out and the system was turned back on.
2:30 PM	SVE/IBT Enclosure Monitoring
	Samples were taken from inlet, Post Ambient Air, C1, and Effluent, using pump lung and 1L of tedlar bags.
	LEL Methane, O2, and CO2 were monitored with RKI Eagle
	VOCs were monitored with MiniRae 2000 PID (1) calibrated to 50 ppm of benzene
	Flows were monitored with Velocicalc.
	O2, VOCs (LEL), Flow were monitored with inline sensors where its installed.
	Pressures were monitored with Magnehelic
	See the monitoring form for results.
	the entire cap was irrigated through the day.
3:15 PM	SM/SA off-site
	Fresh Carbon: Primary = 1826 , Secondary = 1902 (lb)
	Spent Carbon: Primary = 2552, Secondary = 2388 (lb)

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

BAKERCORP™

4306 W. 190TH STREET
TORRANCE, CA 90504

PHN# 310-303-3700 FAX# 310-406-3001

Remit To:
BAKERCORP
P.O. Box 513967
LOS ANGELES, CA 90051-3967

PAGE: 1

Job Site:
C2 REM- CARSON JOB SITE
20245 S. VERMONT AVE.
DEL AMO, CA 99999

C#: 949-261-8098 J#:

S A L E S O R D E R

Order #..... 1204613-000
System date. 5/08/08
Terms..... Net 30
Order date.. 5/08/08
Job Loc..... 20245 S. VERMONT AVE., DEL AMO
Job No..... 1 - C2 REM- CARSON J
P.O. #..... VERBAL
Ordered By.. EDWIN
Reference #.

Quote.....
Reservation.

Customer #: 223098
C2 REM
2382 Southeast Bristol
Suite B
Newport Beach, CA 92660

Qty	Description	Unit
1	**TURNKEY** 101 ON MAY 9, 2008: TURNKEY SERVICE OF (2) KA2000S WITH 2000LBS EACH OF BF R4X8 ACTIVATED VAPOR PHASE CARBON.	AT
1	**FORKLIFT RENTAL** 600	AT
4000	**REACTIVATED CARBON 4X8** R4X8	LB
4	**SUPERSACK BLACK NON-DOT** SUPERSACK	EA
1	**NOTE:** NOTE: WE WANT A TOTAL WEIGHT OF FRESH CARBON GOING INTO EACH VESSEL, AND A TOTAL WEIGHT OF SPENT COMING OUT. PLEASE WEIGH BAGS GOING OUT AND DOCUMENT TO ASSIGNED VESSEL. DOCUMENT SPENT TO SPECIFIC VESSEL AND WEIGH EACH BAG ON RETURN TO BF YARD. PLEASE CALL C2 REM WITH ALL WEIGHTS ONCE COMPLETE. EDWIN'S CELL: 949-261-8098.	EA

spent
~~fresh~~ 1ry = 2552
" 2ry = 2388
Fresh
~~spent~~ 1ry = 1826
2ry = 1902

DAMAGES /CLEANING Y / N _____ DELIVERY TIME AND/OR SET UP CHARGES: _____

READ BEFORE SIGNING: Customer agrees to rent the Baker Equipment described in this Rental Agreement under the terms and conditions set forth on the face and on the reverse side hereof, which the undersigned has read and understands, for a term beginning on the date hereof and ending on written or oral notice of termination given by either party to the other before 5:00pm on or before the last business day of each rental cycle. Spent carbon in rental equipment will only be picked up along with the rental equipment if the spent carbon is profiled and approved, as non-hazardous, ahead of the equipment pick up date. Notice of termination shall only terminate Customer's right to continue in possession of the Equipment. Customer shall continue to be responsible to Baker for all obligations under this Agreement. The Customer has inspected the Equipment rented pursuant to this Rental Agreement after their installation by BakerCorp and acknowledges that the Equipment is in good condition and that the installation is accepted by the Customer. Rental Agreement is not transferable. Details of the Customer's obligations and responsibilities are contained in the terms and conditions on the reverse side of this document. The individual signing below as or on behalf of the Customer agrees t[illegible] of the terms and conditions on the reverse side of this rental agreement, acknowledges receipt of the equipment in good working order and is fully familiar with its operation and use.

BY _____ TITLE _____ FOR _____
COMPANY NAME

PRINT NAME _____ DATE _____

SCHEDULED DELIVERY DATE/TIME _____ ACTUAL DELIVERY DATE/TIME _____ DRIVER INITIALS _____ CUSTOMER INITIALS _____

BKRF-158 Rev. 02/07

05/01/08

BakerCorp

12011-13-000

FIELD SERVICE REPORT DATE:

WORK ORDER NO.:

CUSTOMER: C2 RLM

TYPE OF SERVICE: EXCHANGE X DELIVERY ___ PICK-UP ___ RE-WORK ___ OTHER ___

QUANTITY / TYPE OF UNITS SERVICED: (2) KA 4,000

SITE NAME / CITY: C2 RLM - Carson **TRUCK NO:** 5

SITE CONTACT: **PHONE / PAGER NO:**

BAKER FILTRATION TECHNICIANS: Lito, Ricardo

SPECIAL INFORMATION:

TIME:
DEPART TIME:
ARRIVE TIME:
START TIME:
END TIME:

CARBON USAGE:
TYPE OF MEDIA USED: RIX6
AMOUNT USED: 4,000
LOT / PID #'S

PACKAGING:
TYPE USED: N/A
GENERATED:
LEFT AT SITE: YES NO
TOTAL AT SITE:

JOBSITE SAFETY REVIEW

None	UNSAFE CONDITIONS:
None	AT - RISK BEHAVIOR:
	PPE REQUIREMENTS: Hard Hat, steel toe shoes
Normal	SAFE JOB PROCEDURES:
None	SAFETY SUGGESTIONS:

RENTAL EQUIP. ORDERED FROM: **PHONE NO:**

EQUIPMENT TERMINATION NO: **FROM:**

DEPARTED TO ANOTHER JOB SITE FROM HERE: IF YES, WRITE NAME / CITY:

CUSTOMER COMMENTS:

CUSTOMER SIGNATURE: **DATE:** 5/9/08

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits PAGE 1 of 1

OJECT NUMBER: 97-101 DATE: 5/14/2008

WEATHER: Temperature: 65 Winds: light Precipitation: 0

DESCRIPTION OF THE WORK: Site visit to engineer new monitoring port & flow test system.

	Time Line
	8:00 AM
	9:00 AM
	10:00 AM
	11:00 AM
	12:00 PM SM & SA onsite.
	SM began irrigating the cap. SA calibrated the PID and entered the enclosure. No readings.
	1:00 PM
	Staff measured and found parts to place monitoring port between the 2 carbon vessels.
	Staff conducted flow tests on the system to isolate problem with low flows.
	2:00 PM
	2.30pm staff offsite.
	3:00 PM
	4:00 PM
	5:00 PM
	Special Notes

ared by: SEAMUS Mc GEOUGH Signed: Seamus Mc Geough

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits **PAGE** 1 of 1

PROJECT NUMBER: 97-101 **DATE:** 5/16/2008

WEATHER: Temperature: 85~ **Winds:** none **Precipitation:** None

DESCRIPTION OF THE WORK: **Inspetion of blower A with a technician to identify the flow failure**

Time Line	
9:00	SA arrived on-site and met with BW
9:30	BW/SA met with Bruce Blanchart from Yardley Pump and Vacuum, Inc.
	Bruce inspected the blower A and no problem was identified.
10:30	BW/SA inspected vacuum pressure at effluent, c1, post ambient air, and post air/water separater.
	Strong vacuum was monitored at effluent, c1, and post air/water separater, but not post ambient air.
	higher flow (~100 scfm) was observed at effluent when the plug at post air/water separater was removed because this allows extra air.
	The air/water separater seems to be restricting air flow, and it needs to be inspected.
	SA irrigated the cap through the day
12:30	BW off-site
	SA cleared all tools, etc.
1:30	SA off site.

Prepared by: Shinta Aizawa Signed: [signature]

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: 97-101 **PAGE** 1 of 1

PROJECT NUMBER: **DATE:** 5/21/2008

WEATHER: Temperature: ~75 **Winds:** windy **Precipitation:** None

DESCRIPTION OF THE WORK: **Installation of a new sampling port at post C1, Drainage/Containerize of liquid from air/water separator, inspection of air/water separator.**

Time Line	
10:00 AM	IY, SA, TT arrived on site
	met with BW and LAFD fire inspector and discussed jurisdiction and IY showed the property
	TT went to a home depot to purchase a hose and cramp to be used for drainage of liquid from air/water separator.
	SA monitor the flow and pressure to confirm the current system status.
	The system has been purged since 8 am.
	SA/BW/IY assembled the frame with the new sampling port and installed it.
	TT assenbled pump, hose, and cramp and attached air/water separator.
	IY/TT pumped liquid from the air/water separator and about 7~8 galons of liquid was pumped and containerized in the drum.
2:00 PM	Baker Filtration arrived on site with new employees.
	BW/IY/SA/TT opened the top lid and found out the fully saturated filter that restricted flow.
	BW indicated no filter is needed for the system, and the filter was removed.
	The lid was out back, and SA put the system back on with purging condition.
	Pressure and flow were taken at effkuent and post amboient air.
	Flow at effluent and post ambient = over 100 scfm.
	Pressure at effluent = ~60
	SA run the sytem with a normal condition.
	Blower B and dilution valve were adjusted.
3:00 PM	BW off-site
3:30 AM	IY/SA/TT off-site
	*need to purchase new insulation pipes to cover re-assembled pipes from today's work.
	(C1 new samping port area, and area of output of air/water separator)

Prepared by: Shinta Aizawa Signed:

IAN YUSKO

C_2 REM
FIELD DAILY REPORT

OJECT NAME: Del Amo Pits PAGE 1 of 1

PROJECT NUMBER: 97-101 DATE: 5/22/2008

WEATHER: Temperature: 65 Winds: moderate Precipitation: 0

DESCRIPTION OF THE WORK: Bi monthly GCTS monitoring & SVE/IBT monitoring, irrigate the cap, maintenance

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	TT and SM onsite.
	SM began irrigating the cap.
	TT calibrated the PID and cleared the enclosure for work
11:00 AM	Staff performed the GCTS monitoring.
	Staff performed the SVE/IBT monitoring.
12:00 PM	Staff took lunch onsite.
	12.30pm staff began to clean out and organize the Seatrain.
1:00 PM	
	Staff cleaned and organized all tools and equipment.
2:00 PM	Staff continued to irrigate the cap during the site visit.
	SM contacted All-Star about blowing out the drainage ditches and weeds around trailer.
3:00 PM	Staff offsite.
4:00 PM	
5:00 PM	
Special Notes	

..epared by: Seamus Mc Geough. Signed: [signature]

REM
DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 5/27/2008

WEATHER: Temperature: 85 Winds: None Precipitation: None

DESCRIPTION OF THE WORK: Haz. Waste pick-up, take SVE/IBT lab samples, calibrate LEL meter

Time Line	
8:00 AM	
9:00 AM	
9:30 AM	
10:00 AM	
11:00 AM	
11:15 AM	Arrive on-site with SM American Integrated Services, Inc. was outside front gate to come on-site to pick-up hazardous waste drum
11:45 AM	AIS, Inc. off-site with drum, SM turn on irrigation valves for above cap
12:00 PM	SM & IY perform follow-up monitoring on SVE/IBT system & take monthly lab samples SM pulls field and sample bags using pump lung while IY takes pressure & flow readings Monitor field bags using PID & RKI (See results in 2008 Logbook)
12:45 PM	SM packs new waste drum into secondary overpack container while IY begins calibration of AT2A LEL meter using processmeter & zero and span gases Takes several times using zero and span gas to get the meter back within its correct range
2:15 AM	Put away all toos and instruments, turn off all irrigation valves, lock all gates
2:30 PM	Depart from site

Special Notes

Prepared by: Ian Yusko

Seamus McGeough

Signed: [illegible]

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits **PAGE** 1 of 1

PROJECT NUMBER: 97-101 **DATE:** 5/30/2008

WEATHER: Temperature: ~70 **Winds:** slight **Precipitation:** None

DESCRIPTION OF THE WORK: Calibration of LEL Sensor (AT3A) and Carbon Change-out

Time Line	
11:30 AM	SM/SA arrived on-site
	SM/SA started calibration of LEL sensor (AT3A) at post carbon vessel1
12:15 PM	Baker Filtration arrived on-site
	Baker started carbon change-out
	Baker finished carbon change-out
	SM/SA continued calibration
	PT2 was adjusted when span gas was applied , but mA seems not responding.
	Calibration gas (1% propane) ran out
	Appropriate mA value was not achieved and calibration was not completed.
3:30 PM	SM/SA off-site
	Calibration for LEL Sensor (AT3A) needs to be completed when a new span gas was obtained.

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa
Seamus McGrath

BakerCorp

FIELD SERVICE REPORT DATE: 5/30/08 **WORK ORDER NO.:** 1206786

CUSTOMER: Q2 KEM

TYPE OF SERVICE: EXCHANGE ✓ DELIVERY ___ PICK-UP ___ RE-WORK ___ OTHER ___

QUANTITY / TYPE OF UNITS SERVICED: (2) 2000 gal HYB

SITE NAME / CITY: Sunoco Co **TRUCK NO:** FT. S

SITE CONTACT: Ian Jucko **PHONE / PAGER NO:** [illegible] 8098

BAKER FILTRATION TECHNICIANS: Reno / [illegible]

SPECIAL INFORMATION:

TIME:	CARBON USAGE:	PACKAGING:
DEPART TIME: [illegible]	TYPE OF MEDIA USED: R 4x8	TYPE USED: S/S
ARRIVE TIME: [illegible]	AMOUNT USED: [illegible]	GENERATED: [illegible]
START TIME: [illegible]	LOT / PID #'S 8054 / 24500	LEFT AT SITE: YES NO
END TIME: [illegible]	2000 / 2000	TOTAL AT SITE: [illegible]

JOBSITE SAFETY REVIEW

	UNSAFE CONDITIONS:
	AT - RISK BEHAVIOR:
✓	PPE REQUIREMENTS:
	SAFE JOB PROCEDURES:
	SAFETY SUGGESTIONS:

RENTAL EQUIP. ORDERED FROM: **PHONE NO:**

EQUIPMENT TERMINATION NO: **FROM:**

DEPARTED TO ANOTHER JOB SITE FROM HERE: IF YES, WRITE NAME / CITY:

CUSTOMER COMMENTS: Good Job, [illegible]

CUSTOMER SIGNATURE: [illegible] **DATE:**

BAKERCORP™

4306 W. 190TH STREET
TORRANCE, CA 90504

P 310-303-3700 FAX# 310-406-3001

Remit To:
BAKERCORP
P.O. Box 513967
LOS ANGELES, CA 90051-3967

Job Site:
C2 REM- CARSON JOB SITE
20245 S. VERMONT AVE.
DEL AMO, CA 99999

C#: 949-261-8098 J#:

S A L E S O R D E R

Order #..... 1206786-000
System date. 5/30/08
Terms..... Net 30
Order date.. 5/30/08
Job Loc..... 20245 S. VERMONT AVE., DEL AMO
Job No..... 1 - C2 REM- CARSON J
P.O. #..... VERBAL
Ordered By.. IAN
Reference #.

Quote.....
Reservation.

Customer #: 223098
C2 REM
2382 Southeast Bristol
Suite B
Newport Beach, CA 92660

Qty	Description	Unit
1	**TURNKEY** 101 ON MAY 29, 2008: TURNKEY SERVICE OF (2) KA2000S WITH 2000 LBS EACH OF BF R4X8 ACTIVATED VAPOR PHASE CARBON.	AT
1	**FORKLIFT RENTAL** 600	AT
4000	**REACTIVATED CARBON 4X8** R4X8	LB
4	**SUPERSACK BLACK NON-DOT** SUPERSACK	EA
1	**NOTE:** NOTE: WE WANT A TOTAL WEIGHT OF FRESH CARBON GOING INTO EACH VESSEL, AND A TOTAL WEIGHT OF SPENT COMING OUT. PLEASE WEIGH BAGS GOING OUT AND DOCUMENT TO ASSIGNED VESSEL. DOCUMENT SPENT TO SPECIFIC VESSEL AND WEIGH EACH BAG ON RETURN TO BF YARD. PLEASE CALL C2 REM WITH ALL WEIGHTS ONCE COMPLETE.	EA

DAMAGES /CLEANING Y / N _____ DELIVERY TIME AND/OR SET UP CHARGES: _____

READ BEFORE SIGNING: Customer agrees to rent the Baker Equipment described in this Rental Agreement under the terms and conditions set forth on the face and on the reverse side hereof, which the undersigned has read and understands, for a term beginning on the date hereof and ending on written or oral notice of termination given by either party to the other before 5:00pm on or before the last business day of each rental cycle. Spent carbon in rental equipment will only be picked up along with the rental equipment if the spent carbon is profiled and approved, as non-hazardous, ahead of the equipment pick up date. Notice of termination shall only terminate Customer's right to continue in possession of the Equipment. Customer shall continue to be responsible to Baker for all obligations under this Agreement. The Customer has inspected the Equipment rented pursuant to this Rental Agreement after their installation by BakerCorp and acknowledges that the Equipment is in good condition and that the installation is accepted by the Customer. Rental Agreement is not tr[illegible]ble. Details of the Customer's obligations and responsibilities are contained in the terms and conditions on the reverse side of this document. The individual signing below as or on behalf of the Customer agrees t[illegible] the terms and conditions on the reverse side of this rental agreement, acknowledges receipt of the equipment in good working order and is fully familiar with its operation and use.

BY_____ TITLE _____ FOR _____
COMPANY NAME

PRINT NAME_____ DATE _____

SCHEDULED DELIVERY DATE/TIME _____ ACTUAL DELIVERY DATE/TIME _____ DRIVER INITIALS _____ CUSTOMER INITIALS _____

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: De Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 06/02/2008

WEATHER: Temperature: ~75 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: Site visit to inspect carbon vessels for potential leak.

Time Line	
10:30 AM	SA/SM arrived on-set, met BW, the landscaper was already on site.
	SA purged the system and took a flow at post ambient air and effluent
	Flow = ~65 @ post ambient air, and ~100 scfm @ effluent
	BW/SM identified smalll leak at air/water separater lid, and SA tightened it.
	SA identified leaks at carbon vessel lids at both carbon vessel.
11:00 AM	Baker Filtration arrived on-site
	Baker placed gasket sealant and re-tightened the lids.
	SA turned the system back on (purge) and took a flow at post ambient air.
	Flow >110 scfm.
	The system was turned back on the normal operation.
	BW/SM/SA inspect oxygen generator and identified air filter needs to be cleaned out.
	The cap was irrigated through the day.
1:30 PM	SA/SM off-site
	Oxygen generator is currently off, air filter needs to be cleaned out and re-installed.

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

Seamus McGrath

C_2 REM
FIELD DAILY REPORT

OJECT NAME: Del Amo Pits PAGE 1 of 1

PROJECT NUMBER: 97-101 DATE: 6/5/2008

WEATHER: Temperature: 72 Winds: light Precipitation: 0

DESCRIPTION OF THE WORK: Bi-monthly monitoring, SVE/IBT and GCTS

Time Line	
8:00 AM	
9:00 AM	9.30 SA & SM onsite, SVE system running.
10:00 AM	SA calibrated the PID and cleared the enclosure for entry.
	SM began irrigating the cap.
	Staff performed the monitoring on the SVE and GCTS systems.
11:00 AM	SM tested the eye wash station, it is working normally.
	We also replaced filter on the O2 generator, and restarted.
12:00 PM	11.15 staff offsite.
1:00 PM	
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	Landscaping on the site has not been completely finished, the drains have not been blown out, and weeding in front of the trailer has not been completed.

Prepared by: Seamus Mc Geough. Signed: [illegible]

C_2 REM

FIELD DAILY REPORT

OJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 6/9/2008

WEATHER: Temperature: ~80 Winds: slight Precipitation: none

DESCRIPTION OF THE WORK: Calibration of LEL Sensor (AT3A) and Site Maintenance

Time Line	
11:00 AM	BW/SM/SA arrived on-site
	SA/SM took GCTS Samples to confirm the system efficiency and to determine whether carbon change out is needed or not.
	Inlet = 0.7~0.9, C1 = 2.5~2.6, C2 = 2.5, and Effluent = 2.7
	BW measured manifolds and check inventry of parts for rebuilding.
	SA/SAM/BW calibrated LEL sensor (AT3A), using zero gas and 1.05% propane (50% LEL).
	BW off site
	SA cleaned out the site trailer, and SM cleaned out enclosure.
3:00	SA/SM off site
	Note: Carbon vessel 1&2 need to be changed out.

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

Seanuke Jaff

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 6/11/2008

WEATHER: Temperature: 83 Winds: None Precipitation: None

DESCRIPTION OF THE WORK: Check Site condition, Install locks on injection security cages

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
12:00 PM	
1:00 PM	
2:00 PM	
2:40 PM	Arrive on-site with SM
	Check Site conditions (landscaper's duties are complete, all debris has been blown from ditches and Site is completely mowed and trimmed)
	SM & IY install locks on each of the 4 injection well security cages to limit access to wells to employees only
	Take photos of Site conditions & newly installed locks
3:20 PM	Depart from Site

Special Notes

Prepared by: Ian Yusko

Seamus McGeough

Signed: Seamus McGeough

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 6/23/2008

WEATHER: Temperature: ~80 Winds: slight Precipitation: none

DESCRIPTION OF THE WORK: site visit to restart computers and routers to fix VNC Viewer and security camera access failuar, preparation of the full scale monitoring

Time Line

11:30 AM IY/SA arrived on-site, the system was on.

IY looked for cam locks and hose to assemble purge system for the full scale monitoring.
SA restarted computers of VNC Viewer and security camera.
SA called SM in the office to verify the accessibility to the VNC Viewer and security camera.

12:00 PM IY/SA off-site

Prepared by: Shinta Aizawa
IAN YUSKO

Signed: [signature]

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 6/25/2008

WEATHER: Temperature: ~80 Winds: slight Precipitation: none

DESCRIPTION OF THE WORK: Bi-Monthly SVE/IBT Enclosure Monitoring w/ lab samples and GCTS Monitoring.

Time Line	
	SM/TT/SA stopped at EnviroSupply to pick up tedlar bags.
	SM/TT/SA stopped at Hoseman to pick up hose and camlocks.
	SM/TT/SA stopped at Grainger to pick up heat gun.
11:30 AM	SM/TT/SA arrived on-site
	SM started to assemble the hose and camlocks for the purge system.
	TT/SA started monitoring the system.
	GCTS Monitoring:
	samples were taken from Inlet, C1, C2, and Effluent.
	VOCs were moniotred with MiniRae 2000 PID.
	Flows and temperatures were monitored at Inlet and effluent
	SVE/IBT Enclosure Monitoring:
	samples were taken from Inlet, Post Ambient Air, Carbon1, and Effluent, usisng 1L tedlar bags and pump/lung system.
	Lab samples were taken right after the field samples at each location with the same methods.
	VOCs were monitored with MiniRae 2000 PID
	LEL methane, oxygen, carbon dioxide, hydrogen sulfide were moniotred with RKI Eagle.
	Pressures were taken with magneelic.
	Flows were monitored with velocicalc.
	Inline senseors were read and recorded where applicable.
3:00 PM	off-site

Prepared by: Shinta Aizawa

Signed:

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 6/26/2008

WEATHER: Temperature: ~80 Winds: slight Precipitation: none

DESCRIPTION OF THE WORK: 2nd Quarterly Full Scale Monitoring

Time Line	
6:15 AM	IY/SM/TT/SA arrived on-site
	The system was on since 5:30 AM
	Flow rate at FT01 (treatment rate) was 4~5 scfm (lower rate than usual)
	Prepared for monitoring
7:00 AM	SM/TT Opened well lids and IY/SA took pressures with and magneheic (0-1, and 0-15 in. water). SM/TT took monitored perimeter wells I, J, K, and L with PID and RKI after they took pressures and purged wells.
9:00 AM	Completed taking pressures and the shuted down the sytem
9:15 AM	SM/TT started to purge perimeter wells, vacuum performance wells, and cluster wells, and IY/SA started to monitor the wells with PID and RKI.
12:00 PM	Completed monitoring perimeter, vacuum performance, and cluster wells.
1:00 PM	prepared for the purge system for the SVE wells.
	SM/TT went to Homedepot to rent generator.
2:00 AM	IY/SM started to purge SVE Wells, and TT/SA started to monitor the SVE wells.
	RKI showed error message "sensor failur zero level", TT opened RKI to check and noticed one wiring connection failur. The wiring was re-connected and RKI started to work again.
4:30 AM	Completed monitoring SVE wells.
	VOCs were monitored with MiniRae 2000 PID.
	LEL methane, oxygen, carbon dioxide, and hydrogen sulfide were monitored with RKI Eagle.
	Pressures were monitored with Magnehelic.
	All wells wee purged three pore volume before monitoirng.
4:45 AM	Off-site
	Note: VOCs at perimeter wells seem not normal and need to be re-monitored.

Prepared by: Shinta Aizawa

Signed:

IAN YUSKO

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits **PAGE** 1 of 1

PROJECT NUMBER: 97-101 **DATE:** 7/1/2008

WEATHER: Temperature: ~85 **Winds:** slight **Precipitation:** none

DESCRIPTION OF THE WORK: Follow-up Supplemental Monitoring for 2nd full scale monitoring

Time Line	
11:00 AM	SM/SA arrived on-site
	sytem was on, but soon shutted down.
	SM/SA prepared for monitoring.
	SM/SA started monitoring perimeter wells in the park, and conducted site inspection.
12:30 PM	SM/SA started monitoring perimeter wells A~H, and then cluster wells E" and G" were monitored.
	VOCs were monitored with MiniRae 2000 PID (1) and (2) calibrated to 5 ppm of benzene.
	LEL, Oxygen, Cabon Dioxide, and Hdrogen Sulfide were monitored with RKI Eagle.
	All wells were puged 3 pore volume before monitoring.
	PID (2) read siginificantly higher VOCs than PID (1) in most wells.
	SA re-calibrated both PIDs, but PID (2) read higher than PID (1).
	See monitoring form for the results.
	Inspection of PID is needed for the both PID.
3:00	SM/SA off-site

Prepared by: Shinta Aizawa

Signed: [illegible]

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 7/8/2008

WEATHER: Temperature: 88 Winds: Light Precipitation: None

DESCRIPTION OF THE WORK: Verify Specs for Rebuild of the Manifold System & Carbon Change-Out

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
	SM/IY/SK on-site
12:00 PM	
	Began preparing for rebuilding of the Manifold
	Took inventory of all necessary parts on-site & any parts to be acquired for the rebuild
1:00 PM	Measured specs where current manifold is to ensure proper installation of new manifold
2:00 PM	Baker Corp. arrived on-site
	Baker Corp. begins carbon change-out
3:00 PM	Awaiting arrival of the forklift rental to lift bags of fresh carbon over vessels to fill them
	Forklift arrives & Baker completes carbon change-out on SVE/IBT system
	Clean-up site trailer, Clean-up equipment and tools
4:00 PM	Baker Corp. off-site
	SM/IY/SK off-site
5:00 PM	
Special Notes	Need to coordinate date with Baker Corp. to come on-site and perform carbon change-out of GCTS unit (two 55-gallon carbon drums)

Prepared by: Ian Yusko

Signed: Ian Yusko

BakerCorp

FIELD SERVICE REPORT DATE: 12/08/08 **WORK ORDER NO.:** 1210025-000

CUSTOMER:

TYPE OF SERVICE: EXCHANGE X DELIVERY ___ PICK-UP ___ RE-WORK ___ OTHER ___

QUANTITY / TYPE OF UNITS SERVICED: (2) 2 A 28005

SITE NAME / CITY: Nd Nino **TRUCK NO:** 5

SITE CONTACT: **PHONE / PAGER NO:**

BAKER FILTRATION TECHNICIANS: Irvin, Ricardo

SPECIAL INFORMATION:

TIME:	**CARBON USAGE:**	**PACKAGING:**
DEPART TIME: 1:30	TYPE OF MEDIA USED: RHX8	TYPE USED: 1/5
ARRIVE TIME: 2:00	AMOUNT USED:	GENERATED:
DEPART TIME: 4:00	LOT / PID #'S	LEFT AT SITE: YES (NO)
E TIME:		TOTAL AT SITE:

JOBSITE SAFETY REVIEW

none	UNSAFE CONDITIONS:
none	AT - RISK BEHAVIOR:
yes	PPE REQUIREMENTS:
normal	SAFE JOB PROCEDURES:
none	SAFETY SUGGESTIONS:

RENTAL EQUIP. ORDERED FROM: Hertz **PHONE NO:**

EQUIPMENT TERMINATION NO: **FROM:**

DEPARTED TO ANOTHER JOB SITE FROM HERE: IF YES, WRITE NAME / CITY:

CUSTOMER COMMENTS:

CUSTOMER SIGNATURE: **DATE:** 12/8

BAKERCORP™

4306 W. 190TH STREET
TORRANCE, CA 90504

PHN# 310-303-3700 FAX# 310-406-3001

Remit To:
BAKERCORP
P.O. Box 513967
LOS ANGELES, CA 90051-3967

Job Site:
C2 REM- CARSON JOB SITE
20245 S. VERMONT AVE.
DEL AMO, CA 99999

C#: 949-261-8098 J#:

S A L E S O R D E R

Order #..... 1210525-000
System date. 7/07/08
Terms..... Net 30
Order date.. 7/07/08
Job Loc..... 20245 S. VERMONT AVE., DEL AMO
Job No..... 1 - C2 REM- CARSON J
P.O. #..... VERBAL
Ordered By.. IAN
Reference #.

Quote.....
Reservation.

Customer #: 223098
C2 REM
2382 Southeast Bristol
Suite B
Newport Beach, CA 92660

Qty	Description	Unit
1	TURNKEY 101 ON JULY 8, 2008: TURNKEY SERVICE OF (2) KA2000S WITH 2000 LBS EACH OF R4X8 ACTIVATED VAPOR PHASE CARBON.	AT
1	FORKLIFT RENTAL 600	AT
4000	REACTIVATED CARBON 4X8 R4X8	LB
4	SUPERSACK BLACK NON-DOT SUPERSACK	EA

DELIVERY INSTRUCTIONS:
PLEASE WEIGH BAGS GOING OUT AND DOCUMENT TO ASSIGNED VESSEL. DOCUMENT SPENT TO SPECIFIC VESSEL AND WEIGH EACH BAG ON RETURN TO BF YARD.

DAMAGES /CLEANING Y / N _____ DELIVERY TIME AND/OR SET UP CHARGES: _____

READ BEFORE SIGNING: Customer agrees to rent the Baker Equipment described in this Rental Agreement under the terms and conditions set forth on the face and on the reverse side hereof, which the undersigned has read and understands, for a term beginning on the date hereof and ending on written or oral notice of termination given by either party to the other before 5:00pm on or before the last business day of each rental cycle. Spent carbon in rental equipment will only be picked up along with the rental equipment if the spent carbon is profiled and approved, as non-hazardous, ahead of the equipment pick up date. Notice of termination shall only terminate Customer's right to continue in possession of the Equipment. Customer shall continue to be responsible to Baker for all obligations under this Agreement. The Customer has inspected the Equipment rented pursuant to this Rental Agreement after their installation by BakerCorp and acknowledges that the Equipment is in good condition and that the installation is accepted by the Customer. Rental Agreement is not transferable. Details of the Customer's obligations and responsibilities are contained in the terms and conditions on the reverse side of this document. The individual signing below as or on behalf of the Customer agrees to all of the terms and conditions on the reverse side of this rental agreement, acknowledges receipt of the equipment in good working order and is fully familiar with its operation and use.

BY _____ TITLE _____ FOR _____
COMPANY NAME

PRINT NAME _____ DATE _____

SCHEDULED DELIVERY DATE/TIME _____ ACTUAL DELIVERY DATE/TIME _____ DRIVER INITIALS _____ CUSTOMER INITIALS _____

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 7/10/2008

WEATHER: Temperature: Winds: Light Precipitation:

DESCRIPTION OF THE WORK: Rebuild of the SVE/IBT Manifold System

Time Line	
8:00 AM	SM/IY/TT/SK on-site
	Prepare Health & Safety PPE for staff on-site
9:00 AM	Set-up all equipment needed to rebuild the manifold
	Turned SVE/IBT system off
10:00 AM	Began removing parts of the current manifold
	All piping & fittings were placed on Visquine sheeting for later disposal into 55-gallon drums
11:00 AM	Completed removing old manifold from enclosure location to make way for the construction and installation of the new manifold
12:00 PM	Begin building the newly designed manifold, using schedule 80 PVC piping (all grey) & fittings (90 degree elbows, tees, true union ball valves, etc...with all connections being made using PVC primer and glue)
1:00 PM	
2:00 PM	
3:00 PM	Completed extraction portion of manifold (SVE wells 1,2,5,6,7,10,11, & 12 #20A) & connected that portion to each extraction riser behind the enclosure that lead to the wellfield
4:00 PM	Clean up all equipment, parts, & tools
5:00 PM	SM/IY/TT/SK off-site
Special Notes	Will finish injection side of new manifold tomorrow & containerize the old manifold

Prepared by: Ian Yusko

Signed: Ian Yusko / Seamus McGeagh

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 7/11/2008

WEATHER: Temperature: 87°F Winds: Light Precipitation: None

DESCRIPTION OF THE WORK: Rebuild of the Manifold System

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
	SM/IY on-site
11:00 AM	Set-up all materials & tools to finish rebuild of new manifold.
	Begin work on injection portion (wells 3,4,8, & 9) of the manifold
	Staff is using all grey schedule 80 PVC piping and fittings including 90 degree elbows, tees,
12:00 PM	true union ball valves, etc...with all connections being made using PVC primer and glue.
	Completed injection portion of manifold (SVE wells 3,4,8,& 9) & connected
1:00 PM	portion to each injection riser behind the enclosure that lead to the wellfield
	Staff took lunch
2:00 PM	
	Staff back on-site to cut-up & containerize old manifold parts into two 55-gallon drums
3:00 PM	
4:00 PM	Staff completed containerizing all of old manifold, labeled drums, & sealed them tight
	Staff cleaned up all tools and materials
	Staff Offsite
5:00 PM	
Special Notes	Staff will begin pressure testing the newly built manifold & all SVE wells next week
	SVE/IBT system will remain off during all tests and possible maintenance

Prepared by: Ian Yusko

Signed: Seamus Mc Geagh

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 7/14/2008

WEATHER: Temperature: Winds: Light Precipitation:

DESCRIPTION OF THE WORK: Pressure testing of manifold and conveyance piping.

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	11.30 SM & IY onsite
	Staff set up pressure test equipment, air compressor, pressure gauge and 0-100 magnehelic
	The protocol for the pressure test is to pressurize the system to 90-100 inches of water
12:00 PM	for 5 minutes, to pass the test piping must hold 95% of pressure for 5 minutes.
	Staff then tested the extraction side of the new manifold, it passed..
	Staff then tested the injection side of the manifold, it did not pass. Staff leak tested all of the
1:00 PM	joints, no leaks were found. A helium pressure test will be conducted tomorrow.
	Staff took lunch.
2:00 PM	Staff began pressure testing the conveyance piping from the well heads to the manifold.
	Staff used the same testing protocol, 90-100 inches of water pressure for 5 mins.
	On the extraciton side wells 1, 6, 11, & 12 passed. 2,7,10,20a did not pass
3:00 PM	. The source of the failure on these wells was determined and will be corrected before the end.
	of the week.
4:00 PM	
5:00 PM	
	Staff packed up all equipment and secured the site.
	4.30pm staff offsite
Special Notes	

Prepared by: IAN YUSKO

Signed: Ian Yusko

C_2 REM
FIELD DAILY REPORT

)JECT NAME: Del Amo | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 7/15/2008

WEATHER: Temperature: | Winds: Light | Precipitation:

DESCRIPTION OF THE WORK: Preesure Testing of manifold and conveyance piping

Time Line	
9:45 AM	SA went to Ashtead Technology Rentals to pick up helium detector and went to PraxAir to pick up helium gas
10:30 AM	IY/SM on-site
	IY/SM prepared for pressure testing, started shoveling to identy leaks
11:00 AM	SA on-site
	Pressure testing was conducted at the front side of the manifold for injection wells with helium gas.
	No helium was detected on the suface of manifold, but helium gas leaked through the ball valves and it was detected at back side of the manifold.
	Pressure testing was conducted on the conveyance piping from wellheads to manifold for injection wells.
	Well #s 4 and 8 passed, 3 & 9 did not pass.
	The source of the pressure drop on #9 was determined and corrected
	The source of the pressure drop on #3 could not be determined at wellhead and manifold, and it is suspected that there would be a fault in the underground piping.
2:30 PM	Off-site

Special Notes

Prepared by: Shinta Adama

Signed: Shinta Adama

C_2 REM
FIELD DAILY REPORT

OJECT NAME: Del Amo | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 7/16/2008

WEATHER: Temperature: Winds: Light Precipitation:

DESCRIPTION OF THE WORK: Pressure Testing of manifold and conveyance piping.

Time Line	
10:00 AM	IY/SM/SA on-site
	Staff prepared for pressure testing
	IY/SM re-tested several wells for pressure, SA went to PraxAir to pick up helium gas.
	Pressure testing was conducted on the conveyance piping from wellhead to manifold.
	Well #s 3 and 9 did not pass
	One end of the union ball valve was plugged to prevent potetial leaks through the ball valve.
	Pressure testing still did not pass at 3 and 9.
	some leaks were found at 9's wellhead and caulked.
	some helium was detected inside of 3's wellhead at post ball valve, but could not confirmed due to te sensitivity of helium detector.
	Pressure testing was conducted on the conveyance piping from wellhead to manifold for 20A, and did not pass, even did not build up pressure more than 40 in. water.
	The sorce of the failur could not be determined at manifold and wellhead, it is suspected that there would be a fault on the underground piping.
	Pressure testing was conducted on ht econveyance piping from wellhead to manifold for well #7.
	Staff re-tighten an union at 7's wellhead, and the union was broken.
	The union at 7's wellhead needs to be replaced.
4:30 PM	Off-site

Special Notes

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 7/17/2008

WEATHER: Temperature: 80 Winds: Light Precipitation: 0

DESCRIPTION OF THE WORK: Site Visit to Identify and repair well leaks.

Time Line	
8:00 AM	
9:00 AM	
	[redacted]IY & SM onsite.
10:00 AM	Staff repaired broken union at wellhead # 7 by replacing piping and union.
	Staff used caulk and sealant on well #'s 2, 10 & 9 to attempt to seal leaks.
	JC onsite to see progress and assist with testing and safety protocols.
11:00 AM	Staff began digging to expose conveyance piping for well # 3, staff contiued to search for leak
	using pressure testing, no leak was discovered.
12:00 PM	Staff took lunch. JC offsite.
	Staff pressure tested the repairs made in the morning, all repairs had failed.
	Staff did not test # 7 to allow repairs to cure.
1:00 PM	
	Staff began replacing the conveyance piping going into well # 2, with a new union, and
2:00 PM	piping from the ground into the well.
3:00 PM	SK onsite to see progress of repairs.
4:00 PM	Repairs to well # 2 completed, SK offsite.
	Staff packed up all equipment and secured the site.
	4.30 all staff offsite.
5:00 PM	

Special Notes

Prepared by: SEAMUS M. CROUGH
IAN YUSKO

Signed: Seamus M. Crough
Ian Yusko

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits **PAGE** of 1

PROJECT NUMBER: 97-101 **DATE:** 7/18/2008

WEATHER: Temperature: ~80 **Winds:** slight **Precipitation:** none

DESCRIPTION OF THE WORK: Pressure Testing and fixing leaks

Time Line	
10:30 AM	SA/SM on-site
	At the 10's and 9's wellheads, the source of leaks were determined and corrected.
11:30 AM	IY on-site
	pressure testing was conducted on the conveyance piping from wellhead and manifold for well #s 2, 7 and 10, and #s 2 and 7 passed, but #10 did not pass, it probably blow through the glue before it's dried completely.
	To locate leaks, the conveyance piping of #9 was cut at the half way point, and the both ends were capped for the pressure testing.
	The one closer to the manifold did not pass pressure testing, and there should be a fault on the underground piping in that section.
2:00 PM	IY Off-site
	SA went to HomeDepot to get caps and adaptors for further pressure testing
	The conveyance piping of #9 was cut at the first corner joint near the back gate, and the both ends were capped.
	Pressure test was conducted and the one farther to the manifold did not pass and there should be a fault on the underground piping in that section.
4:30 PM	SA/SM off-site

Prepared by: Shinta Aizawa Signed: Shinta Aizawa

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 7/21/2008

WEATHER: Temperature: ~80 Winds: slight Precipitation: none

DESCRIPTION OF THE WORK: Locating leaks at well 3 and 20A

Time Line	
10:00 AM	IY/SM arrived on-site
	IY/SM dug sand to expose pipes and joints to find potential leaks on the line for well #3.
	Bubble test was conducted at all joints, and the source of the leak was determined at one joint.
	The joint was tightened and the leak stopped.
1:00 PM	SA/TT arrived on-site
	To locate leaks, 20A was cut at the half way point (second corner from the enclosure), and the both ends were capped for pressure testing.
	The one side closer to the enclosure dd not pass pressure testing.
	SA/SM/TT dug sand to expose the joint in the first corner for identifying leaks of 20 A.
	20 A was cut at the first corner and pressure test was conducted for both side.
	The one closer to the enclosure failed pressure testing, and SA/SM/TT continued digging sand to expose all pipes and joints for the conveyance piping of 20A.
4:30 PM	Off-site

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

C_2 REM

FIELD DAILY REPORT

.OJECT NAME:

PROJECT NUMBER:

PAGE 1 of 1

DATE: 7/24/2008

WEATHER: Temperature: ~80° Winds: slight Precipitation: none

DESCRIPTION OF THE WORK: Site inspection for the system start up and SVE/IBT Enclosure Monitoring, GCTS Monitoritng

Time Line	
10:00 AM	SM/SA arrived on-site
	SA confirmed all ball valves at wellheads were opened, and started the system back up.
	Flows at manifold for each well were adjusted.
	Total flow at inlet = ~50
	SM noticed some leaks on 9 at the bottom of the manifold.
	SM/SA re-built the leaking section.
	SM went to HomeDepot to pick up sand packs to cover pipes where repaired.
	SA prepared for the monitoring.
12:00 PM	SK/IY arrived on-site
	SA Started GCTS Monitoring.
	SM/IY/SK Started placing sand packs
2:00 PM	SA/SM conducted SBE/IBT Enclosure Monitoring.
3:45 PM	Off-site
	Note:
	See the monitoring forms for the monitoring results.
	Pressure test needs to be conducted at well 9, and flows at manifold needs to be adjusted
	Well 9 is currently closed.

Prepared by: Shinta Arizawa

Signed: Shinta Arizawa
Seamus McGarry

C_2 REM
FIELD DAILY REPORT

OJECT NAME: Del Amo Pits PAGE 1 of 1

PROJECT NUMBER: 97-101 DATE: 7/28/2008

WEATHER: Temperature: Winds: slight Precipitation: none

DESCRIPTION OF THE WORK: Re-sampling GCTS and Flow Adjustment at manifold.

Time Line	
1:00 PM	SM/SA on-site
	Prepared for monitoring equipments, purged tedlar bags
	GCTS Monitoring
	samples were taken from inlet, C1, C2, and effluent, using a pump/lung and 1L of tedlar bags
	VOCs were monitored with PID 1 calibrated to 50 ppm benzene
	Flows were monitored at inlet and effluent with velocicalc
	Temperature was monitored at inlet and effluent with the temperature gauges
	SA/SM changed configuration of carbon vessel
	2nd samples were taken and moitored.
	the system was not operating as designed and SA shut it off
	Please see monitoring form for the results
	Flow Adjustment at the manifold
	Well #9 was opened and bubble testing was conducted. No leak was found.
	Flows at each conveyance piping at manifold were monitored with velocicalc, and adjusted.
	Please see the moitorng form for the results
2:30 PM	Off-site

Prepared by: Shinta Arzawa Signed: Shinta Arzawa

~~Monitoring of Perimeter Wells during long-term operations~~

Monitored by: SA/SM
Date: 7/28/08
Weather: Sunny.

Well ID	Flow - 1st	Flow - 2nd
1	7.0	
2	12.5	
3	14.0	10.5
4	8.2	
5	11.8	
6	7.1	
7	5.5	
8	10.5	
9	7.5	
10	7.5	
11	13.3	
12	3.5	
20A	7.0	
Inlet.	43	45.
Recycle	33~36.	
Treatment	11.3	

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits PAGE 1 of 1

PROJECT NUMBER: 97-101 DATE: 7/30/2008

WEATHER: Temperature: 80 Winds: Light Precipitation: 0

DESCRIPTION OF THE WORK: Site clean up and maintenance, Bi-monthly monitoring.

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	SM & TT onsite
	Staff secured all injection well cages.
11:00 AM	Staff covered up all conveyance piping uncovered during pressure testing.
12:00 PM	
1:00 PM	Staff took lunch
	1.15pm staff conducted bi-monthly monitoring of the GCTS system and SVE system
2:00 PM	1.30 SK onsite for H&S inspection
	TT assembled new weed eater, and blower attachment. TT blew out the enclosure
	& one of the ditches, he also tidied up some of the weeds along the drain.
3:00 PM	SM washed down the enclosure.
	SK & SM walked the site and noted some work to be completed tomorrow.
4:00 PM	
5:00 PM	

Special Notes

Prepared by: _____ Signed: _____

C_2 REM

FIELD DAILY REPORT

.OJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 7/31/2008

WEATHER: Temperature: ~85 Winds: slight Precipitation: none

DESCRIPTION OF THE WORK: Site Miantenance

Time Line	
12:00 PM	SA/ SM on-site
12:30 PM	SK/IY on-site
12:50 PM	SK/IY off-site
	SA cleaned out gravels and blew sediments in the V-ditch.
	SM went to the park to pick up trash.
	SA placed a well lid on the cluster well A.
2:00 AM	URS's contractor arrived on-site to maintained grandwater well maintenance.
	SA/SM off-site

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

Seamus Murphy

C2 REM
FIELD DAILY REPORT

PROJECT NAME: PAGE 1 OF 1

PROJECT NUMBER: DATE: 8/1/08

WEATHER: Temperature 70° Winds: Precipitation:

DESCRIPTION OF THE WORK: 3rd Qt. Site Inspection

9:00 am: arrive on-site to conduct 3rd Qt. Site Inspection

- Individuals in Attendance: Dante Rodriguez, USEPA
  Ted Peng, DTSC
  Safouh Sayed, DTSC
  George Landreth, Shell
  Pat Gobb, Newfields
  Edmond Bowie, C2 REM

- Walk site to observe components of remedy system. See attached Inspection forms for inspection results.

Prepared by: Stefan Klemm Signed: Stefan Klemm

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 8/1/2008

WEATHER: Temperature: 88 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: 3rd Quarterly Site Inspection

Time Line	
8:00 AM	SM & IY arrive on-site
	Check enclosure with PID for any fugitive emissions, etc...(ENCLOSURE CLEAR)
	Prepare proper PPE on fold-out table in front of enclosure entrance (hard hats, ear protection)
8:40 AM	Safouh & Ted of DTSC arrive on-site, sign-in, & put on necessary PPE
9:00 AM	Ed & Stefan of C2REM, George of SOPUS, Pat of Newfields, & Dante of USEPA arrive onsite
	They all signed in & put on necessary PPE
	Conduct tailgate H&S meeting regarding health and safety topics on-site
	Performed Site Walk & Inspection of entire site from the enclosure (both SVE/IBT & GCTS systems) to the wellfield & drainage ditches to the perimeter boundaries of the property
10:15 AM	All participants completed 3rd Quarterly Site Inspection of the property
	All participants departed from the site
10:30 AM	SM & IY identified some gopher holes & caulking repairs, which the participants mentioned, that are needed
11:00 PM	SM & IY put away all PPE & departed from site
12:00 PM	
1:00 PM	
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	Staff will perform caulking repairs & other site maintenance in the coming weeks

Prepared by: Ian Yusko

Seamus McGeough

Signed: Ian Yusko

Seamus McGeough

C_2 REM
FIELD DAILY REPORT

.OJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 8/7/2008

WEATHER: Temperature: ~85 Winds: slight Precipitation: none

DESCRIPTION OF THE WORK: Monitoring GCTS, SVE/IBT system, and O_2 purity, Caulking V-ditch, Flagging on new gopher holes

Time Line	
12:00 PM	SA/TT on-site
	SA Conducted GCTS Monitoring, TT put flags on new gopher holes.
	GCTS Monitoring
	Samples were taken from inlet, C1, C2, and Effluent, usisng a pump/lung and 1L tedlar bags
	Flows and temperatures were monitored with velocicalc and temperature gauges at inlet and effluent
	VOCs were monitored with PID
	See the monitoring form for results.
2:00 PM	SA/TT conducted SVE/IBT Enclosure Monitoring
	Samples were taken from inlet, post ambient air, C1, and effluent, usisng pump/lung and 1L tedlar bags.
	VOCs were moniotred with PID.
	LEL, O2, CO2 were monitored with RKI Eagle.
	Flows and pressures were monitored with velocical and magnehelic
	O2, LEL, and flows were monitored with inline sensors where applicable.
	SA took a samplefrom oxygen generator with a 3L tedlar bag to monitor O2 purity
	O2 purrity was monitored with maxtec oxygen analyzer OM-25A
	The reading was about 87%, and it incresed up to 95% if pressure applied on the tedlar bag.
	SA/TT started caulking V-ditch behind trailer.
3:00 PM	Off-site
Note:	AT2B, AT4B (in-line O2 sensors) needs calibration or repairs.
	Carbon vessel 1 is close to saturation

Prepared by: Shinta Aizawa

Signed: [signature]

C_2 REM

FIELD DAILY REPORT

.OJECT NAME: ~~[illegible]~~ ← Del Amo Pits.

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 8/11/2008

WEATHER: Temperature: 83 Winds: Light Precipitation: None

DESCRIPTION OF THE WORK: Site Maintenance

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	SA / TT visisted the site
	Turned on irrigation system
	Checked caulk in the back ditch
12:00 PM	repaired and recauked the back ditch
1:00 PM	~~Flagged on new gopher holes.~~
2:00 PM	closed up and left site
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	

epared by: TRI TRAN

Signed: [signature]

C_2 REM
FIELD DAILY REPORT

OJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 8/18/2008

WEATHER: Temperature: 80 Winds: Light Precipitation: 0

DESCRIPTION OF THE WORK: Site visit to replace and calibrate O2 sensors

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
12:00 PM	
1:00 PM	
	1.30 SM, SA onsite.
2:00 PM	Staff replaced and calibrated sensors at AT2B & AT1B and calibrated AT 5 B.
3:00 PM	3.30 staff offsite.
4:00 PM	
5:00 PM	

Special Notes

epared by: SEAMUS Mc GEOUGH

Signed: Seamus McGough

BAKERCORP™

4306 W. 190TH STREET
TORRANCE, CA 90504

PHN# 310-303-3700 FAX# 310-406-3001

Remit To:
BAKERCORP
P.O. Box 513967
LOS ANGELES, CA 90051-3967

Job Site:
C2 REM- CARSON JOB SITE
20245 S. VERMONT AVE.
DEL AMO, CA 99999

C#: 949-261-8098 J#:

S A L E S O R D E R

Order #..... 1215206-000
System date. 8/19/08
Terms..... Net 30
Order date.. 8/19/08
Job Loc..... 20245 S. VERMONT AVE., DEL AMO
Job No..... 1 - C2 REM- CARSON J
P.O. #..... VERBAL
Ordered By.. TBA
Reference #.

Quote.....
Reservation.

Customer #: 223098
C2 REM
2382 Southeast Bristol
Suite B
Newport Beach, CA 92660

Qty	Description	Unit
1	**TURNKEY** 101 ON AUGUST 20, 2008: TURNKEY SERVICE OF (2) KA2000S WITH 2000 LBS EACH OF BF R4X8 ACTIVATED VAPOR PHASE CARBON.	AT
1	**FORKLIFT RENTAL** 600	AT
4000	**REACTIVATED CARBON 4X8** R4X8	LB
4	**SUPERSACK BLACK NON-DOT** SUPERSACK	EA
1	**NOTE:** NOTE: WE WANT A TOTAL WEIGHT OF FRESH CARBON GOING IN TO EACH VESSEL, AND A TOTAL WEIGHT OF SPENT COMING OUT OF EACH VESSEL. PLEASE CALL RYAN WITH ALL WEIGHTS ONCE COMPLETE. DELIVERY INSTRUCTIONS: PLEASE WEIGH BAGS GOING OUT AND DOCUMENT TO ASSIGNED VESSEL. DOCUMENT SPENT TO SPECIFIC VESSEL AND WEIGH EACH BAG ON RETURN TO BF YARD.	EA

continued...

DAMAGES /CLEANING Y / N _____ DELIVERY TIME AND/OR SET UP CHARGES: _____

READ BEFORE SIGNING: Customer agrees to rent the Baker Equipment described in this Rental Agreement under the terms and conditions set forth on the face and on the reverse side hereof, which the undersigned has read and understands, for a term beginning on the date hereof and ending on written or oral notice of termination given by either party to the other before 5:00pm on or before the last business day of each rental cycle. Spent carbon in rental equipment will only be picked up along with the rental equipment if the spent carbon is profiled and approved, as non-hazardous, ahead of the equipment pick up date. Notice of termination shall only terminate Customer's right to continue in possession of the Equipment. Customer shall continue to be responsible to Baker for all obligations under this Agreement. The Customer has inspected the Equipment rented pursuant to this Rental Agreement after their installation by BakerCorp and acknowledges that the Equipment is in good condition and that the installation is accepted by the Customer. Rental Agreement is not transferable. Details of the Customer's obligations and responsibilities are contained in the terms and conditions on the reverse side of this document. The individual signing below as or on behalf of the Customer agrees to all of the terms and conditions on the reverse side of this rental agreement, acknowledges receipt of the equipment in good working order and is fully familiar with its operation and use.

BY _____ TITLE _____ FOR _____
COMPANY NAME

PRINT NAME _____ DATE _____

SCHEDULED DELIVERY DATE/TIME _____ ACTUAL DELIVERY DATE/TIME _____ DRIVER INITIALS _____ CUSTOMER INITIALS _____

BakerCorp

SERVICE REPORT DATE: WORK ORDER NO.:

MER:

F SERVICE: EXCHANGE X DELIVERY ___ PICK-UP ___ RE-WORK ___ OTHER ___

TY / TYPE OF UNITS SERVICED:

ME / CITY: TRUCK NO:

NTACT: PHONE / PAGER NO:

FILTRATION TECHNICIANS:

INFORMATION:

TIME:
TIME:
TIME:
E:

CARBON USAGE:
TYPE OF MEDIA USED:
AMOUNT USED:
LOT / PID #'S

PACKAGING:
TYPE USED:
GENERATED:
LEFT AT SITE: YES NO
TOTAL AT SITE:

SAFETY REVIEW

UNSAFE CONDITIONS:
AT - RISK BEHAVIOR:
PPE REQUIREMENTS:
SAFE JOB PROCEDURES:
SAFETY SUGGESTIONS:

EQUIP. ORDERED FROM: PHONE NO:

NT TERMINATION NO: FROM:

D TO ANOTHER JOB SITE FROM HERE: IF YES, WRITE NAME / CITY:

ER COMMENTS:

ER SIGNATURE: DATE:

C_2 REM
FIELD DAILY REPORT

OJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 8/21/2008

WEATHER: Temperature: ~80 Winds: slight Precipitation: none

DESCRIPTION OF THE WORK: SVE/IBT Enclosure Moitoring, GCTS Monitoring, Installation of In-line Thermometer at TT01

Time Line

12:00 PM SA/SM on-site

Prepared for monitorings.

GCTS Monitoring

Samples were taken from inlet, C1, C2, and effluent, usisng pump/lung technique and 1L of tedlar bags.

VOCs were moniotred with MiniRae 2000 PID calibrated to 50 ppm benzene.

Flows and Temperatures were monitored at inlet and effluent with velocicalc and temperature gage.

SVE/IBT Enclosue Monitoring

Samples were taken from inlet, post ambient air, C1, and effluent, usisng pump/lung tequnique and 1L of tedlar bags.

VOCs were monitored with MiniRae 2000 PID (1) calibrated with 50 ppm benzene.

O2, CO2, LEL, were monitored with RKI Eagle.

Pressures were monitored with Magnehelic.

Flows were taken with velocicalc.

Data from In-line sensors were monitored where applicable.

Divergent flow was also monitored with velocicalc, (= 8.0 scfm)

Please see the monitoring form for the results

Lab samples were taken from four stations right after field samples, including inlet duplicate samsple.

Note VOC monitored with PID at inlet did not really exceed 9999 of reading limit where it nomally exceeds.

In-line thermometer has been installed at TT01 and it is properly functioning.

Sampling port at inlet and post ambient air need a little more improvement, current condition could cause some dilution when sampling. (compression fittings and ferrules should be used)

3:45 Off-site

Prepared by: Shinta Aizawa

Signed: [signature]

C_2 REM

FIELD DAILY REPORT

OJECT NAME: Del Amo Pits **PAGE** 1 of 1

PROJECT NUMBER: 97-101 **DATE:** 8/28/2008

WEATHER: Temperature: ~80 **Winds:** slight **Precipitation:** None

DESCRIPTION OF THE WORK: Effluent PID calibration, Replacement of the cooling fan for Effluent PID

Time Line	
1:00 PM	SA/TT on-site
	SA displaced the cooling fan for the effluent PID
	Staff left for Grainger to pick up new fan.
	Staff installed the new fan and it is properly working.
	SA started calibration of Effluent PID (with zero gas and 50 ppm benzene)
	PID is properly working.
	Tubing in the PID cooling sstem needs to be replaced.
	The connection between tubing and effluent stack needs to be improved.
	Staff cleaned out sea-train.
	Staff irrigated the cap through the day.
3:30 PM	Staff off-site

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 9/3/2008

WEATHER: Temperature: ~80 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: Inspection on Effluent PID, Tubing replacement in the cooling system, Reinstallation of security camera computer

Time Line	
1:00PM	IY/SA on-site
	Staff reinstalled the computer of security camera
	It is properly working now.
	Staff started replacement of tubing for the effluent PID
	The plastic tubing was replaced with copper tubing.
	The cooling system at effluent PID was re-built with the copper tubing and fan.
	The tubing attached to PID needs to be replaced once in a while.
4:00 PM	Staff off-site

Prepared by: Shinta Aizawa, Ian Yusko

Signed: Shinta Aizawa, IAN YUSKO

C_2 REM

FIELD DAILY REPORT

OJECT NAME: Del Amo Pits PAGE 1 of 1

PROJECT NUMBER: DATE: 9/4/2008

WEATHER: Temperature: ~80 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: Oversight of inspection on pipeline corrosion control

Time Line	
10:30 AM	SA on-site
	SA meet with Mark Englebright from Farwest Corrosion Control Company.
	Mark started inspection on pipelines.
11:00 AM	Mark completed inspection and left off-site
	SA cleaned out the site trailer.
11:30 AM	SA off-site

Prepared by: Shinta Aizawa Signed: Shinta Aizawa

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits **PAGE** 1 of 1

PROJECT NUMBER: 97-101 **DATE:** 9/5/2008

WEATHER: Temperature: ~80 **Winds:** strong **Precipitation:** none

DESCRIPTION OF THE WORK: SVE/IBT Enclosure Moitoring, GCTS Monitoring,

Time Line	
10:00 AM	SA/TT on-site
	Prepared for monitorings.
	GCTS Monitoring
	Samples were taken from inlet, C1, C2, and effluent, usisng pump/lung technique and 1L of tedlar bags.
	VOCs were moniotred with MiniRae 2000 PID calibrated to 50 ppm benzene.
	Flows and Temperatures were monitored at inlet and effluent with velocicalc and temperature gage.
	SVE/IBT Enclosue Monitoring
	Samples were taken from inlet, post ambient air, C1, and effluent, usisng pump/lung tequnique and 1L of tedlar bags.
	VOCs were monitored with MiniRae 2000 PID (1) calibrated with 50 ppm benzene.
	O2, CO2, LEL, were monitored with RKI Eagle.
	Pressures were monitored with Magnehelic.
	Flows were taken with velocicalc.
	Data from In-line sensors were monitored where applicable.
	Divergent flow was also monitored with velocicalc, (= 8.0 scfm)
	Please see the monitoring form for the results
	Sample from the oxygen generator was taken and monitored with the O2 sensor (= 91 %, and = 95% with applied pressure)
	Note: VOC monitored with PID at inlet did not exceed 9999 of reading limit where it nomally exceeds.
1:00 PM	Off-site

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

C_2 REM

FIELD DAILY REPORT

OJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 9/15/2008

WEATHER: Temperature: ~80 Winds: none Precipitation: none

DESCRIPTION OF THE WORK: Site Maintenance

Time Line	
8:00 AM	SA/TT on-site
	Staff turned on water to irrigate the cap.
	All-Star Landscaping arrived on-site, and began their work at the undeveloped parcel (the park) along the perimeter fence.
9:00 AM	Allota H2O arrived on site for dust control.
	Staff told All-Star Landscaping to work at the Pits property first during the Allota H2O perform dust control at the park.
	Staff purged tedlar bags.
10:00 AM	Off-site

Prepared by: Shinta Aizawa

Signed: [illegible]

C_2 REM

FIELD DAILY REPORT

OJECT NAME: Del Amo Pits **PAGE** 1 of 1

PROJECT NUMBER: 97-101 **DATE:** 9/19/2008

WEATHER: Temperature: ~80 **Winds:** strong **Precipitation:** none

DESCRIPTION OF THE WORK: SVE/IBT Enclosure Moitoring, GCTS Monitoring,

Time Line	
12:00 PM	SA/TT on-site
	Prepared for monitorings.
	GCTS Monitoring
	Samples were taken from inlet, C1, C2, and effluent, usisng pump/lung technique and 1L of tedlar bags.
	VOCs were moniotred with MiniRae 2000 PID calibrated to 50 ppm benzene.
	Flows and Temperatures were monitored at inlet and effluent with velocicalc and temperature gage.
1:00 PM	SVE/IBT Enclosue Monitoring
	Samples were taken from inlet, post ambient air, C1, and effluent, usisng pump/lung tequnique and 1L of tedlar bags.
	VOCs were monitored with MiniRae 2000 PID (1) calibrated with 50 ppm benzene.
	O2, CO2, LEL, were monitored with RKI Eagle.
	Pressures were monitored with Magnehelic.
	Flows were taken with velocicalc.
	Data from In-line sensors were monitored where applicable.
	Divergent flow was also monitored with velocicalc, (= 8.8 scfm)
	Lab samples were taken immediately after field samples.
	Inlet lab samples were collected with 3L tedlar bag and split into 1L tedlar bag for duplicate sample.
	Please see the monitoring form for the results
3:30 PM	Off-site (left for lab and Geotechnical services for RKI check-up)
Note	VOC monitored with PID at inlet was fluctuating (3000 ppm through >9999 ppm)
	When the cap of sampling port at post ambient air was opened for taking pressure and flow, inline flow sensor FT1 reaches 0, causing low alarm automatic system shutdown.
	RKI Eagle needs factory check up for pump and oxygen sensor

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

C_2 REM

FIELD DAILY REPORT

OJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 9/24/2008

WEATHER: Temperature: ~85 Winds: moderate Precipitation: none

DESCRIPTION OF THE WORK: oversight of carbon change-out

Time Line	
1:00 PM	SA/TT on site
	Forklift arrived
1:30 PM	Baker Filtration arrived on-site
	Baker started removing spent carbon,
2:30 PM	Baker noticed that the forklift did not reach to the top of the carbon vessels, and made calls for another forklift.
	Baker tried another way to load fresh carbon into the vessels. Baker place carbon bag on a wood plate and lifted up instead of using handles of the carbon bag.
	SA/TT removed in-line thermometer installed at carbon vessels to avoid being damaged during
4:15 PM	Baker finished change-out.
4:30 PM	Staff off-site

Prepared by: Shinta Abana

Signed: [illegible]

BAKERCORP™

4306 W. 190TH STREET
TORRANCE, CA 90504

PHN# 310-303-3700 FAX# 310-406-3001

Remit To:
BAKERCORP
P.O. Box 513967
LOS ANGELES, CA 90051-3967

Job Site:
C2 REM- CARSON JOB SITE
20245 S. VERMONT AVE.
DEL AMO, CA 99999

C#: 949-261-8098 J#:

S A L E S O R D E R

Order #..... 1219135-000
System date. 9/24/08
Terms..... Net 30
Order date.. 9/24/08
Job Loc..... 20245 S. VERMONT AVE., DEL AMO
Job No..... 1 - C2 REM- CARSON J
P.O. #..... VERBAL
Ordered By.. VERBAL
Reference #.

Quote.....
Reservation.

Customer #: 223098
C2 REM
2382 Southeast Bristol
Suite B
Newport Beach, CA 92660

Qty	Description	Unit
1	**TURNKEY** 101 TURNKEY SERVICE OF (2) KA2000S WITH 2000 LBS EACH OF BF R4X8 ACTIVATED VAPOR PHASE CARBON.	AT
1	**FORKLIFT RENTAL** 600	AT
4000	**REACTIVATED CARBON 4X8** R4X8	LB
4	**SUPERSACK BLACK NON-DOT** SUPERSACK	EA

DELIVERY INSTRUCTIONS:
WEIGH BAGS GOING OUT & DOCUMENT TO ASSIG
NED VESSEL.DOCUMENT SPENT TO SPECIFIC
VESSEL & WEIGH EA BAG ON RETURN TO BF.
TOTAL WEIGHT OF FRESH CARBON.

DAMAGES /CLEANING Y / N _____ DELIVERY TIME AND/OR SET UP CHARGES: _____

READ BEFORE SIGNING: Customer agrees to rent the Baker Equipment described in this Rental Agreement under the terms and conditions set forth on the face and on the reverse side hereof, which the undersigned has read and understands, for a term beginning on the date hereof and ending on written or oral notice of termination given by either party to the other before 5:00pm on or before the last business day of each rental cycle. Spent carbon in rental equipment will only be picked up along with the rental equipment if the spent carbon is profiled and approved, as non-hazardous, ahead of the equipment pick up date. Notice of termination shall only terminate Customer's right to continue in possession of the Equipment. Customer shall continue to be responsible to Baker for all obligations under this Agreement. The Customer has inspected the Equipment rented pursuant to this Rental Agreement after their installation by BakerCorp and acknowledges that the Equipment is in good condition and that the installation is accepted by the Customer. Rental Agreement is not transferable. Details of the Customer's obligations and responsibilities are contained in the terms and conditions on the reverse side of this document. The individual signing below as or on behalf of the Customer agrees to [illegible] of the terms and conditions on the reverse side of this rental agreement, acknowledges receipt of the equipment in good working order and is fully familiar with its operation and use.

BY_____ TITLE _____ FOR _____
COMPANY NAME

PRINT NAME _____ DATE _____

SCHEDULED DELIVERY DATE/TIME _____ ACTUAL DELIVERY DATE/TIME _____ DRIVER INITIALS _____ CUSTOMER INITIALS _____

BakerCorp

FIELD SERVICE REPORT DATE: **WORK ORDER NO.:**

CUSTOMER:

TYPE OF SERVICE: EXCHANGE___DELIVERY___PICK-UP___RE-WORK___OTHER___

QUANTITY / TYPE OF UNITS SERVICED:

SITE NAME / CITY: **TRUCK NO:**

SITE CONTACT: **PHONE / PAGER NO:**

BAKER FILTRATION TECHNICIANS:

SPECIAL INFORMATION:

TIME:	**CARBON USAGE:**	**PACKAGING:**
DEPART TIME:	TYPE OF MEDIA USED:	TYPE USED:
ARRIVE TIME:	AMOUNT USED:	GENERATED:
START TIME:	LOT / PID #'S	LEFT AT SITE: YES NO
END TIME:		TOTAL AT SITE:

JOBSITE SAFETY REVIEW

	UNSAFE CONDITIONS:
	AT - RISK BEHAVIOR:
	PPE REQUIREMENTS:
	SAFE JOB PROCEDURES:
	SAFETY SUGGESTIONS:

RENTAL EQUIP. ORDERED FROM: **PHONE NO:**

EQUIPMENT TERMINATION NO: **FROM:**

DEPARTED TO ANOTHER JOB SITE FROM HERE: IF YES, WRITE NAME / CITY:

CUSTOMER COMMENTS:

CUSTOMER SIGNATURE: **DATE:**

C_2 REM

FIELD DAILY REPORT

.OJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 9/25/2008

WEATHER: Temperature: ~85 Winds: moderate Precipitation: None

DESCRIPTION OF THE WORK: Inspection of the sytem for post carbon change-out.

Time Line	
10:30 AM	SA/TT arrived on-site
	Staff purged the system and inspected all pressure gauge, joints, sampling port, carbon vessels.
	Staff found that one lever on the top of the carbon vessel is in open position and obserbed strong vacuum from that opening.
	Staff closed the valve.
	All pressure readings and flows returned to the normal.
	Staff monitored the system for a while and the system was operating normally.
1:00 PM	Staff off-site

Prepared by: Shinta Aizawa

Signed: [signature]

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 9/30/2008

WEATHER: Temperature: ~85 Winds: moderate Precipitation: none

DESCRIPTION OF THE WORK: 3rd Quarterly Full Scale Monitoring

Time Line	
6:30 AM	SA/SM/TT arrived on-site and meet with IY
	System was on since 5:30 AM, and staff prepared tools, purge system, monitoring devices
	Staff were divided up into two team, and began to monitor presssures with magnehelic.
9:00 AM	Staff finished monitoring pressures.
	Stafff began to purge all perimeter, vaccum performance, and cluster wells.
	SA/IY purged 3 pore volume for each wells, and SM/TT followed to monitor the wells.
	VOCs were monitored with MiniRae 2000 PID calibrated to 50 ppm benzene.
	O2, CO2, LEL methane was monitored with GEM 2000.
	See monitoring results for the results.
12:30 PM	Staff prepared for purge system for the SVE wells.
	SA/IY began to purge SVE wells, SM/TT followed to monitor the SVE wells.
	VOCs were monitored with MiniRae 2000 PID calibrated to 50 ppm benzene.
	O2, CO2, LEL methane was monitored with GEM 2000.
3:00 PM	Staff finished monitoring, and packed up all equipments.
3:30 PM	Staff off-site.
Note	PID 1 was functioning well for lower VOC concentrations, however, it seems to began malfunctioning when it reads higher concentrations. (SVE wells in sub area I and II should have more than 10000 ppm based on field results and lab results in the past, but it PID 1 did not read more than 4~5000 ppm). High concentration wells need to be re-monitored with other PIDs to confirm thier concentrations.)

Prepared by: Shinta Aizawa

IAN YUSKO

Signed:

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1
PROJECT NUMBER: 97-101 | DATE: 10/3/2008
WEATHER: Temperature: 68 Winds: Light Precipitation: 0
DESCRIPTION OF THE WORK: Remonitor cluster wells and SVE wells, to confirm results

Time Line	
8:00 AM	7.15am SA, IY, SM onsite.
	C2rem team set up purge equipment & calibrated PID's (1 mini rae 2000, 1 mini rae 3000)
9:00 AM	Team then proceeded to the cluster wells outside the fence and worked our way into the pits area.
10:00 AM	Team continued to purge and monitor the cluster wells. SA & IY logged the results while
	SM went ahead to remove the well lids and then replace the lids of the monitored wells.
11:00 AM	
12:00 PM	12.30 SK onsite. Team took lunch.
	Team recalibrated PID's
1:00 PM	1pm team set up purging system for the SVE wells.
	Team began purging and monitoring the SVE wells.
2:00 PM	
	SA & IY purged, monitored with PID's and logged the data.
	SM opened the purging closed off the wells and opened the purging oriface.
3:00 PM	
	After the wells were purged and monitored, SM resealed the purging oriface and opened the wells.
4:00 PM	
	4.15pm all staff off-site
5:00 PM	
Special Notes	PID's(2000 & 3000) reading correlated well on the cluster wells with lower concentrations, on wells with higher concentrations the PID 2000 would not read above 4000ppm, the PID 3000 gave readings up to 15,000ppm its maximum limit.

Prepared by: Seamus McCaugh
IAN YUSKO

Signed: Seamus McCaugh

C_2 REM

FIELD DAILY REPORT

OJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER:

DATE: 10/7/2008

WEATHER: Temperature: ~90 Winds: slight Precipitation: None

DESCRIPTION OF THE WORK: Monitoring oxygen concentrtions from inlet and recirculation stream

Time Line	
9:30 AM	SA/TT arrived on-site
	Staff collected samples in tedlar bags from inlet and recirculation stream.
	Samples were monitored for oxygen with RKI eagle.
	Monitring Results:
	1st samples: inlet = 13.9%, recirculation = 15.5%
	2nd samples: inlet = 13.6%, recirculation = 14.3%
	Staff took readings from in-line oxygen sensors
	Monitoring Results:
	AT5B (inlet) = 13.3%
	AT1B (post divergence) = 12.7%
	AT2B (post ambient air) = 21.6%
	AT3B (Effluent) = 20.1 %
	AT4B (recirculation): sensor faulting
	Staff monitored oxygen concentration from recirculation stream by using in-line O2 sensor AT5B.
	No siginificant difference in oxygen level was observed from inlet stream. (13-13.5%)
12:00 PM	Staff left off-site.

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: [redacted] 10/8/08

WEATHER: Temperature: | Winds: Light | Precipitation:

DESCRIPTION OF THE WORK: Site visit to pressure test O2 piping.

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
12:00 PM	
1:00 PM	
2:00 PM	
	2.30pm IY, SM onsite.
	Staff set up pressure test on the O2 injection piping.
3:00 PM	All lines held pressure except # 9 which showed some irregularity.
	Staff searched for source of irregularity but were unable to isolate the source.
4:00 PM	Staff turned off the O2 generator and secured the site.
	4.30pm staff offsite.
5:00 PM	
Special Notes	Staff will return to the site tomorrow to identify the source of the pressure test irregularity.

Prepared by: IAN YUSKO
SEAMUS McGEOUGH

Signed: Ian Yusko
Seamus McGeough

C_2 REM
FIELD DAILY REPORT

.OJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 10/9/2008

WEATHER: Temperature: ~80 Winds: moderate Precipitation: none

DESCRIPTION OF THE WORK: Enclosure Monitoring, GCTS Monitoring, Pressure testing on oxygen line.

Time Line	
12:00 PM	SA/IY arrived on-site
	Prepared for monitorings.
	GCTS Monitoring
	Samples were taken from inlet, C1, C2, and effluent, using pump/lung technique and 1L of tedlar
	VOCs were monitored with MiniRae 2000 PID calibrated to 50 ppm benzene.
	Flows and Temperatures were monitored at inlet and effluent with velocicalc and temperature gage.
	SVE/IBT Enclosue Monitoring
	Samples were taken from inlet, post ambient air, C1, and effluent, usisng pump/lung tequnique and
	VOCs were monitored with MiniRae 2000 PID (1) calibrated with 50 ppm benzene.
	O2, CO2, LEL, were monitored with RKI Eagle, and Q-Rae
	Pressures were monitored with Magnehelic.
	Flows were taken with velocicalc.
	Data from In-line sensors were monitored where applicable.
	Divergent flow was also monitored with velocicalc, (= 8~10 scfm)
	Pressure Testing on oxygen injection line
	Staff conducted pressure testing on oxygen line for SVE well 9.
	Staff dug sand and exposed joints in the suspected section.
	Staff discovered loose jointand will conduct follow-up repair.
4:45 AM	Staff left off-site.

Prepared by: Shinta Aizawa
IAN YUSKO

Signed: Shinta Aizawa

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 10/10/2008

WEATHER: Temperature: 86 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Complete O2 injection line repair, organize seatrain

Time Line	
8:45 AM	IY/SM get sand to redistribute along exposed underground piping and other necessary parts at Home Depot
9:30 AM	Arrive On-site
9:45 AM	Work on O2 injection line #9 repair
11:00 AM	Complete O2 injection line #9 repair
11:15 AM	Begin organizing Seatrain tools and equipment
12:15 PM	Break for Lunch
1:00 PM	Pressure test all O2 injection lines once more (All lines pass pressure test)
1:15 PM	Cover all exposed piping with sand
1:45 PM	Clean up Site, Depart from Site
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	Follow-up Site Visit needed to reconnect O2 generator to O2 injection lines and re-start O2 generator

Prepared by: Ian Yusko
Seamus McGeough

Signed: Ian Yusko
Seamus McGeough

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 10/13/2008

WEATHER: Temperature: 88 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Restart O2 generator, Observe SVE/IBT ops

Time Line	
8:30 AM	IY/SM arrive on-site
9:00 AM	Reconfigure O2 injection line running from the O2 buffer system to the O2 injection manifold inside the enclosure, which runs out to the wellfield through conveyance piping
10:00 AM	Complete reconnection of O2 generator to manifold & re-start the O2 generator
10:45 AM	Observe SVE/IBT ops & O2 generator flow trends, etc.
11:15 AM	Secure each injection security cage firmly and put all locks back on cages
12:00 PM	Depart from the Site
1:00 PM	
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	

Special Notes

Prepared by: Ian Yusko

Seamus McGeough

Signed: Ian Yusko / Seamus McGeough

C_2 REM
FIELD DAILY REPORT

OJECT NAME: Del Amo Pits PAGE 1 of 1

PROJECT NUMBER: 97-101 DATE: 10/16/2008

WEATHER: Temperature: 85 Winds: Light Precipitation: 0

DESCRIPTION OF THE WORK: Meet Cal Haz Waste Services/ irrigate the cap, organize/inventory seatrain

Time Line	
8:00 AM	7.45 am TT & SM onsite.
	C2rem staff replaced lids on the 2 drums to be picked up by Cal Haz waste services
9:00 AM	8.20am Cal Haz onsite.
	Drums were loaded and removed from the site.
10:00 AM	9am Staff offsite
11:00 AM	
	11.30 staff return to site.
12:00 PM	SM began irrigating the cap, TT began organizing and cleaning the Seatrain.
	12.30pm Staff took lunch.
1:00 PM	
	Staff finished cleaning the seatrain and disposed of all used calbration gas bottles.
2:00 PM	2.15pm staff off site.
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	

epared by: Signed:

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 10/23/2008

WEATHER: Temperature: 92 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Bimonthly SVE/IBT & GCTS Monitoring, Perimeter monitoring

Time Line	
9:00 AM	IY/SM/TT arrive on-site
9:30 AM	Set-up necessary equipment for the Perimeter monitoring
	Conduct Perimeter monitoring event with PID 3000 & RKI Eagle
11:00 AM	Complete Perimeter monitoring (see results in logbook)
11:15 AM	Install LEL meter into AT 4A position and observe ops after install
11:45 PM	Break for Lunch
2:15 PM	Arrive back on-site
2:30 PM	Conduct bi-monthly GCTS and SVE/IBT monitoring using PID 3000, RKI Eagle, Velocicalc, and Magnahelic (Collect samples from SVE/IBT for lab analysis) - see results in logbook
3:30 PM	Troubleshoot effluent PID on SVE/IBT system after noticing E004 error message
4:30 PM	Clean up all tools, Lock-up Site, Depart from Site
Special Notes	Perform follow-up Site visit to complete troubleshooting of effluent PID on SVE/IBT system

Prepared by: Ian Yusko
Seamus McGeough
Tri Tran

Signed: Ian Yusko
Seamus McGeough

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 10/27/2008

WEATHER: Temperature: 89 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Troubleshoot Effluent PID, Oversight of Landscapers

Time Line	
9:30 AM	IY/TT arrive on-site
	Landscapers already on-site performing duties
9:40 AM	Set-up all tools to troubleshoot effluent PID on SVE/IBT system
10:00 AM	Remove PID lamp and sensor and thoroughly clean them with methanol solution
	Give both components adequate time to dry before reinstallation into device
	Courier arrives on-site to drop-off tubing ordered from EnviroSupply for monitoring devices
11:30 AM	Reinstall lamp and sensor into device and reinstall hardware into housing ensuring all tubing
	and wires were reconnected in the proper places
12:00 PM	Perform calibration on device and re-start the SVE/IBT system
	Observe effluent PID operations (appears to be functioning properly)
12:30 PM	Take break, Observe landscapers finishing up their on-site duties
1:15 PM	Clean-up tools, Lock-up Site, Depart from Site
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	

Prepared by: Ian Yusko

Tri Tran

Signed: Ian Yusko

Tri Tran

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FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER:

DATE: 10/30/2008

WEATHER: Temperature: ~75 **Winds:** slight **Precipitation:** None

DESCRIPTION OF THE WORK: Installation of in-line oxygen sensors and calibration

Time Line	
11:00 AM	IY/SA on-site
	Staff prepared tools, calibration gases
	Staff started calibration of effluent PID with zero gas and 50 ppm of benzene.
	The calibration was completed.
	Staff shut down the system for the installation of new O2 sensors at AT4B and AT5B.
	Old O2 sensors were replaced with new sensors and calibrations were conducted.
	Calibrations were completed and the sensors were operating fine.
	Staff ran sprinklers throughout Site Visit to irrigate the cap.
2:00 PM	Staff off-site

Prepared by: Shinta Aizawa
IAN YUSKO

Signed:

C_2 REM

FIELD DAILY REPORT

OJECT NAME: Del Amo Pits **PAGE** 1 of 1

PROJECT NUMBER: 97-101 **DATE:** 11/10/2008

WEATHER: Temperature: ~65 **Winds:** moderate **Precipitation:** none

DESCRIPTION OF THE WORK: Monitoring oxygen concentrattion from the system, effluent concentration, and flows at the manifold

Time Line	
12:00 PM	SA/TT arived on-site
	Staff prepared for monitoring instruments
	Staff took samples from inlet, recirculation stream and effluent.
	VOCs and oxygen concentrations were moitored with PIDs and RKI Eagle and Q-Rae.
	Staff monitored flows at the manifold with Velocicalc.
3:30 PM	Staff left off-site

:pared by: Shinta Aizawa

Signed: Shinta Aizawa

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 11/13/2008

WEATHER: Temperature: 70 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Carbon change-out, Routine system & perimeter monitoring

Time Line	
9:00 AM	Arrive on-site (Unlock trailer & sea train)
	Baker arrives on-site to conduct carbon change-out
	Staff holds tailgate safety meeting before change-out is conducted
9:30 AM	Oversight of Baker performing carbon change-out
	Field team conducts monthly perimeter well monitoring around Site
11:30 AM	Staff completes perimeter well monitoring
	Breaks for a quick lunch
12:00 PM	Baker finishes carbon change-out (Baker Corp. off-site)
	Staff conducts bi-monthly monitoring of the GCTS & SVE/IBT systems
	(see results for both systems in 2008 logbook)
2:00 PM	Field staff cleans up equipment and Site
	Locks up and departs from Site

Special Notes

Prepared by: Ian Yusko

Seamus McGeough

Tri Tran

Signed: Ian Yusko

Seamus McGeough

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 11/25/2008

WEATHER: Temperature: 72 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Bi-monthly monitoring of GCTS & SVE/IBT (with lab samples)

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	
12:00 PM	
1:00 PM	
2:00 PM	Arrive on-site with SM, unlock site
	Perform tailgate safety meeting, prepare instruments & equipment for monitoring
	Conduct bi-monthly GCTS monitoring using pump lung to collect tedlar bag samples from system inlet, C1, C2, and system outlet, velocicalc to measure flow at inlet and outlet, and inline gauges for temperature (see results in GCTS monitoring section of log book)
	Note: measure field samples with PID for VOCs
2:45 PM	Conduct bi-monthly SVE/IBT monitoring using pump lung to collect tedlar bag samples from system influent, post ambient air, C1, and system effluent (also collect lab samples), use velocicalc to measure flow at influent, post ambient air, and effluent, and measure pressure at each station using 0-100 in. of H2O magnahelic (take corresponding readings from system sensors using the VNC display), (see results in SVE/IBT monitoring section of log book)
	Note: measure field samples with PID and RKI for VOCs, O2, CO2, and LEL
	Clean up equipment for monitoring and put-away instruments
4:00 PM	Depart from site with SM to drop samples off @ Test America
5:00 PM	
Special Notes	

Prepared by: Ian Yusko

Seamus McGeough

Signed: Ian Yusko

Seamus McGeough

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: | DATE: 11/26/2008

WEATHER: Temperature: 75 Winds: Light Precipitation: light

DESCRIPTION OF THE WORK: Post Rain inspection.

Time Line	
8:00 AM	
9:00 AM	TT & SM onsite.
	Staff walked the site to assess any damage from heavy rain.
	All drains were clear.
10:00 AM	There was no water accumulation anywhere on the site.
	The enclosure had also drained.
	Staff filled out post rain inspection forms.
11:00 AM	10.30am staff offsite.
12:00 PM	
1:00 PM	
2:00 PM	
3:00 PM	
4:00 PM	
5:00 PM	
Special Notes	

Prepared by: Seamus Mc Geough

Signed: Seamus Mc Geough

C_2 REM
FIELD DAILY REPORT

PROJECT NAME: Del Amo Waste Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 12/3/2008

WEATHER: Temperature: 68 Winds: Slight Precipitation: None

DESCRIPTION OF THE WORK: Bi-monthly monitoring of GCTS & SVE/IBT, site maintenance

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	
11:00 AM	Arrive on-site with SM & TT
	SM off-site to run errands
	IY/TT perform tailgate safety meeting
	IY/TT perform Site maintenance, turn on irrigation
12:00 PM	IY/TT break for lunch
1:00 PM	Conduct bi-monthly GCTS monitoring using pump lung to collect tedlar bag samples from system inlet, C1, C2, and system outlet, velocicalc to measure flow at inlet and outlet, and inline gauges for temperature (see results in GCTS monitoring section of log book)
	Note: measure field samples with PID for VOCs
1:45 PM	SM arrives back on-site (picked up 55-gallon drum with reactivated carbon inside for upcoming full-scale monitoring events
2:00 PM	Conduct bi-monthly SVE/IBT monitoring using pump lung to collect tedlar bag samples from system influent, post ambient air, C1, and system effluent, use velocicalc to measure flow at influent, post ambient air, and effluent, and measure pressure at each station using 0-100 in. of H2O magnahelic (take corresponding readings from system sensors using the VNC display), (see results in SVE/IBT monitoring section of log book)
	Note: measure field samples with PID and RKI for VOCs, O2, CO2, and LEL
3:15 PM	Clean up equipment for monitoring and put-away instruments
	Depart from site with SM & TT

Special Notes

Prepared by: Ian Yusko

Seamus McGeough

Tri Tran

Signed:

C_2 REM
FIELD DAILY REPORT

OJECT NAME: Del Amo Pits | PAGE 1 of 1

PROJECT NUMBER: 97-101 | DATE: 12/16/2008

WEATHER: Temperature: 58 Winds: Light Precipitation: 0

DESCRIPTION OF THE WORK: Repair piping at injection wells

Time Line	
8:00 AM	
9:00 AM	
10:00 AM	SA & SM onsite.
	10.30 TT onsite.
	System off. SA began to purge the injection wells.
11:00 AM	TT & SM prepared parts and equipment needed to complete the repairs.
	Staff donned PPE, and commenced repairs.
	Before cutting the existing piping the new assembly war prepared and ready to be put in
12:00 PM	place.
	Staff repaired injection wells # 4, & # 8, with new piping assembly.
1:00 PM	# 9 was also repaired, but no cutting or replacement parts were necessary.
	After the glue dried a little, a PID was passed over the new joints. No readings were
2:00 PM	detected. 2pm staff took lunch.
	2.30pm Staff offsite.
3:00 PM	
4:00 PM	Staff returned to site.
	Staff secured the site and departed.
5:00 PM	

Special Notes

Prepared by: Seamus McGeoff

Signed: Shirley Dizane

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 12/18/2008

WEATHER: Temperature: ~55 Winds: moderate Precipitation: none

DESCRIPTION OF THE WORK: Flow adjustment at the manifold and Injection Well Maintenance.

Time Line

11:00 AM	IY/SA arrived on-site
	Staff prepared equipments for the flow adjustments at conveyance maifold.
	Vapors from the SVE well #2 and #5 are too moist for Velocicalc to monitor the flow.
	Total flow at inlet is ~40.
1:00 PM	The wellhead at #3, 4, 8, and 9 were tested with PID to find any leaks.
	Staff determined that the wellhead at #8 needs to be repaired.
	Staff reassembled a suspected section.
3:30 PM	Staff off-site
Note	The union at SVE #8 needs to be tighten before the system startup.

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

C_2 REM

FIELD DAILY REPORT

PROJECT NAME: Del Amo Pits

PAGE 1 of 1

PROJECT NUMBER: 97-101

DATE: 12/19/2008

WEATHER: Temperature: ~55 Winds: moderate Precipitation: none

DESCRIPTION OF THE WORK: Flow adjustment at the manifold and Injection Well Maintenance, GCTS Monitoring, Enclosure Monitoring

Time Line	
12:00 AM	IY/SA arrived on-site
	The system is off, staff tightened union at SVE well #8.
	Staff prepared equipments for the flow adjustments at conveyance maifold.
	Vapors from the SVE well #2 and #5 are too moist for Velocicalc to monitor the flow.
	Total flow at inlet is ~42.
1:30 PM	The wellhead at 8 was tested with PID to find any leaks.
	No VOCs were monitored at the well #8.
	Staff prepared for monitorings.
	GCTS Monitoring
	Samples were taken from inlet, C1, C2, and effluent, usisng pump/lung technique and 1L of tedlar
	VOCs were moniotred with MiniRae 2000 PID calibrated to 5 ppm benzene.
	Flows and Temperatures were monitored at inlet and effluent with velocicalc and temperature gage.
	SVE/IBT Enclosue Monitoring
	Samples were taken from inlet, post ambient air, C1, and effluent, usisng pump/lung tequnique and
	VOCs were monitored with MiniRae 2000 PID (1) calibrated with 400 ppm isobutylene.
	O2, CO2, LEL, were monitored with RKI Eagle.
	Pressures were monitored with Magnehelic.
	Flows were taken with velocicalc.
	Data from In-line sensors were monitored where applicable.
	Divergent flow was also monitored with velocicalc, (= 10.5 scfm)
	Please see the monitoring form for the results
	Lab samples were also taken after the field samples, including inlet duplicate.
3:00 PM	Staff off-site

Prepared by: Shinta Aizawa

Signed: Shinta Aizawa

C2 REM
FIELD DAILY REPORT

PROJECT NAME:

PROJECT NUMBER:

WEATHER: Temperature 65° Winds: -

DESCRIPTION OF THE WORK: 4th Qrt. Inspection

PAGE 1 OF 1

DATE: 12/30/08

Precipitation: —

10:00 am: arrive on-site w/ Ed Bourke and met Dante Rodriguez, USEPA to conduct 4th Qrt. Site Inspection

- Walk site to observe any issues with remedy components (cap, SVE/IBT System, GCTS, access roads, perimeter fence, surface water controls)

- No significant issues of concern - see Inspection forms for a detailed checklist of items observed

Prepared by: _____ Signed: [signature]

APPENDIX C

2008 LABORATORY DATA
(VIA CD ROM)

APPENDIX D

2008 IN-LINE SENSOR DATA
(VIA CD ROM)

APPENDIX E

2008 SEMI-MONTHLY SVE/IBT
ENCLOSURE DATA

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
	1-3-08	10 AM			FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET			54.5	27.7	-56	OVER.	75	92	11.1	13	N/A
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air			55.5	39.2	31	2078.	8	16	19.9	21	N/A
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)			80	~~39~~ N/A	NA	100	0	5	20.9	20	N/A
								AT06 (Benzene)		AT3B	
EFFLUENT			N/A	~~4.65~~ 28.5.	NA	0.0	0	0.3	20.3	20.	N/A

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene

DIVERGENCE : 4.65

RH = 38%.

Used Q Rae for O2 & LEL.

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	1/17/08	11:25	55.5	25.2	NA	>99999	155V	92%	10.5	12%	.4
					FT2 + FT1			AT2A (LEL%)		AT2B	
Post Ambient Air	1/17/08	11:10	32.0	43.5	32	365 110	2 1	6%	20.9	21	0
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	1/17/08	11:02	49.5	NA	NA	13.3	Ø	5%	20.9	20	Ø
								AT06 (Benzene)		AT3B	
EFFLUENT	1/17/08	10:53	0	28.2	NA	.1	0	0.3 PPM	20.3	20	0

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene

Divergent: flow(scfm)= 2.3

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	01/31/08	11:20	-60	22.1	NA	over	14.5(V) ~~72~~	92	10.4	9.3	9.4
					FT2 +FT1			AT2A (LEL%)		AT2B	
Post Ambient Air	01/31/08	11:20	-60	40.5	FT2 = 28	1620	6 ~~12~~	12	20.0	20.6	0.6
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	01/31/08	11:20	-80 ~~-82~~	NA	NA	4.2	0	5	20.1	NA	0.6
								AT06 (Benzene)		AT3B	
EFFLUENT	01/31/08	11:20	-82	27.5	NA	0	0	0.5	20.0	20.3	0.8

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene

Divergent: flow(scfm)= 2.17

FIEL. ..RM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	2/20/08	1:50	-22	53	~~[illegible]~~ NA	>9999	20 ✓	92	15.2	14.7	10.0
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air	2/20/08	1:50	-20	NA*	46	4992	34	54	19.8	19.9	2.2
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	2/20/08	1:50	-64	NA	NA	9.0	0	6	20.3	NA	1.2
								AT06 (Benzene)		AT3B	
EFFLUENT	2/20/08	1:50	-76	61	NA	0	0	1.1	19.9	20.5	2.2

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene

Treatment Rate w/ velocicalc = 11.5

* velocicalc read over (moisture).

RH = 80%

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	2/28/08	11:45	-18	52.5	NA	>9999	21.5 V	92	13.9 ~~14.1~~	12.3	11.2
					FT2 +FT1			AT2A (LEL%)		AT2B	
Post Ambient Air	2/28/08	11:45	-20	72.5	59	4360	17	39	19.3	20.7	1.6
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	2/28/08	11:45	-64	NA	NA	3.9	Ø	4	20.3	NA	0.6
								AT06 (Benzene)		AT3B	
EFFLUENT	2/28/08	11:45	-76	60	NA	0.1	Ø	0.0	19.3	20.7	1.8

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene, 6%LeL = 6% of 5%V—%V=X %lel x 5/100 methan

Divergent: flow(scfm)= 10.0

c1 2nd sample 49.5 19.8 0.8

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	3/14/08	12:00	-22	45	36	over.	17 ✓	92	14.9	12.5	10.4
					FT2 +FT1			AT2A (LEL%)		AT2B	
Post Ambient Air	3/14/08	12:00	-22.5	52	39	3547	19	44	18.9	20.3	1.8
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	3/14/08	12:00	-70	NA	NA	300	~~3~~ 1	27	19.4	~~20~~ NA	1.0
								AT06 (Benzene)		AT3B	
EFFLUENT	3/14/08	12:00	+3/-80	49.5	NA	Ø	Ø	Ø	19.0	20.3	1.8

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene, 6%LeL = 6% of 5%V---%V=X %lel x 5/100 methan

Divergent: flow(scfm)= 6~10

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	4/4/08	1:15	-26	40-45	35	over.	16.5 ~~60.5~~	92	14.1	12	10.6
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air	4/4/08	1:06	-26	52	43	over.	31	48	19.2	20	2
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	4/4/08	12:57	-72 ~~79~~	NA	NA	807	2	2	20.9	20	0
								AT06 (Benzene)		AT3B	
EFFLUENT	4/4/08	12:45	+2/-79	40	NA	0	0	0.2 ppm	20.4	20	0

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene

DIVERSION FLOW (FT1) = 9 scfm
velocicalc = 11 scfm

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	4/16/08	11:00	-28	43.9		OVER	21.5V		9.9		12.8
					FT2 +FT1			AT2A (LEL%)		AT2B	
Post Ambient Air	4/16/08	"	-28	42.2		OVER	41		18.3		3.0
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	4/16/08	"	-74	NA	NA	75.2	Ø		20.5		1.2
								AT06 (Benzene)		AT3B	
EFFLUENT	4/16/08	"	Ø	31.5	NA	Ø	Ø	Ø	18.3		3.2

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene, 6%LeL = 6% of 5%V---%V=X %lel x 5/100 methan

Divergent: flow(scfm)= 11.7 SCFM

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	4/30/08	11:15	-26	43.0	34	OVER	5% V	104	17.4	12.6	5.0
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air	4/30/08	11:15	-26	38.0	31	OVER	19	50	20.2	19.3	1.8.
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	4/30/08	11:15	-74	NA	NA	3730	12	29	20.8	NA	1.0
								AT06 (Benzene)		AT3B	
EFFLUENT	4/30/08	11:15	-80	32.0	NA	0.0	0	0.3	19.6	19.7	2.6

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene

Post Dilution 9.5

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
	5/9/08	2.30			FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET			-26	44.2	35	OVER	6.0	104	18.0	13.2	5.0
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air			-26	38.4	26	OVER	29	60	20.0	19.0	2.4
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)			-74	NA	NA	131	0	3	20.9	NA	0.6
								AT06 (Benzene)		~~AT3B~~	
EFFLUENT			-80	41.5	NA	0.6	0	0.3	20.6	19.8	0

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene

Post divergence = 12.0
(treatment rate)

FI. ORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
	5/22/08	12.20			FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET			-21	48		OVER	21.5 V		15.2		12.0
					FT2 +FT1			AT2A (LEL%)		AT2B	
Post Ambient Air			-24	93.5		4080	15		20.6		1.6
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	Between Vessels		45	NA	NA	5.3	0		20.6		1.6
								AT06 (Benzene)		AT3B	
EFFLUENT			0/-60	96	NA	0.0	0		19.0		1.6

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene, 6%LeL = 6% of 5%V—%V=X %lel x 5/100 methan

Divergent: flow(scfm)= 12.5

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	5/27/08	12:05	-23	50	40	OVER	6.0 ✓	104	18.9	12	6.0
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air	5/27/08	11:55	-25	83	73 + Dilution	5720	8	42	20.9	21	1.0
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	5/27/08	11:45	-46	78	NA	383	1	9	20.9	20	1.8
								AT06 (Benzene)		AT3B	
EFFLUENT	5/27/08	11:35	Ø	91	NA	0.0	0	0.3 ppm	20.9	20	2.0

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene

Dilution → 17 scfm

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	6/5/08	10:00	-22	51.0	38	over.	14.5 ✓	104	13.6	10.6	10.2
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air	6/5/08	10:00	-22	87.0	76	4002	11	25	19.5	20.3	1.2
								AT3A (LEL%)		~~AT3B~~	
C1 (Outlet of Primary Vessel)	6/5/08	10:00	-44	NA	NA	0.1	Ø	4	19.8 ~~20.1~~	NA	1.4
								AT06 (Benzene)		AT3B	
EFFLUENT	6/5/08	10:00	-57	95.0	NA	0.0	Ø	0.2	20.1	19.6	~~Ø~~ 0.8

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene

Dwell Seal Flow = 10.5

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	6/25/08	12:00	-20	49.5	36~ 45	Over.	7.5V	104	18.6	14.6	6.4
					FT2 +FT1			AT2A (LEL%)		AT2B	
Post Ambient Air	6/25/08	12:00	-23	89 ~~24.5~~	87	3336	12	22	20.6	21.1	1.2
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	6/25/08	12:00	-44	NA	NA	2763	7	17	20.9	NA.	1.0
								AT06 (Benzene)		AT3B	
EFFLUENT	6/25/08	12:00	-56	88.5	NA	0	0	0.5	20.9	20.9	0.8

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene, 6%LeL = 6% of 5%V—%V=X %lel x 5/100 methan

Divergent: flow(scfm)= 8.5

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	7/24/08	3:00PM	-22	46	34~36	Over	24.5	104	9.4	7.9	16.2
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air			-24	84	81	4272	2	30	20.9	19.5	0.4
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)			-44	NA	NA	0.9	0	0	20.9	NA.	0.8
								AT06 (Benzene)		AT3B	
EFFLUENT			-57	97.5	NA	0.9	0	0.7	20.9	19.0	0.2

Notes: 100% LEL = 12000 ppm benzene, Effluent VOC Inline = Benzene (ppm)

Divergent Flow = 13.5

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	7/30/08	2:30 PM	20	47.4		over	18.0 ✓		11.1		14.0
					FT2 +FT1			AT2A (LEL%)		AT2B	
Post Ambient Air	7/30/08	2:30	22	97		4211	13 %		19.1		1.8
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	7/30/08	2:30	50		NA	0	0		19.3		1.8.
								AT06 (Benzene)		AT3B	
EFFLUENT	7/30/08	2:30	2	101	NA	0	0		19.2		1.8.

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene, 6%LeL = 6% of 5%V---%V=X %lel x 5/100 methan

Divergent: flow(scfm)= _____

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	8/7/08	2:10	-20	49.3	37~43 (FT4=40)	Over	21.5 ✓	104.	13.4	11.6	15.2
					FT2 +FT1			AT2A (LEL%)		AT2B	
Post Ambient Air	8/7/08	2:10	25	88	99 + 10	4844	17	26	20.3	NA	2.0
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	8/7/08	2:10	-48	NA	NA	3957	12	19	20.3	NA	2.2 ~~2.0~~
								AT06 (Benzene)		AT3B	
EFFLUENT	8/7/08	2:10	-60	89.3	NA	0.1	0	0.7	20.3	20.0	2.0

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene, 6%LeL = 6% of 5%V---%V=X %lel x 5/100 methan

Divergent: flow(scfm)= 15.9

O_2 from O_2 generator = 87.~96 (with pressure). max O_2. oxygen analyzer. model # OM-25A INDUSTRIAL maxtec. 1800 748 5355

AT2B O_2 sensor needs calibration or repair.
AT4B "

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	8/21/08	1:00 PM	-20	42.6	34~40	6000~ over.	15 ✓	104	14.8	13.5	13.0
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air	8/21/08	1:00 PM	-22	105	105	2968	12	17	20.4	21.9	1.6
								AT3A (LEL%)		~~AT2B~~	
C1 (Outlet of Primary Vessel)	8/21/08	1:00 PM	-46	NA.	NA	0.3	0	0	20.9	NA	1.2
					...			AT06 (Benzene)		AT3B	
EFFLUENT	8/21/08	1:00 PM	-60	97.5	NA	0.8	0	0.4	20.9	19.5	1.4

Notes: 100% LEL = 12000 ppm benzene, Effluent VOC Inline = Benzene (ppm)

Divergent Flow = 8.0
FT1 = 7.

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
	9/5/08	11:00			FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET			-18	48.4	37	8902	14.5 V	104 ~~13.5~~	13.9	13.3	13.2
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air			-24	99.5	96	2913	9	17 ~~21.~~	19.1	21.6	1.6
								AT3A (LEL%)			
C1 (Outlet of Primary Vessel)			-42	NA	NA	1223	4 ~~3~~	13	19.4	NA	1.6
								AT06 (Benzene)		AT3B	
EFFLUENT			-60	91.5	NA	0	0	0.8	20.9	20.5	0

Divergent Flow (Treatment Rate) = 80

Notes: Effluent VOC Inline = Benzene (ppm)

O_2 generator sample = 91% (95% with applied pressure).

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	9/19/08	1:00 pm	-20	48.3	37	>9999 5000 ↓ 3800	20 V	104	(13.7) NA	14.4	14.8
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air			-22	SYS SHUT DOWN (when open valve)	99	2812	9	17	(18.7) NA	21.9	1.4
								AT3A (LEL%)			
C1 (Outlet of Primary Vessel)			-47	NA	NA	2889	8	25	(18.6) NA	NA	1.2
								AT06 (Benzene)		AT3B	
EFFLUENT			-80	106	NA	0.3	0	0.7	(19.1) NA	20.6	0

Divergent Flow (Treatment Rate) = 8.8 FT1=7.

Notes: Effluent VOC Inline = Benzene (ppm)

* RKI O_2 sensor does not return to 20.9%.
Adjusting zero cause error for O_2 sensor.

* PID reading @ inlet sample does not stabilize.
1st try read 5000 ppm down to 3800 ppm.
2nd try on the ~~same~~ same sample read >9999 down to 3000 ppm.

opening monitoring port @ post ambient air cause FT01 become zero and system shut down with ~~the alarm~~ the alarm for ~~FT~~ FT01 Low.

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	10/9/08	1:50	+11 on recirc. -18 on inlet	48.5	35~41	4908	(58 LEL) 20.5 V	104	14.1 (16.5)	13.0	14.6
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air	10/9/08	1:41	-10	88	106	1918	10	18	20.4 (20.1~20.4)	21.9	1.2
								AT3A (LEL%)			
C1 (Outlet of Primary Vessel)	10/9/08	1:36	-30	NA	NA	0.1	0	0	20.5 (20.4)	NA	1.2
								AT06 (Benzene)		AT3B	
EFFLUENT	10/9/08	1:30	+4/-60	94	NA	0	0	0.5	20.5 (20.4)	20.5	1.2

(Q-Rae). (Q-Rae)

Divergent Flow (Treatment Rate) = 8~10.

Notes: Effluent VOC Inline = Benzene (ppm)

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
			INLET / RECIRC		FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	10/23/08	3:00	+14	49.5	~~35~~	High 5030↓	17.5 V	104%	14.9	12% ~~[illegible]~~	13.4
					FT2 +FT1			AT2A (LEL%)		AT2B	
Post Ambient Air	10/23/08	2:50	-24	89	126+8	4680↓	14	23%	20.5	22%	1.6
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	10/23/08	2:40	-48	~~NA~~	NA	**3975↓**	**9**	15%	**20.5**	20%	**1.6**
								AT06 (Benzene)		AT3B	
EFFLUENT	10/23/08	2:30	+4	85	NA	0.1	Ø	0.3 ppm	20.7	20%	1.2

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene, 6%LeL = 6% of 5%V---%V=X %lel x 5/100 methan

Divergent: flow(scfm)= 11 scfm / 8 scfm

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
	11-13	1.pm			FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET		1.30	-26/+10	44	35%		20✓	10H%	14.3	13%	15
					FT2 FT1			AT2A (LEL%)		AT2B	
Post Ambient Air		1.20	-29	86	106 +7	2231	11	20	19.7	22	1.8
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)		1.15	-49	NA	NA	0.3	0	2.	19.9	20%	1.6
								AT06 (Benzene)		AT3B	
EFFLUENT	✓	1.10	+4	90	NA	0	0	0.3	19.4	20%	1.4

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene, 6%LeL = 6% of 5%V---%V=X %lel x 5/100 methan

Divergent: flow(scfm)= 8.2

11/25/08

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
	11-25-08	2.30pm.			FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	"	"		48.5		1252 (MAX) 3640	10.5 ✓		17.4		8.4
					FT2 +FT1			AT2A (LEL%)		AT2B	
Post Ambient Air	"	"		97.5		1250 MAX	13		20.4		1.4
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	"	"		N/A	NA	0.3	0		20.5		1.4
								AT06 (Benzene)		AT3B	
EFFLUENT	"	"		88	NA	0.1	0		20.6		1.4

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene, 6%LeL = 6% of 5%V---%V=X %lel x 5/100 methan

Divergent: flow(scfm)= 7.2

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	12/3/08		+14 / -22	47.1		II: 1200 III: 11400	23 U		~~13.6~~ 16.3		13.6
					FT2 +FT1			AT2A (LEL%)		AT2B	
Post Ambient Air	12/3/08		-24	98.5		I: 1333 III: 9400	14		20.4		1.4
								AT3A (LEL%)		AT3B	
C1 (Outlet of Primary Vessel)	12/3/08		C_1 = -48 C_2 = -60	NA	NA	PID I: 559 III: 2350	5		20.6		1.4
								AT06 (Benzene)		AT3B	
EFFLUENT	12/3/08		+4	104	NA	0	0		20.6		1.4

Notes: 100% benzene = 12000 ppm, Effluent VOC Inline (lel) = Benzene, 6%LeL = 6% of 5%V---%V=X %lel x 5/100 methan

Divergent: flow(scfm)= 7.8

using PID I = "I" and III (=3000")

FIELD FORM 1.0
SVE/IBT ENLOSURE DATA
DEL AMO WASTE PITS

				Flow (scfm)		VOCs (ppm)			Oxygen (% volume)		CO2 (% vol)
LOCATION	DATE	TIME	Pressure (inch. in H20)	Velocicalc	Inline	PID (ppm)	RKI (% lel)	Inline	RKI	Inline	RKI
					FT5			AT5A (LEL%)		AT5B	
SYSTEM INLET	12/19/08	2:30	-24	42.	36	9400 ~~9150~~ 14300	25 ✓	104	14.2	13.6	16.8
					FT2			AT2A (LEL%)		AT2B	
Post Ambient Air			-26	93	59	5562	14	24	20.8	20.4	1.6
								AT3A (LEL%)			
C1 (Outlet of Primary Vessel)			-50	NA	NA	2774	~~8~~ 9	17	20.8	NA	1.6
								AT06 (Benzene)		AT3B	
EFFLUENT			-64	115	NA	0.1	0	(1.9). 3.5	20.8	NA	1.6

Divergent Flow (Treatment Rate) = 10.5 FT1 = 7.

Notes: Effluent VOC Inline = Benzene (ppm)

APPENDIX F

FULL SCALE FIELD MONITORING FORMS

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Monitored by: IY/SA/TT/SM.
Date: 3/27/08

Well ID	Pressure (in. H20)	VOCs (ppm)	LEL methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
1	-15	Over	19.5 V	9.9	8.8	0	
2	-2	Over	27.5 V	18.9	11.0	0	
3	4	Over	18 V	25.5	9.8	0	
4	4.5	Over	16 V	32.7	8.6	0	
5	-8	Over	49 V	19.6	13.0	0	
6	-7	Over	34.5 V	11.1	7.6	0	
7	-3	Over	44.5 V	10.1	16.6	0	
8	6	Over	18 V	28	9.4	0	
9	5	Over	20 V	23.5	10.2	0	
10	-6	Over	46.8 V	10.6	12.2	0	
11	-1	Over	21.5 V	24.1	11.2	0	
12	-5	Over	10.5 V	20.9	7.0	0	
13	-0.10	Over	16 V	2.7	1.8	0	
14	-0.12	1255	8	1.0	20.2	0	
15A	-0.02	2645	20	0	13.2	0	
15B	-0.2	317	13	5.2	14.0	0	
16	-0.16	3724	35	0	11.2	0	
17	NA	NA	NA	NA	NA	0	
18	-0.08	45.6	0	8.5	12.0	0	
19	-0.08	273	20	1.6	14.4	0	
20A	-9	175	11	1.4	16.0	0	
20B	-0.05	1913	52	0	17.6	0	
21	-0.11	577	9	9.7	9.8	0	

Date: 3/27/08

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Location ID	Pressure (in. H_2O)	VOCs (ppm)	LEL Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
A	-0.05	0	0	20.9	0.4	0	
B	-0.05	0.3	0	11.1	8.4	0	
C	-0.05	0.2	0	8.3	7.8	0	
D	0	0.1	0	20.2	0.6	0	
E	-0.01	0.1	0	15.4	3.2	0	
F	0	0.1	0	15.7	3.4	0	
G	-0.05	0.1	0	15.2	1.8	0	
H	-0.1	0.1	0	15.1	3.6	0	
I	-0.05	0.1	0	20.9	0	0	
J	0	0.1	0	15.5	2.8	0	
K	0	0.1	0	16	3.8	0	monitored on 4/1/08.
L	0	0.1	0	20.9	0	0	
A'	-0.3	22	0	20.9	0.7	0	
B'	0	0.1	0	6.8	16.2	0	
C'	0.75	3000	30 V	13.5	10.2	0	
D'	-0.28	40.5	0	19.4	0.4	0	
E'	-0.1	15.9	0	20.9	0	0	
F'	-0.06	0.3	0	20.9	0	0	
G'	-0.06	2.5	0	2.6	16.2	0	
H'	0	0.1	0	12.2	9.0	0	
I'	-0.06	4036	65	2.5	2.2	0	
J'	0	30	0	20.9	0	0	
K'	-0.12	0.3	0	11.6	6.1	0	
L'	-0.06	1.2	0	3.4	18.2	0	
M'	0	2200	47	14.0	4.2	0	
N'	0	1839	35V	16.8	7.6	0	
A"1	-0.05	0.2	0	19.4	1.4	0	
A"2	-0.05	0.1	0	20.9	0	0	
A"3	-0.05	0.1	1	20.7	0.6	0	
B"1	1.0	1870	30.5V	20.9	7.6	0	
B"2	0.5	3500	19 V	15.3	5.2	0	
B"3	0.65	2400	26 V	20.4	8.0	0	
C"1	-0.76	340	1	19.4	0.6	0	
C"2	-0.14	32	0	10.0	0	0	
C"3	-0.16	33.4	0	20.0	0.2	0	
D"1	-0.48	3985	14.5V	10.0	7.6	0	
D"2	-0.22	21.5	2	20.0	0	0	
D"3	-0.2	8.6	0	20.3	0	0	
E"1	-0.1	0.1	0	20.1	1.0	0	
E"2	-0.05	0.1	0	17.8	1.2	0	
E"3	-0.05	0.1	0	19.3	1.0	0	
F"1	-0.06	0.2	0	20.9	0	0	
F"2	-0.06	18.5	0	20.9	0	0	
F"3	-0.06	19.0	0	20.9	0	0	

Date: 3/27/08

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Location ID	Pressure (in. H_2O)	VOCs (ppm)	LEL Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
G"1	-0.05	0	0	18.4	0.6	0	
G"2	0	0	0	18.0	0.6	0	
G"3	0	0.2	0	19.6	1.2	0	
H"1	-0.02	0.1	0	20.9	0	0	
H"2	-0.02	0.1	0	20.9	0	0	
H"3	-0.08	0	0	11.1	9.0	0	
I"1	-0.3	2611	42	0	16.4	0	
I"2	-0.48	13.2	0	20.9	0	0	
I"3	-0.01	60.3	0	15.5	2.6	0	
J"1	-0.02	2.6	0	20.9	0	0	
J"2	-0.02	3.1	0	20.9	0	0	
J"3	-0.04	0.2	0	20.9	0	0	
K"1	-0.02	1.8	0	20.9	0	0	
K"2	-0.06	610	31	7.5	14.0	0	
K"3	-0.06	41	1	20.7	0	0	
L"1	+1.0	2600	34.5V	6.7	14.2	0	
L"2	+0.75	3125	19.5V	17.1	7.2	0	
L"3	+0.75	2700	5.5	19.1	2.8	0	
M"1	-0.11	1600	15	7.2	10.4	0	
M"2	-0.07	245	3	4.4	14.7	0	
M"3	0	60.1	1	20.6	0.2	0	

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Monitored by: SA/SM/IY/TT
Date: 6/26/08

Well ID	Pressure (in. H20)	VOCs (ppm)	LEL methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
1	-2.5	Over	17.5V	9.5	8.6	0	
2	-4	Over	24V	17.5	13.2	0	
3	5	Over	23V	25.5	11.6	0	
4	6.5	Over	21.5V	26.7	11.2	0	
5	-11	Over	37.5V	17.2	13.8	0	
6	-4	Over	27.5V	10.4	7.2	0	
7	-1	Over	38.5V	5.2	19.2	0	
8	6.5	Over	16.5V	24.9	0.6	0	
9	5.5	Over	21.5V	24.3	11.4	0	
10	-4.5	Over	46V	12.3	13.8	0	
11	-4	Over	22.5V	17.5	12.4	0	
12	-0.5	Over	5.5V	24.5	5.6	0	
13	-0.14	Over	0	2.7	1.8	0	
14	-0.1	1163	8	2.8	17.4	0	
15A	-0.14	1154	6	0.7	12.4	0	
15B	-0.15	240	3	5.1	14	0	
16	-0.14	2240	21	0	13.2	0	
17	N/A	N/A	N/A	N/A	N/A	N/A	
18	-0.06	19.5	2	11.1	9.6	0	
19	-0.09	330	4	2.1	14	0	
20A	-0.8	854	10	2.1	14	0	
20B	-0.16	1739	60	0.2	16.2	0	
21	-0.06	472	9	6.9	7.8	0	

Date: 6/26/08

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Location ID	Pressure (in. H_2O)	VOCs (ppm)	LEL Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
A	-0.02	0	0	20.9	0	0	
B	-0.02	30	0	15.3	8.2	0	
C	-0.02	18	0	12	10.2	0	Need bolts/washer
D	-0.03	13.9	0	20.9	0	0	
E	-0.04	10.5	0	17	4	0	
F	-0.02	11.9	0	18	3.6	0	
G	-0.03	5.2	0	19.2	2.2	0	
H	-0.02	87	0	17.1	3.4	0	
I	0	0	0	20.9	0	0	
J	0	0	0	19.3	2.4	0	
K	-0.05	0.2	0	20.3	1.4	0	
L	0	0.2	0	16.5	4.8	0	
A'	-0.56	Over.	13.5V	7.1	14.4	0	
B'	-0.04	342	2	8.9	15.8	0	Need washer.
C'	0.94	Over	51V	15.6	13.6	2.5	
D'	-0.38	13	0	20.9	0	0	
E'	-0.09	10.1	0	20.9	0	0	
F'	-0.06	46.1	0	20.9	0	0	
G'	-0.06	32	0	20.9	0	0	
H'	-0.05	34.5	0	20.7	8	0	
I'	-0.02	1305	14	7.1	2.4	0	
J'	-0.07	21.3	0	20.9	0	0	
K'	-0.11	31	0	7.6	10.2	0	
L'	-0.08	16.5	0	20.9	0	0	
M'	0.02	Over	11.5V	9.8	12.8	0	
N'	0.3	1399	11	20.9	0.2	0	
A"1	-0.02	2.3	0	19.7	1.6	0	
A"2	-0.02	0	0	20.9	0	0	
A"3	-0.02	0	0	20.9	0	0	
B"1	1	Over	30.5V	20.4	12.4	0	
B"2	0.4	Over	39V	21.3	12.6	0	
B"3	0.6	Over	36V	21.7	12.4	0	
C"1	-0.38	75	18	19.7	4.4	0	
C"2	-0.19	85	0	20.9	0	0	
C"3	-0.24	110	0	20.9	0	0	
D"1	-0.3	Over	19V	0.7	15.2	0	
D"2	-0.14	67	835	17	0.8	0	tight.
D"3	-0.2	Over	6.5V	0.7	13.6	0	
E"1	-0.02	12.3	0	20.9	0	0	Re-adjust gasket/need 3 small Volts.
E"2	-0.02	103	0	20.9	1.2	0	
E"3	-0.03	8	0	20.9	0	0	
F"1	-0.06	7.5	0	20.9	0	0	
F"2	-0.08	47.7	0	20.9	0	0	
F"3	-0.04	25.4	0	20.9	0	0	

Date: 6/26/08

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Location ID	Pressure (In. H_2O)	VOCs (ppm)	LEL Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
G"1	-0.06	5.6	0	17	4	0	Need New bolt
G"2	-0.02	322	1	20.5	1.4	0	
G"3	-0.08	1.4	0	20.9	0.6	0	
H"1	-0.02	25.1	0	20.9	0	0	
H"2	-0.02	63.3	0	20.9	0	0	
H"3	-0.06	61.7	0	13.7	7.4	0	
I"1	-0.14	2176	23	0	15.8	0	
I"2	-0.18	31.2	0	20.9	0	0	
I"3	-0.08	71.9	0	18.1	1.4	0	
J"1	-0.02	28.5	0	20.9	0	0	
J"2	-0.04	16.5	0	20.9	0	0	
J"3	-0.1	281	0	18	2.6	0	
K"1	-0.02	108	1	20.9	0	0	
K"2	-0.05	1850	9	6	16.2	0	
K"3	-0.02	136	0	20.9	0	0	
L"1	1	over	36 V	7.5	15	1.5	
L"2	1	1143	20	20.9	0	0	
L"3	0.42	44.3	15	20.9	0	0	
M"1	-0.05	1943	9	6.7	12	0	
M"2	-0.04	62	0	3.8	16.8	0	
M"3	-0.01	27	0	20.9	0	0	

2nd Quarterly Full Scale Monitoring
Follow-up Supplemental Monitoring
7/1/2008

Location ID	VOCs (ppm)		LEL Methane (%)	Oxygne (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)
	PID 1	PID 2				
A	0	10↑	0	20.9	0	0
B	7.0→0.8	10↑	0	15.5	7.6	0
C	0.2	18.8	0	12.7	9.2	0
D	0.1	0.3	0	20.9	0	0
E	0.1	13	0	17.4	3.8	0
F	0.3	32↑	0	18.1	3.4	0
G	0.1	15↑	0	19.2	2.4	0
H	0.5	13.5↑	0	16.4	3.8	0
I	0	0.2	0	20.9	0	0
J	0.6	22	0	18.2	3.2	0
K	0.8	25.8	0	17.9	3.6	0
L	0	0.3	0	15.5	5.0	0
E"1	0.1	0.1	0	20.9	0	0
E"2	0.7	70↑	0	20.9	1.0	0
E"3	0.1	0.6	0	20.9	0	0
G"1	0.5	52↑	0	16.6	4.0	0
G"2	26.7	38→18.7	0	20.9	1.0	0
G"3	0.6	25→2.4	0	20.9	0.6	0

Perimeter Wells Monitoring Form

Monitored by: IY/SM.
Date: 8/29
Weather: Sunny.

Well ID	P (in. H20)	O2 (%)	LEL methane (%)	CO2 (%)	VOCs (ppm)	
A	NA	20.9	0	0	15→0.2	*
B	NA	17.1	0	7.2	0.1	
C	NA	15.1	0	8.4	0	
D	NA	NA	NA	NA	0	**
E						
F						
G						
H	NA	16.8	0	4.0	0	
I						
J						
K						
L						

* PID read 15 ppm and dropped down and stabilized at 0.2 ppm.

** RKI Eagle (multi gas sensor) could not monitor under very low pressure.

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Monitored by: SA/SM/LY/TT
Date: 9/30/08

Well ID	Pressure (in. H20)	VOCs (ppm)	LEL methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
1	-2.0	>15000	74	6.8	8.8	0	
2	-6.5	>15000	>100	15.9	14.8	0	
3	+4.5	>15000	10	19.7	0.1	0	
4	+9.5	>15000	>100	20.7	12.8	0	
5	-7.75	>15000	>100	11.3	16.4	0	
6	-1.0	>15000	>100	3.6	7.9	0	
7	-1.0	>15000	>100	5.9	16.8	0	
8	+9.5	>15000	>100	21.8	11.0	0	
9	+2.0	>15000	>100	24	11.1	0	
10	-13.0	>15000	>100	13.4	14.1	0	
11	-6.75	>15000	>100	20.5	13.6	0	
12	0.5	>15000	42	19.5	4.0	0	
13	0	>15000	8	2.7	1.5	0	
14	-0.25	914	>100	1.9	17.1	0	
15A	-0.25	1170	11	0	12.6	0	
15B	-0.5	196	10	4.3	13.8	0	
16	0	1362	22	0	12.6	0	
17	NA						
18	0	2.1	9	10.5	9.9	0	
19	-0.25	322	22	2.0	13.3	0	
20A	-15	690	38	14.1	1.8	0	
20B	-0.5	1234	>100	0	15.6	0	
21	0	428	>100	5.9	11.8	0	

Date: 9/30/08

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Location ID	Pressure (in. H_2O)	VOCs (ppm)	LEL Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
A	-0.05	0	0	19.7	0.4	0	
B	-0.05	0	0	16.6	7.0	0	
C	-0.05	0	0	16.2	8.7	0	
D	0	0	0	18.5	1.3	0	
E	0	0	0	16.6	3.5	0	
F	-0.05	0	0	16.8	3.4	0	
G	-0.05	0.4	0	18.8	1.2	0	
H	-0.05	2.3	0	16.5	3.5	0	
I	0	0.5	0	19.2	1.6	0	
J	0	0.1	0	18.5	2.5	0	
K	-0.05	0.1	0	18.4	2.9	0	
L	0	0.1	0	20.0	0.2	0	
A'	-1.0	14	3.8	9.4	10.6	0	
B'	-0.05	0	0	13.4	9.5	0	
C'	+0.025	150	15.4V	10.7	13.8	0	
D'	-0.5	>15000	7.3	0.2	14.1	0	
E'	-0.05	4.2	0.1	21.5	0	0	
F'	0	0.8	0.6	21.1	0	0	
G'	-0.05	3.3	0.2	4.4	12.9	0	
H'	-0.01	0.8	0.1	14.9	4.7	0	
I'	-0.1	>15000	7.5	3.2	3.4	0	
J'	-0.15	9.8	0.2	18.0	1.8	0	
K'	-0.1	31.6	0.3	13.2	4.9	0	
L'	0	20.0	0.4	20.6	0	0	
M'	0	>15000	8.5V	6.8	15.1	0	
N'	+0.05	>15000	1.3V	21.3	10.4	0	
A"1	-0.05	3.0	0	18.5	1.6	0	
A"2	-0.05	8.9	0	20.1	0	0	
A"3	-0.05	2.6	0	20.2	0	0	
B"1	+0.25	>15000	7.7V	24	12.1	0	
B"2	0	>15000	3.4V	21.6	12.3	0	
B"3	0	>15000	11.2V	23.2	12.7	0	
C"1	-0.5	4.7	0.6	19.8	0	0	
C"2	-0.25	25.3	1.0	16.9	2.0	0	
C"3	-0.25	5201	0.4	19.9	0	0	
D"1	-1.5	>15000	4.4V	1.8	12.0	0	
D"2	-0.5	121.8	0.7	19.7	0	0	
D"3	-0.25	>15000	4.3V	0	12.1	0	
E"1	-0.1	0.1	0	16.2	3.8	0	
E"2	-0.05	0	0	19.1	0.5	0	
E"3	-0.35	2.9	0	19.1	0.3	0	
F"1	0	0	0.4	21.3	0	0	
F"2	0	30.2	0.4	21.1	0	0	
F"3	0	7.2	0.4	21.0	0	0	

Date: 9/30/08

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Location ID	Pressure (in. H_2O)	VOCs (ppm)	LEL Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
G"1	-0.1	0	0	19.5	0.1	0	
G"2	0	0	0	19.0	0.6	0	
G"3	-0.05	0.2	0	19.1	0.7	0	
H"1	-0.05	0	0.3	20.8	0	0	
H"2	-0.01	0	0.4	20.4	0	0	
H"3	-0.01	0	0.3	13.1	6.2	0	
I"1	-0.3	8420	2.5	0	14.1	0	
I"2	-0.5	1.1	0.3	21.0	0	0	
I"3	-0.20	201.8	0.3	17.5	1.4	0	
J"1	-0.025	0.5	0.3	21.0	0	0	
J"2	0	2.3	0.4	21.0	0	0	
J"3	-0.1	3.5	0.3	16.8	2.6	0	
K"1	-0.05	4.7	0.6	18.4	1.5	0	
K"2	-0.05	5946	0.8	2.8	16.4	0	
K"3	-0.05	8.9	0.6	20.6	0	0	
L"1	+0.05	>15000	13.7V	4.6	15.6	0	
L"2	0	>15000	10.1V	13.1	9.0	0	
L"3	0	>15000	7.9	15.1	6.8	0	
M"1	-0.15	4479	0.7	10.9	7.7	0	
M"2	-0.25	12.7	0.4	5.5	14.3	0	
M"3	-0.05	8.7	0.3	19.7	0	0	

Perimeter Wells Monitoring Form

Monitored by: 10/23/08
Date:
Weather:

Well ID	P (in. H20)	O2 (%)	LEL methane (%)	CO2 (%)	VOCs (ppm)
A	0.04	20.3	0	0.6	0
B	0.04	17.9	0	6.8	0
C	0.0	16.5	0	8.4	0
D	0.0	18.3	0	3.0	0
E	0.02	17.5	0	4.2	0
F	0.02	17.8	0	3.8	0
G	0	18.9	0	2.4	0
H	0.02	17.3	0	4.0	0
I					
J					
K					
L					

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Monitored by: SM/SA/IY/TT
Date: 12/10/2008

Well ID	Pressure (in. H20)	VOCs (ppm)	LEL methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
1	-20	>15000	21 V	10.6	10.8	Ø	
2	-4	5200	28 V	17.1	19.0	Ø	
3	+4	>9999	23 V	30.6	12.2	Ø	
4	+6	>15000	27 V	27.7	13.2	Ø	
5	-4	>15000	42 V	14.4	20.4	Ø	
6	-20	>9999	37.5 V	11.0	10.6	Ø	
7	-3	11469	46 V	13.6	17.4	Ø	
8	+5	>15000	23.5 V	27.7	12.0	Ø	
9	+6	>15000	26 V	24.3	13.2	Ø	
10	-18	13928	50.5	11.5	10.2	Ø	
11	-4.0	8000	23 V	20.9	17.0	Ø	
12	-18	>15000	9.5 V	20.9	9.2	Ø	
13	Ø	>15000	11	18.4	0.2	Ø	
14	Ø	960	8	2.4	20.4	Ø	
15A	Ø	2445	7	0.2	15.2	Ø	
15B	Ø	169	2	2.9	17.6	Ø	
16	Ø	1300	17	Ø	14.6	Ø	
17	NA						
18	Ø	0.3	0	10.5	12.0	Ø	
19	Ø	487.7	3	1.2	16.2	Ø	
20A	-2.0	1070	7	Ø	18.4	Ø	
20B	Ø	7899	56	0.4	18.6	Ø	
21	Ø	698	11	8.0	12.0	Ø	

Date: 12/10/2008

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Location ID	Pressure (in. H_2O)	VOCs (ppm)	LEL Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
A	Ø	0.1	Ø	19.7	1.0	Ø	
B	Ø	0.2	Ø	17.2	6.2	Ø	
C	Ø	Ø	Ø	16.3	6.8	Ø	
D	Ø	0.1	Ø	18.9	1.2	Ø	
E	Ø	Ø	Ø	17.4	4.0	Ø	
F	Ø	Ø	Ø	17.4	3.6	Ø	
G	Ø	Ø	Ø	18.5	2.4	Ø	
H	Ø	0.3	Ø	17.0	4.0	Ø	
I	Ø	0.1	Ø	20.6	Ø	Ø	
J	Ø	0.1	Ø	18.5	2.6	Ø	
K	Ø	Ø	Ø	18.8	2.2	Ø	
L	Ø	Ø	Ø	15.5	4.8	Ø	
A'	-0.75	19.5	Ø	20.9	Ø	Ø	
B'	Ø	0.2	Ø	11.6	13.8	Ø	
C'	Ø	6397	42.5V	11.7	17.2	3.5	
D'	-0.35	1020	Ø	19.1	0.6	Ø	
E'	-0.05	2.3	Ø	12.2	7.0	Ø	
F'	-0.1	1.0	Ø	20.8	Ø	Ø	
G'	Ø	Ø	Ø	20.6	Ø	Ø	
H'	Ø	0.3	Ø	17.2	3.2	Ø	
I'	Ø	13000	3	15.7	1.2	Ø	
J'	Ø	3.4	Ø	18.7	1.2	Ø	
K'	Ø	1.0	Ø	20.6	Ø	Ø	
L'	-0.15	2.0	1	20.0	Ø	Ø	
M'	Ø	3517	9.0 V	10.9	13.2	Ø	
N'	Ø	8005	35.5V	19.3	11.6	Ø	
A"1	-0.1	0.3	Ø	19.3	1.8	Ø	
A"2	-0.1	0.1	Ø	20.5	0.2	Ø	
A"3	Ø	1.4	1	19.9	0.6	Ø	
B"1	Ø	>15000	30.0V	23.2	15.0	Ø	
B"2	Ø	11980	40.5V	22.2	16.2	Ø	
B"3	Ø	>15000	26.5V	19.2	13.4	Ø	
C"1	-0.2	1150	Ø	20.2	Ø	Ø	
C"2	-0.2	4.0	Ø	20.1	Ø	Ø	
C"3	-0.1	450	Ø	19.6	0.4	Ø	
D"1	-0.55	>15000	15.0V	9.7	9.4	Ø	
D"2	Ø	25	12V	16.5	1.8	Ø	
D"3	-0.55	>15000	7V	3.4	17.0	Ø	
E"1	Ø	0.1	Ø	20.6	Ø	Ø	
E"2	Ø	Ø	Ø	19.9	0.6	Ø	
E"3	Ø	0.1	Ø	20.6	Ø	Ø	
F"1	Ø	0.9	Ø	20.9	Ø	Ø	
F"2	Ø	3.1	Ø	20.6	Ø	Ø	
F"3	Ø	10.2	Ø	20.6	Ø	Ø	

Date: 12/10/2008

SVE/IBT
Full Scale Monitoring Form
Del Amo Pits

Location ID	Pressure (in. H_2O)	VOCs (ppm)	LEL Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (%)	Note
G"1	Ø	0.1	Ø	16.4	4.2	Ø	
G"2	Ø	Ø	Ø	19.4	0.6	Ø	
G"3	Ø	0.1	Ø	20.8	Ø	Ø	
H"1	Ø	0.1	Ø	20.4	0.2	Ø	
H"2	Ø	0.1	Ø	20.4	Ø	Ø	
H"3	Ø	0.5	Ø	12.4	7.4	Ø	
I"1	Ø	4000	15	Ø	16.4	Ø	
I"2	Ø	1.5	Ø	19.9	Ø	Ø	
I"3	Ø	38.0	1	18.4	1.2	Ø	
J"1	Ø	1.7	Ø	20.0	0.4	Ø	
J"2	Ø	20.1	4	19.3	0.8	Ø	
J"3	Ø	1.1	1	16.6	2.8	Ø	
K"1	Ø	1.2	Ø	19.3	0.6	Ø	
K"2	-0.1	1035	2	7.0	15.0	Ø	
K"3	Ø	13.6	Ø	20.6	Ø	Ø	
L"1	Ø	936	44.5V	7.6	20.4	1.5	
L"2	Ø	4100	32.5V	11.5	15.4	Ø	
L"3	Ø	12090	46	19.7	2.2	Ø	
M"1	-0.1	1401	4	11.9	11.0	Ø	
M"2	-0.2	5.2	1	8.2	17.2	Ø	
M"3	Ø	44.0	Ø	20.9	Ø	Ø	

APPENDIX G

2008 INSPECTION FORMS

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

Completed By: TRI TRAN
Title: FIELD TECH

Sheet 1 of 9
Date: 1/7/08
Time: 11:AM

Verified By: _____
Title: _____

Date: 1/7/08

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (X) After Heavy Rain[2]

( ) Other (explain) _____

Item Description		Condition*/Remarks
1.	Erosion	No ✓
2.	Stressed Vegetation (Plant Die-Back)	" ✓
3.	Sediment Build-Up	" ✓
4.	Local Subsidence or Loss of Grade	" ✓
5.	Water Ponding	" ✓
6.	Turf Height	" ✓
7.	Burrowing Animals	" ✓
8.	Weeds or Undesirable Vegetation	" ✓
9.	Evidence of Fires or Vandalism	" ✓
10.	Soil Quality Check	✓
11.	Unauthorized Traffic	✓
12.	Slope Instability or Sloughing	" ✓
13.	Survey Monuments	✓
14.	Vertical Cracking	" ✓
15.	Intrusions	" ✓
16.	Evidence of Waste Pit Materials	" ✓

* Indicate satisfactory condition with a check; briefly describe conditions other than satisfactory; use additional sheets if more space is needed.

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the Waste Pits OU.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

Completed By: TT / SA

Title: FIELD TECH / Engineer

Sheet 3 of 9

Date: 1/7/08

Time: _____

Verified By: _____

Title: _____

Date: _____

Type of Inspection (check only one):

( ) Monthly ( ) Semi-Annual

( ) Other (explain) _____

(X) Heavy Rain _____

Collection System Valves	
1. Adequate-Free Movement	✓
2. Seals - Complete	✓
3. Signs of Rust/Corrosion	✓

Condensate Collection (1)	Comments/Corrective Action
4. Air Moisture Separator	✓
Carbon Adsorbers	
5. Vessels	
- Exterior Damage	✓
- FRP Grating and Mesh	✓

(1) Initial condensate collected from (1) the drainage system downstream of the valve vaults, and (2) from the carbon absorber vessels must be characterized to determine methods of appropriate disposal.

DEL AMO WASTE PITS OU
CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

6. Blower ✓
   - General Motor Maintenance ✓
   - Drive Maintenance ✓
   - Bearing Maintenance ✓
   - Lubrication ✓
   - Structural Maintenance ✓

Recommendations for maintenance or repair (attach additional sheets as needed):

DEL AMO WASTE PITS OU

SURFACE WATER DRAINAGE INSPECTION FORM

Completed By: TRI TRAN
Title: FIELD TECH

Sheet 4 of 9
Date: 1/7/08
Time: 11:00 AM
Date: 1/7/08

Verified By: _____
Title: _____

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1]

(✓) Other (explain) After Rain.

Item Description	Condition*/Remarks
SURFACE-WATER DRAINAGE SYSTEMS [2]	
1. Washouts or Erosion of Contoured Grade	✓
2. Ponding on Contoured Grade	✓
3. Gullies and Ruts on Contoured Grade	✓
4. Plugging of Drainage Culverts	✓
5. Holes and Cracks in Swales or Catch Basins	✓
6. Sediment Build-Up in Swales or Catch Basin	a little sediment build-up.
7. Surface Cracking of Swales/Catch Basins	✓
8. Spalling of Swales/Catch Basins	✓
9. Structural Failure of Swales/Catch Basins	✓

* Indicate satisfactory condition with a check; briefly describe conditions other than satisfactory; use additional sheets if more space is needed.

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.
(2) Contoured grades, swales, and catch basins

DEL AMO WASTE PITS OU

SUBSURFACE DRAINAGE INSPECTION FORM

Completed By: TRI TRAN

Title: FIELD TECH

Sheet 5 of 9

Date: 1/7/08

Time: 1:00 pm

Verified By: _____

Date: 1/7/08

Title: _____

Type of Inspection (check only one):

( ) Semi-annual

(✓) Heavy Rainfall[2]

( ) Other (explain) _____

Item Description	Condition*/Remarks
SUBSURFACE DRAINAGE SYSTEMS	
1. Holes and Cracks in Swales, Catch Basin	✓
2. Plugging of Drainage Inlets	✓
3. Sediment Build-Up or Debris in Catch Basin	a little sediment build-up.
4. Structural Failure of Catch Basin	✓

* Indicate satisfactory condition with a check; briefly describe conditions other than satisfactory; use additional sheets if more space is needed.

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999).

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

Completed By: TT / SA
Title: FIELD TECH / ENGINEER

Sheet 6 of 9
Date: 01/7/08
Time:

Verified By:
Title:

Date:

Type of Inspection (check only one):

( ) Quarterly

( ) Other (explain)

Item Description	Condition*/Remarks
Perimeter Fence	
1. Breaks and Holes	Repair 1 (open)
2. Settlement Damage	✓
3. Loose Posts/Tension	✓
4. Rust/Corrosion	✓
5. Ruts and Burrows Beneath Fence	✓
6. Vegetation Overgrowth	✓
7. General Signs of Deterioration	✓
8. Vandalism/Animal/Wind Damage	✓
Gates	
9. Adequate Movement of Hinges and Gates	✓
10. Proper Function of Lock(s)	✓

* Indicate satisfactory condition with a check; briefly describe conditions other than satisfactory; use additional sheets if more space is needed.

Recommendations for maintenance or repair (attach additional sheets as needed):

DEL AMO WASTE PITS OU

ACCESS ROAD INSPECTION FORM

Completed By: TRI TRAN Sheet 7 of 9

Title: FIELD TECH Date: 1/7/08

Time: _____

Verified By: _____ Date: _____

Title: _____

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (X) After Heavy Rain[2]

( ) Other (explain) _____

Item Description	Condition*/Remarks
Access Road	
1. Holes and Cracks	✓
2. Vegetation Overgrowth	✓
3. Settlement	✓
4. Excessive Dispersion of Gravel	✓
5. General Signs of Deterioration	✓

* Indicate satisfactory condition with a check; briefly describe conditions other than satisfactory; use additional sheets as needed.

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

SVE/IBT SYSTEM INSPECTION FORM

Completed By: TRI TRAN

Title: FIELD TECH

Sheet 8 of 9

Date: 11/7/08

Time: 11:30 AM

Verified By: _____

Date: 11/7/08

Title: _____

Type of Inspection (check only one):

( ) Monthly ( ) Semi-Annual

( ) Other (explain) _____

(X) Heavy Rain _____

Manifold

1. Adequate-Free Movement ✓
2. Seals - Complete ✓
3. Visible Damage ✓

Condensate Collection [1] — Comments/Corrective Action

4. Air Moisture Separator ✓

Additional System Components

5. Carbon Adsorber Vessels
   - Exterior Damage ✓
   - Vessel Configuration (A-B or B-A) ✓ A-B configuration

6. Blowers
   - General Motor Maintenance ✓
   - Drive Maintenance ✓
   - Bearing Maintenance ✓

(1) Initial condensate collected from (1) the drainage system downstream of the valve vaults, and (2) from the carbon absorber vessels must be characterized to determine methods of appropriate disposal.

DEL AMO WASTE PITS OU
SVE/IBT SYSTEM INSPECTION FORM

7. Oxygen Generator
   - Signs of Rust/Corrosion ✓
   - Mechanical Functioning ✓
   - Oxygen Purity ✓

8. System Sensors
   - Visible Damage ✓
   - Mechanical Functioning AT4B, FT05, FT01 are under repairing.

9.(2) SVE Wellheads
   - Tee Flanges ✓
   - Valves ✓

Recommendations for maintenance or repair (attach additional sheets as needed):

(2) Tee flanges monitored for leaks using a PID.

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

Completed By: IAN YUSKO
Title: PE

Sheet 1 of 11
Date: 1/25/08
Time: 1:40 PM

Verified By: STEFAN KIEMM
Title: PM

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (X) After Heavy Rain[2]

( ) Other (explain) _____

Item Description		Condition/Remarks
1.	Erosion	4
2.	Stressed Vegetation (Plant Die-Back)	4
3.	Sediment Build-Up	4
4.	Local Subsidence or Loss of Grade	4
5.	Water Ponding	4
6.	Turf Height	4
7.	Burrowing Animals	4
8.	Weeds or Undesirable Vegetation	4
9.	Evidence of Fires or Vandalism	4
10.	Soil Quality Check	4
11.	Unauthorized Traffic	4
12.	Slope Instability or Sloughing	4
13.	Survey Monuments	4
14.	Vertical Cracking	4
15.	Intrusions	4
16.	Evidence of Waste Pit Materials	4

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

SHEET 2 OF 11

DATE: 1/25/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

NONE

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the Waste Pits OU.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

Completed By: IAN YUSKO

Title: PE

Sheet 3 of 11

Date: 1/25/08

Time: 1:40 PM

Verified By: STEFAN KLEMM

Title: PM

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (X) After Heavy Rain[2]

( ) Other (explain) _____

	Condition/Remarks
Collection System Valves	
1. Adequate-Free Movement	4
2. Seals - Complete	4
3. Signs of Rust/Corrosion	3
Condensate Collection [1]	
4. Air Moisture Separator	4
Carbon Adsorbers	
5. Vessels	4
- Exterior Damage	4
- FRP Grating and Mesh	4
Heavy Equipment	
6. Blower	
- General Motor Maintenance	4
- Drive Maintenance	4
- Bearing Maintenance	4
- Lubrication	4
- Structural Maintenance	4

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

SHEET 4 OF 11

DATE: 1/25/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

3. Signs of Rust/corrosion - parts of the GCTS system may need to be wire-brushed & painted in the near future to deter additional rust from forming.

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

(3) Initial condensate collected from the air moisture separator must be characterized to determine methods of appropriate disposal.

DEL AMO WASTE PITS OU

SURFACE WATER DRAINAGE INSPECTION FORM

Completed By: IAN YUSKO
Title: PE

Sheet 5 of 11
Date: 1/25/08
Time: 1:40 PM

Verified By: STEFAN KLEMM
Title: PM

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (X) After Heavy Rain[2]

( ) Other (explain)_____

Item Description	Condition*/Remarks
SURFACE-WATER DRAINAGE SYSTEMS [2]	
1. Washouts or Erosion of Contoured Grade	4
2. Ponding on Contoured Grade	4
3. Gullies and Ruts on Contoured Grade	4
4. Plugging of Drainage Culverts	4
5. Holes and Cracks in Swales or Catch Basins	4
6. Sediment Build-Up in Swales or Catch Basin	4
7. Surface Cracking of Swales/Catch Basins	4
8. Spalling of Swales/Catch Basins	4
9. Structural Failure of Swales/Catch Basins	4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

NONE

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.
(2) Contoured grades, swales, and catch basins.

DEL AMO WASTE PITS OU

SUBSURFACE DRAINAGE INSPECTION FORM

Completed By: IAN YUSKO

Title: PE

Sheet 6 of 11

Date: 1/25/08

Time: 1:40 PM

Verified By: STEFAN KLEMM

Title: PM

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (X) After Heavy Rain[2]

( ) Other (explain) _____

Item Description	Condition/Remarks
SUBSURFACE DRAINAGE SYSTEMS	
1. Holes and Cracks in Swales, Catch Basin	4
2. Plugging of Drainage Inlets	4
3. Sediment Build-Up or Debris in Catch Basin	4
4. Structural Failure of Catch Basin	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

NONE

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999).

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

Completed By: IAN YUSKO
Title: PE

Sheet 7 of 11
Date: 1/25/08
Time: 1:40 PM

Verified By: STEFAN KLEMM
Title: PM

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (X) After Heavy Rain[2]

( ) Other (explain) _____

Item Description	Condition/Remarks
Perimeter Fence	
1. Breaks and Holes	4
2. Settlement Damage	4
3. Loose Posts/Tension	4
4. Rust/Corrosion	4
5. Ruts and Burrows Beneath Fence	4
6. Vegetation Overgrowth	4
7. General Signs of Deterioration	4
8. Vandalism/Animal/Wind Damage	4
Gates	
9. Adequate Movement of Hinges and Gates	4
10. Proper Function of Lock(s)	4

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

SHEET 8 OF 11

DATE: 1/25/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

NONE

DEL AMO WASTE PITS OU

ACCESS ROAD INSPECTION FORM

Completed By: IAN YUSKO

Title: PROJECT ENGINEER (PE)

Sheet 9 of 11

Date: 1/25/08

Time: 1:40 PM

Verified By: STEFAN KLEMM

Title: PROJECT MANAGER (PM)

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (X) After Heavy Rain[2]

( ) Other (explain) _____

Item Description	Condition/Remarks
Access Road	
1. Holes and Cracks	4
2. Vegetation Overgrowth	4
3. Settlement	4
4. Excessive Dispersion of Gravel	4
5. General Signs of Deterioration	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

NONE

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

SVE/IBT SYSTEM INSPECTION FORM

Completed By: IAN YUSKO

Title: PE

Sheet 10 of 11

Date: 1/25/08

Time: 1:40 PM

Verified By: STEFAN KLEMM

Title: PM

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (X) After Heavy Rain[2]

( ) Other (explain) _____

	Condition/Remarks
Manifold	
1. Adequate-Free Movement	4
2. Seals - Complete	4
3. Visible Damage	4
Condensate Collection [1]	
4. Air Moisture Separator	4
Additional System Components	
5. Carbon Adsorber Vessels	
- Exterior Damage	4
- Vessel Configuration (A-B or B-A)	B-A
6. Blowers	
- General Motor Maintenance	4
- Drive Maintenance	4
- Bearing Maintenance	4
7. Oxygen Generator	
- Signs of Rust/Corrosion	4
- Mechanical Functioning	4
- Oxygen Purity	4

DEL AMO WASTE PITS OU
SVE/IBT SYSTEM INSPECTION FORM

SHEET 11 OF 11
DATE: 1/25/08

8. System Sensors
   - Visible Damage: 4
   - Mechanical Functioning: 3

9. SVE Wellheads[2]
   - Tee Flanges: 4
   - Valves: 4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

8. System Sensor – Mechanical Functioning
3 of the O_2 sensors are displayed a different reading than what is being interpreted and displayed by the PLC system onto the VNC viewer display. CZREM will tune down the sensor's 4-20 mA range electronically (with remote) to get them adjusted and reading the same again.

(1) Initial condensate collected from (1) the drainage system downstream of the valve vaults, and (2) from the carbon absorber vessels must be characterized to determine methods of appropriate disposal.
(2) Tee flanges monitored for leaks using a PID.

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

Completed By: S. McGEOUGH
Title: PROJECT Engineer.

Sheet 1 of 11
Date: 1-28-08
Time: 2.30pm.

Verified By: TRI TRAN
Title: FIELD TECH.

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Item Description		Condition/Remarks
1.	Erosion	H
2.	Stressed Vegetation (Plant Die-Back)	H
3.	Sediment Build-Up	H
4.	Local Subsidence or Loss of Grade	H
5.	Water Ponding	3
6.	Turf Height	H
7.	Burrowing Animals	H
8.	Weeds or Undesirable Vegetation	H
9.	Evidence of Fires or Vandalism	H
10.	Soil Quality Check	H
11.	Unauthorized Traffic	H
12.	Slope Instability or Sloughing	H
13.	Survey Monuments	H
14.	Vertical Cracking	H
15.	Intrusions	H
16.	Evidence of Waste Pit Materials	H.

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

SHEET 2 OF 11

DATE: 1-28-08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the Waste Pits OU.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

Completed By: S. Mc GEOUGH

Title: PROJECT ENGINEER.

Sheet 3 of 11

Date: 1-28-08

Time: 2.30pm

Verified By: Tri Tran.

Title: Field tech.

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Collection System Valves	Condition/Remarks
1. Adequate-Free Movement	4
2. Seals - Complete	4
3. Signs of Rust/Corrosion	4
Condensate Collection[1]	
4. Air Moisture Separator	4
Carbon Adsorbers	
5. Vessels	4
- Exterior Damage	4
- FRP Grating and Mesh	4
Heavy Equipment	
6. Blower	
- General Motor Maintenance	4
- Drive Maintenance	4
- Bearing Maintenance	4
- Lubrication	4
- Structural Maintenance	4

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

SHEET 4 OF 11

DATE: 1-28-08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

(3) Initial condensate collected from the air moisture separator must be characterized to determine methods of appropriate disposal.

DEL AMO WASTE PITS OU

SURFACE WATER DRAINAGE INSPECTION FORM

Completed By: S Mc GEOUGH
Title: PROJECT ENGINEER.

Sheet 5 of 11
Date: 1-28-08
Time: 2.30pm

Verified By: TRI TRAN
Title: FIELD TECH.

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain)_____

Item Description	Condition*/Remarks
SURFACE-WATER DRAINAGE SYSTEMS [2]	
1. Washouts or Erosion of Contoured Grade	4
2. Ponding on Contoured Grade	4
3. Gullies and Ruts on Contoured Grade	4
4. Plugging of Drainage Culverts	4
5. Holes and Cracks in Swales or Catch Basins	4
6. Sediment Build-Up in Swales or Catch Basin	4
7. Surface Cracking of Swales/Catch Basins	4
8. Spalling of Swales/Catch Basins	4
9. Structural Failure of Swales/Catch Basins	4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.
(2) Contoured grades, swales, and catch basins.

DEL AMO WASTE PITS OU

SUBSURFACE DRAINAGE INSPECTION FORM

Completed By: S. Mc GEOUGH

Title: PROJECT ENGINEER

Sheet 6 of 11

Date: 1-28-08

Time: 2.30pm

Verified By: TRI TRAN

Title: FIELD TECH.

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Item Description	Condition/Remarks
SUBSURFACE DRAINAGE SYSTEMS	
1. Holes and Cracks in Swales, Catch Basin	4
2. Plugging of Drainage Inlets	4
3. Sediment Build-Up or Debris in Catch Basin	4
4. Structural Failure of Catch Basin	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999).

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

Completed By: S. Mc GEOUGH
Title: PROJECT Engineer

Sheet 7 of 11
Date: 1-28-08
Time: 2.30pm

Verified By: TRI TRAN
Title: FIEND TECH.

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Item Description	Condition/Remarks
Perimeter Fence	
1. Breaks and Holes	H
2. Settlement Damage	H
3. Loose Posts/Tension	H
4. Rust/Corrosion	3
5. Ruts and Burrows Beneath Fence	H
6. Vegetation Overgrowth	H
7. General Signs of Deterioration	H
8. Vandalism/Animal/Wind Damage	H
Gates	
9. Adequate Movement of Hinges and Gates	H
10. Proper Function of Lock(s)	H

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

SHEET 8 OF 11

DATE: 1-28-08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

DEL AMO WASTE PITS OU

ACCESS ROAD INSPECTION FORM

Completed By: S. McGEOUGH

Sheet 9 of 11

Title: PROJECT ENGINEER

Date: 1-28-08

Time: 2.30pm

Verified By: TRI TRAN

Title: FIELD TECH.

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Item Description	Condition/Remarks
Access Road	
1. Holes and Cracks	4
2. Vegetation Overgrowth	4
3. Settlement	4
4. Excessive Dispersion of Gravel	4
5. General Signs of Deterioration	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

SVE/IBT SYSTEM INSPECTION FORM

Completed By: S. Mc GEOUGH

Title: PROJECT ENGINEER.

Sheet 10 of 11

Date: 1-28-08

Time: 2-30pm

Verified By: TRI TRAN

Title: FIELD TECH.

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Manifold	Condition/Remarks
1. Adequate-Free Movement	H
2. Seals - Complete	H
3. Visible Damage	H
Condensate Collection[1]	
4. Air Moisture Separator	H
Additional System Components	
5. Carbon Adsorber Vessels	
- Exterior Damage	H
- Vessel Configuration (A-B or B-A)	H
6. Blowers	
- General Motor Maintenance	H
- Drive Maintenance	H
- Bearing Maintenance	H
7. Oxygen Generator	
- Signs of Rust/Corrosion	H
- Mechanical Functioning	H
- Oxygen Purity	H

DEL AMO WASTE PITS OU
SVE/IBT SYSTEM INSPECTION FORM

SHEET 11 OF 11
DATE: 1-28-08

8.	System Sensors	
	- Visible Damage	4
	- Mechanical Functioning	4
9.	SVE Wellheads(2)	
	- Tee Flanges	4
	- Valves	4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Initial condensate collected from (1) the drainage system downstream of the valve vaults, and (2) from the carbon absorber vessels must be characterized to determine methods of appropriate disposal.
(2) Tee flanges monitored for leaks using a PID.

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

Completed By: Stefan Klemm

Title: Project Manager

Sheet 1 of 11

Date: 2/27/08

Time: 9:00 am

Verified By:

Title:

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 1st Quarterly

Item Description		Condition/Remarks
1.	Erosion	4
2.	Stressed Vegetation (Plant Die-Back)	4
3.	Sediment Build-Up	4
4.	Local Subsidence or Loss of Grade	4
5.	Water Ponding	4
6.	Turf Height	4
7.	Burrowing Animals	3 (slight in a few areas)
8.	Weeds or Undesirable Vegetation	4
9.	Evidence of Fires or Vandalism	4
10.	Soil Quality Check	4
11.	Unauthorized Traffic	4
12.	Slope Instability or Sloughing	4
13.	Survey Monuments	4
14.	Vertical Cracking	4
15.	Intrusions	4
16.	Evidence of Waste Pit Materials	4

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

SHEET 2 OF 11

DATE: 2/22/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the Waste Pits OU.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

Completed By: Stefan Klemm

Sheet 3 of 11

Title: Project Manager

Date: 2/29/08

Time: 9:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 1st Quarterly

Collection System Valves	Condition/Remarks
1. Adequate-Free Movement	Y
2. Seals - Complete	Y
3. Signs of Rust/Corrosion	Y
Condensate Collection[1]	
4. Air Moisture Separator	Y
Carbon Adsorbers	
5. Vessels	
- Exterior Damage	Y
- FRP Grating and Mesh	Y
Heavy Equipment	
6. Blower	
- General Motor Maintenance	Y
- Drive Maintenance	Y
- Bearing Maintenance	Y
- Lubrication	Y
- Structural Maintenance	Y

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

SHEET 4 OF 11

DATE: 2/28/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

(3) Initial condensate collected from the air moisture separator must be characterized to determine methods of appropriate disposal.

DEL AMO WASTE PITS OU

SURFACE WATER DRAINAGE INSPECTION FORM

Completed By: Stefan Klemm
Title: Project Manager

Sheet 5 of 11
Date: 2/22/08
Time: 9:00 am

Verified By: _____
Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 1st Quarterly

Item Description	Condition*/Remarks
SURFACE-WATER DRAINAGE SYSTEMS [2]	
1. Washouts or Erosion of Contoured Grade	4
2. Ponding on Contoured Grade	4
3. Gullies and Ruts on Contoured Grade	4
4. Plugging of Drainage Culverts	4
5. Holes and Cracks in Swales or Catch Basins	4
6. Sediment Build-Up in Swales or Catch Basin	4
7. Surface Cracking of Swales/Catch Basins	4
8. Spalling of Swales/Catch Basins	4
9. Structural Failure of Swales/Catch Basins	4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

Some of joints in concrete drainage swales need to be re-caulked

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.
(2) Contoured grades, swales, and catch basins.

DEL AMO WASTE PITS OU

SUBSURFACE DRAINAGE INSPECTION FORM

Completed By: Stefan Klemm

Sheet 6 of 11

Title: Project Manager

Date: 2/22/08

Time: 9:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 1st Quarterly

Item Description	Condition/Remarks
SUBSURFACE DRAINAGE SYSTEMS	
1. Holes and Cracks in Swales, Catch Basin	4
2. Plugging of Drainage Inlets	4
3. Sediment Build-Up or Debris in Catch Basin	4
4. Structural Failure of Catch Basin	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999).

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

Completed By: Stefan Klemm

Title: Project Manager

Sheet 7 of 11

Date: 2/29/08

Time: 9:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 1st Quarterly

Item Description	Condition/Remarks
Perimeter Fence	
1. Breaks and Holes	Y
2. Settlement Damage	Y
3. Loose Posts/Tension	Y
4. Rust/Corrosion	Y
5. Ruts and Burrows Beneath Fence	Y
6. Vegetation Overgrowth	Y
7. General Signs of Deterioration	Y
8. Vandalism/Animal/Wind Damage	Y
Gates	
9. Adequate Movement of Hinges and Gates	Y
10. Proper Function of Lock(s)	Y

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

SHEET 8 OF 11

DATE: 2/29/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

DEL AMO WASTE PITS OU

ACCESS ROAD INSPECTION FORM

Completed By: Stefan Klemm

Title: Project Manager

Sheet 9 of 11

Date: 2/22/08

Time: 9:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 1st Quarterly

Item Description	Condition/Remarks
Access Road	
1. Holes and Cracks	4
2. Vegetation Overgrowth	4
3. Settlement	4
4. Excessive Dispersion of Gravel	4
5. General Signs of Deterioration	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

SVE/IBT SYSTEM INSPECTION FORM

Completed By: Stefan Klemm

Sheet 1 of 4

Title: Project Manager

Date: 2/29/08

Time: 9:00 AM

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 1st Quarterly

Manifold	Condition/Remarks
1. Adequate-Free Movement	4
2. Seals - Complete	4
3. Visible Damage	4
Condensate Collection[1]	
4. Air Moisture Separator	4 (approx 7 gallons in separator)
Additional System Components	
5. Carbon Adsorber Vessels	
- Exterior Damage	4
- Vessel Configuration (A-B or B-A)	4 (B-A)
6. Blowers	
- General Motor Maintenance	4
- Drive Maintenance	4
- Bearing Maintenance	4
7. Oxygen Generator	
- Signs of Rust/Corrosion	4
- Mechanical Functioning	4
- Oxygen Purity	4

DEL AMO WASTE PITS OU
SVE/IBT SYSTEM INSPECTION FORM

SHEET 11 OF 11

DATE: 2/22/08

8. System Sensors
   - Visible Damage 4
   - Mechanical Functioning 4

9. SVE Wellheads(2)
   - Tee Flanges 4
   - Valves 4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Initial condensate collected from (1) the drainage system downstream of the valve vaults, and (2) from the carbon absorber vessels must be characterized to determine methods of appropriate disposal.
(2) Tee flanges monitored for leaks using a PID.

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

Completed By: Stefan Klemm

Title: Project Manager

Sheet 1 of 11

Date: 6/26/08

Time:

Verified By:

Title:

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 2nd 2008 Quarterly

Item Description		Condition/Remarks
1.	Erosion	4
2.	Stressed Vegetation (Plant Die-Back)	3
3.	Sediment Build-Up	4
4.	Local Subsidence or Loss of Grade	4
5.	Water Ponding	4
6.	Turf Height	4
7.	Burrowing Animals	4
8.	Weeds or Undesirable Vegetation	4
9.	Evidence of Fires or Vandalism	4
10.	Soil Quality Check	4
11.	Unauthorized Traffic	4
12.	Slope Instability or Sloughing	4
13.	Survey Monuments	4
14.	Vertical Cracking	4
15.	Intrusions	4
16.	Evidence of Waste Pit Materials	4

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

SHEET 2 OF 11

DATE: 6/26/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the Waste Pits OU.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

Completed By: Stefan Klemm

Sheet 3 of 11

Title: Project Manager

Date: 6/26/08

Time: _____

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 2nd 2008 Quarterly

	Condition/Remarks
Collection System Valves	
1. Adequate-Free Movement	4
2. Seals - Complete	4
3. Signs of Rust/Corrosion	4
Condensate Collection[1]	
4. Air Moisture Separator	4
Carbon Adsorbers	
5. Vessels	4
- Exterior Damage	4
- FRP Grating and Mesh	4
Heavy Equipment	
6. Blower	
- General Motor Maintenance	4
- Drive Maintenance	4
- Bearing Maintenance	4
- Lubrication	4
- Structural Maintenance	4

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

SHEET 4 OF 11

DATE: 6/26/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

(3) Initial condensate collected from the air moisture separator must be characterized to determine methods of appropriate disposal.

DEL AMO WASTE PITS OU

SURFACE WATER DRAINAGE INSPECTION FORM

Completed By: Stefan Klemm
Title: Project Manager

Sheet 5 of 11
Date: 6/26/08
Time:

Verified By:
Title:

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 2nd 2008 Quarterly

Item Description	Condition*/Remarks
SURFACE-WATER DRAINAGE SYSTEMS [2]	
1. Washouts or Erosion of Contoured Grade	4
2. Ponding on Contoured Grade	4
3. Gullies and Ruts on Contoured Grade	4
4. Plugging of Drainage Culverts	4
5. Holes and Cracks in Swales or Catch Basins	4
6. Sediment Build-Up in Swales or Catch Basin	4
7. Surface Cracking of Swales/Catch Basins	4
8. Spalling of Swales/Catch Basins	4
9. Structural Failure of Swales/Catch Basins	4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.
(2) Contoured grades, swales, and catch basins.

DEL AMO WASTE PITS OU

SUBSURFACE DRAINAGE INSPECTION FORM

Completed By: Stefan Klemm

Title: Project Manager

Sheet 6 of 11

Date: 6/26/08

Time: _____

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 2nd 2008 Quarterly

Item Description	Condition/Remarks
SUBSURFACE DRAINAGE SYSTEMS	
1. Holes and Cracks in Swales, Catch Basin	4
2. Plugging of Drainage Inlets	4
3. Sediment Build-Up or Debris in Catch Basin	4
4. Structural Failure of Catch Basin	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999).

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

Completed By: Stefan Klemm
Title: Project Manager

Sheet 7 of 11
Date: 6/26/08
Time: _____

Verified By: _____
Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 2nd 2008 Quarterly

Item Description	Condition/Remarks
Perimeter Fence	
1. Breaks and Holes	4
2. Settlement Damage	4
3. Loose Posts/Tension	4
4. Rust/Corrosion	4
5. Ruts and Burrows Beneath Fence	4
6. Vegetation Overgrowth	4
7. General Signs of Deterioration	4
8. Vandalism/Animal/Wind Damage	4
Gates	
9. Adequate Movement of Hinges and Gates	4
10. Proper Function of Lock(s)	4

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

SHEET 8 OF 11

DATE: 6/26/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

DEL AMO WASTE PITS OU

ACCESS ROAD INSPECTION FORM

Completed By: Steve Klemm

Sheet 9 of 11

Title: Project Manager

Date: 6/28/08

Time: _____

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 2nd 2008 Quarterly

Item Description	Condition/Remarks
Access Road	
1. Holes and Cracks	4
2. Vegetation Overgrowth	4
3. Settlement	4
4. Excessive Dispersion of Gravel	4
5. General Signs of Deterioration	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

SVE/IBT SYSTEM INSPECTION FORM

Completed By: Stefan Klemm

Title: Project Manager

Sheet 10 of 11

Date: 6/26/08

Time: _____

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 2nd 2008 Quarterly

Manifold	Condition/Remarks
1. Adequate-Free Movement	4
2. Seals - Complete	4
3. Visible Damage	4
Condensate Collection[1]	
4. Air Moisture Separator	4
Additional System Components	
5. Carbon Adsorber Vessels	
- Exterior Damage	4
- Vessel Configuration (A-B or B-A)	4 (B-A)
6. Blowers	
- General Motor Maintenance	4
- Drive Maintenance	4
- Bearing Maintenance	4
7. Oxygen Generator	
- Signs of Rust/Corrosion	4
- Mechanical Functioning	4
- Oxygen Purity	4

DEL AMO WASTE PITS OU
SVE/IBT SYSTEM INSPECTION FORM

SHEET 11 OF 11

DATE: 6/26/08

8.	System Sensors	
	- Visible Damage	4
	- Mechanical Functioning	4
9.	SVE Wellheads(2)	
	- Tee Flanges	4
	- Valves	4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Initial condensate collected from (1) the drainage system downstream of the valve vaults, and (2) from the carbon absorber vessels must be characterized to determine methods of appropriate disposal.
(2) Tee flanges monitored for leaks using a PID.

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

Completed By: Stefan Klemm

Title: Project Manager

Sheet 1 of 11

Date: 8/1/08

Time: 9:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 3rd Qrt. Inspection

Item Description		Condition/Remarks
1.	Erosion	4
2.	Stressed Vegetation (Plant Die-Back)	3
3.	Sediment Build-Up	4
4.	Local Subsidence or Loss of Grade	4
5.	Water Ponding	4
6.	Turf Height	4
7.	Burrowing Animals	3-2
8.	Weeds or Undesirable Vegetation	4
9.	Evidence of Fires or Vandalism	4
10.	Soil Quality Check	4
11.	Unauthorized Traffic	4
12.	Slope Instability or Sloughing	4
13.	Survey Monuments	4
14.	Vertical Cracking	3
15.	Intrusions	4
16.	Evidence of Waste Pit Materials	4

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

SHEET 2 OF 11

DATE: 8/1/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

Some areas with slight cracking were observed. These areas will continue to be monitored.

Observed some area of cap with stressed or dying vegetation due to ~~water~~ dry conditions + lack of rainfall. Will continue to monitor these areas

Observed some areas with holes from burrowing animals. Areas were marked and will be mitigated during routine maintenance activities (Vector control conduct bi-monthly visits).

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the Waste Pits OU.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

Completed By: Steton Klemm

Title: Project Manager

Sheet 3 of 11

Date: 8/1/08

Time: 9:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 3rd Qrt. Inspection

	Condition/Remarks
Collection System Valves	
1. Adequate-Free Movement	4
2. Seals - Complete	4
3. Signs of Rust/Corrosion	4
Condensate Collection[3]	
4. Air Moisture Separator	4
Carbon Adsorbers	
5. Vessels	4
- Exterior Damage	4
- FRP Grating and Mesh	4
Heavy Equipment	
6. Blower	
- General Motor Maintenance	4
- Drive Maintenance	4
- Bearing Maintenance	4
- Lubrication	4
- Structural Maintenance	4

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

SHEET 4 OF 11

DATE: 8/1/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

(3) Initial condensate collected from the air moisture separator must be characterized to determine methods of appropriate disposal.

DEL AMO WASTE PITS OU

SURFACE WATER DRAINAGE INSPECTION FORM

Completed By: Stefan Klemm
Title: Project Manager

Sheet 5 of 11
Date: 8/1/08
Time: 9:00 am

Verified By: _____
Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 3rd Qrt. Inspection

Item Description	Condition*/Remarks
SURFACE-WATER DRAINAGE SYSTEMS [2]	
1. Washouts or Erosion of Contoured Grade	4
2. Ponding on Contoured Grade	4
3. Gullies and Ruts on Contoured Grade	4
4. Plugging of Drainage Culverts	4
5. Holes and Cracks in Swales or Catch Basins	3
6. Sediment Build-Up in Swales or Catch Basin	4
7. Surface Cracking of Swales/Catch Basins	3
8. Spalling of Swales/Catch Basins	4
9. Structural Failure of Swales/Catch Basins	4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

Observed some joints in concrete drainage swale that need to be re-caulked.

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.
(2) Contoured grades, swales, and catch basins.

DEL AMO WASTE PITS OU

SUBSURFACE DRAINAGE INSPECTION FORM

Completed By: Stefan Klemme

Title: Project Manager

Sheet 6 of 11

Date: 8/1/08

Time: 9:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 3rd Qrt. Inspection

Item Description	Condition/Remarks
SUBSURFACE DRAINAGE SYSTEMS	
1. Holes and Cracks in Swales, Catch Basin	3
2. Plugging of Drainage Inlets	4
3. Sediment Build-Up or Debris in Catch Basin	4
4. Structural Failure of Catch Basin	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

Observed a few joints of concrete drainage channel that need to be re-caulked. Maintenance will be completed as needed.

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999).

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

Completed By: Stefan Klemm

Title: Project Manager

Sheet 7 of 11

Date: 8/1/08

Time: 9:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 3rd Qrt. Inspection

Item Description	Condition/Remarks
Perimeter Fence	
1. Breaks and Holes	4
2. Settlement Damage	4
3. Loose Posts/Tension	4
4. Rust/Corrosion	4
5. Ruts and Burrows Beneath Fence	4
6. Vegetation Overgrowth	4
7. General Signs of Deterioration	4
8. Vandalism/Animal/Wind Damage	4
Gates	
9. Adequate Movement of Hinges and Gates	4
10. Proper Function of Lock(s)	4

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

SHEET 8. OF 11

DATE: 8/1/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

DEL AMO WASTE PITS OU

ACCESS ROAD INSPECTION FORM

Completed By: Stefan Klemm

Title: Project Manager

Sheet 9 of 11

Date: 8/1/08

Time: 9:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 3rd Qrt. Inspection

Item Description	Condition/Remarks
Access Road	
1. Holes and Cracks	4
2. Vegetation Overgrowth	4
3. Settlement	4
4. Excessive Dispersion of Gravel	4
5. General Signs of Deterioration	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

SVE/IBT SYSTEM INSPECTION FORM

Completed By: Stefan Klemm

Title: Project Manager

Sheet 10 of 11

Date: 8/1/08

Time: 9:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 3rd Qrt. Inspection

Manifold	Condition/Remarks
1. Adequate-Free Movement	4
2. Seals - Complete	4
3. Visible Damage	4
Condensate Collection[1]	
4. Air Moisture Separator	4 (approx 4 gallons of liquid in separator)
Additional System Components	
5. Carbon Adsorber Vessels	
- Exterior Damage	4
- Vessel Configuration (A-B or B-A)	4 A-B
6. Blowers	
- General Motor Maintenance	4
- Drive Maintenance	4
- Bearing Maintenance	4
7. Oxygen Generator	
- Signs of Rust/Corrosion	4
- Mechanical Functioning	4
- Oxygen Purity	4 (approx. 92%)

DEL AMO WASTE PITS OU
SVE/IBT SYSTEM INSPECTION FORM

SHEET 11 OF 11
DATE: 8/1/08

8.	System Sensors	
	- Visible Damage	4
	- Mechanical Functioning	4 (2 LEL sensors currently at manufacturer for re-calibration)
9.	SVE Wellheads[2]	
	- Tee Flanges	4
	- Valves	4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Initial condensate collected from (1) the drainage system downstream of the valve vaults, and (2) from the carbon absorber vessels must be characterized to determine methods of appropriate disposal.
(2) Tee flanges monitored for leaks using a PID.

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

Completed By: TT / SM

Title: PROJECT ENGINEER

Sheet 1 of 9

Date: 11/26/08

Time: 1

Verified By:

Title:

Date: 11/26/08

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain)

Item Description		Condition*/Remarks
1.	Erosion	NONE
2.	Stressed Vegetation (Plant Die-Back)	NONE
3.	Sediment Build-Up	YES (back of enclosure area)
4.	Local Subsidence or Loss of Grade	NONE
5.	Water Ponding	NONE
6.	Turf Height	NONE
7.	Burrowing Animals	NONE
8.	Weeds or Undesirable Vegetation	NONE
9.	Evidence of Fires or Vandalism	NONE
10.	Soil Quality Check	OK
11.	Unauthorized Traffic	NONE
12.	Slope Instability or Sloughing	NONE
13.	Survey Monuments	OK
14.	Vertical Cracking	NONE
15.	Intrusions	NONE
16.	Evidence of Waste Pit Materials	NONE

* Indicate satisfactory condition with a check; briefly describe conditions other than satisfactory; use additional sheets if more space is needed.

Recommendations for maintenance or repair (attach additional sheets as needed):

- Remove sediment in ~~the~~ the drainage line in the back of enclosure area
- re-caulk broken caulk in the drainage line

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the Waste Pits OU.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

Completed By: TT /SM

Title: PROJECT ENGINEER

Sheet 2 of 9

Date: 11/26/08

Time: _____

Verified By: _____

Date: _____

Title: _____

Type of Inspection (check only one):

( ) Monthly ( ) Semi-Annual

( ) Other (explain) _____

(✓) Heavy Rain _____

Collection System Valves

1. Adequate-Free Movement — YES
2. Seals - Complete — YES
3. Signs of Rust/Corrosion — NONE

Condensate Collection [1]	Comments/Corrective Action
4. Air Moisture Separator	only 2" of water about 3 gallon (tank is > 20 inches)
Carbon Adsorbers	
5. Vessels	
- Exterior Damage	NONE
- FRP Grating and Mesh	NONE

(1) Initial condensate collected from (1) the drainage system downstream of the valve vaults, and (2) from the carbon absorber vessels must be characterized to determine methods of appropriate disposal.

DEL AMO WASTE PITS OU
CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

6. Blower _____

- General Motor Maintenance WORKING CONDITION
- Drive Maintenance ↓
- Bearing Maintenance ↓
- Lubrication ↓
- Structural Maintenance ✓

Recommendations for maintenance or repair (attach additional sheets as needed):

DEL AMO WASTE PITS OU

SURFACE WATER DRAINAGE INSPECTION FORM

Completed By: TT / SM
Title: _____

Sheet 4 of 9
Date: 11/26/08
Time: _____

Verified By: _____
Title: _____

Date: _____

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1]

(✓) Other (explain) POST RAIN INSPECTION

Item Description	Condition*/Remarks
SURFACE-WATER DRAINAGE SYSTEMS [2]	
1. Washouts or Erosion of Contoured Grade	NONE
2. Ponding on Contoured Grade	NONE
3. Gullies and Ruts on Contoured Grade	NONE
4. Plugging of Drainage Culverts	YES
5. Holes and Cracks in Swales or Catch Basins	NONE
6. Sediment Build-Up in Swales or Catch Basin	NONE
7. Surface Cracking of Swales/Catch Basins	NON
8. Spalling of Swales/Catch Basins	NONE
9. Structural Failure of Swales/Catch Basins	NONE

* Indicate satisfactory condition with a check; briefly describe conditions other than satisfactory; use additional sheets if more space is needed.

Recommendations for maintenance or repair (attach additional sheets as needed):

Remove / pull out debris in the culverts.

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.
(2) Contoured grades, swales, and catch basins

DEL AMO WASTE PITS OU

SUBSURFACE DRAINAGE INSPECTION FORM

Completed By: TT / SM

Sheet 5 of 9

Title: PROJECT EGINEER

Date: 11/26/08

Time: _____

Verified By: _____

Date: _____

Title: _____

Type of Inspection (check only one):

( ) Semi-annual

(✓) Heavy Rainfall[2]

( ) Other (explain) _____

Item Description	Condition*/Remarks
SUBSURFACE DRAINAGE SYSTEMS	
1. Holes and Cracks in Swales, Catch Basin	NONE.
2. Plugging of Drainage Inlets	NONE
3. Sediment Build-Up or Debris in Catch Basin	YES (Back of enclosure area)
4. Structural Failure of Catch Basin	NONE

* Indicate satisfactory condition with a check; briefly describe conditions other than satisfactory; use additional sheets if more space is needed.

Recommendations for maintenance or repair (attach additional sheets as needed):

* Re-caulking
* Clean out build up sediment

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999).

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

Completed By: TT /SM

Title: PROJECT ENGINEER

Sheet 6 of 9

Date: 11/26/08

Time:

Verified By:

Title:

Date:

Type of Inspection (check only one):

( ) Quarterly

(✓) Other (explain) POST RAIN Inspection

Item Description		Condition*/Remarks
Perimeter Fence		
1.	Breaks and Holes	NONE
2.	Settlement Damage	NONE
3.	Loose Posts/Tension	NONE
4.	Rust/Corrosion	NONE
5.	Ruts and Burrows Beneath Fence	NONE
6.	Vegetation Overgrowth	NONE
7.	General Signs of Deterioration	NONE
8.	Vandalism/Animal/Wind Damage	NONE
Gates		
9.	Adequate Movement of Hinges and Gates	YES
10.	Proper Function of Lock(s)	YES

* Indicate satisfactory condition with a check; briefly describe conditions other than satisfactory; use additional sheets if more space is needed.

Recommendations for maintenance or repair (attach additional sheets as needed):

DEL AMO WASTE PITS OU

ACCESS ROAD INSPECTION FORM

Completed By: TT / SM

Title: PROJECT ENGINEER

Sheet 1 of 9

Date: 10/26/08

Time: _____

Verified By: _____

Title: _____

Date: _____

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (X) After Heavy Rain[2]

( ) Other (explain) _____

Item Description	Condition*/Remarks
Access Road	
1. Holes and Cracks	NONE
2. Vegetation Overgrowth	NONE
3. Settlement	~~N~~ YES (drainage in the back of enclosure area)
4. Excessive Dispersion of Gravel	NONE
5. General Signs of Deterioration	NON

* Indicate satisfactory condition with a check; briefly describe conditions other than satisfactory; use additional sheets as needed.

Recommendations for maintenance or repair (attach additional sheets as needed):

Remove settement in the water drainge line - back of enlosure area

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

SVE/IBT SYSTEM INSPECTION FORM

Completed By: TT/SMM

Sheet 8 of 9

Title: PROJECT ENGINEER

Date: 11/26/08

Time: _____

Verified By: _____

Date: _____

Title: _____

Type of Inspection (check only one):

( ) Monthly ( ) Semi-Annual

( ) Other (explain) _____

(√) Heavy Rain _____

Manifold

1. Adequate-Free Movement — OK
2. Seals - Complete — OK
3. Visible Damage — NONE

Condensate Collection [1]	Comments/Corrective Action
4. Air Moisture Separator	OK

Additional System Components

5. Carbon Adsorber Vessels
   - Exterior Damage — NONE
   - Vessel Configuration (A-B or B-A) — OK

6. Blowers
   - General Motor Maintenance — NO NEED
   - Drive Maintenance — NO NEED
   - Bearing Maintenance — NO NEED

(1) Initial condensate collected from (1) the drainage system downstream of the valve vaults, and (2) from the carbon absorber vessels must be characterized to determine methods of appropriate disposal.

DEL AMO WASTE PITS OU
SVE/IBT SYSTEM INSPECTION FORM

7. Oxygen Generator
   - Signs of Rust/Corrosion: NONE
   - Mechanical Functioning: WORKING CONDITION
   - Oxygen Purity: OK

8. System Sensors
   - Visible Damage: NONE
   - Mechanical Functioning: WORKING CONDITION

9.(2) SVE Wellheads
   - Tee Flanges: OK
   - Valves: OK

Recommendations for maintenance or repair (attach additional sheets as needed):

(2) Tee flanges monitored for leaks using a PID.

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

Completed By: S Mc Geough
Title: Project Engineer

Sheet 1 of 11
Date: 12-16-08
Time: 10:30am

Verified By: Tri Tran
Title: Field Tech

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Item Description		Condition/Remarks
1.	Erosion	H
2.	Stressed Vegetation (Plant Die-Back)	H
3.	Sediment Build-Up	3 (Check Culvert)
4.	Local Subsidence or Loss of Grade	H
5.	Water Ponding	3 (by Front Gate).
6.	Turf Height	H
7.	Burrowing Animals	3 (Activity in/area).
8.	Weeds or Undesirable Vegetation	H
9.	Evidence of Fires or Vandalism	H
10.	Soil Quality Check	H
11.	Unauthorized Traffic	H
12.	Slope Instability or Sloughing	H
13.	Survey Monuments	H
14.	Vertical Cracking	H
15.	Intrusions	H
16.	Evidence of Waste Pit Materials	H

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

SHEET 2 OF 11

DATE: 12-16-08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the Waste Pits OU.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

Completed By: S Mc Gough

Title: Project Engineer

Sheet 3 of 11

Date: 12-16-08

Time: 10:30 am.

Verified By: Tri Tran

Title: Field Technician

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Collection System Valves	Condition/Remarks
1. Adequate-Free Movement	H
2. Seals - Complete	H
3. Signs of Rust/Corrosion	H
Condensate Collection[1]	
4. Air Moisture Separator	H
Carbon Adsorbers	
5. Vessels	H
- Exterior Damage	H
- FRP Grating and Mesh	H
Heavy Equipment	
6. Blower	
- General Motor Maintenance	H
- Drive Maintenance	H
- Bearing Maintenance	H
- Lubrication	H
- Structural Maintenance	H

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

SHEET 4 OF 11

DATE: 12-16-08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

(3) Initial condensate collected from the air moisture separator must be characterized to determine methods of appropriate disposal.

DEL AMO WASTE PITS OU

SURFACE WATER DRAINAGE INSPECTION FORM

Completed By: S. Mc Gough
Title: Project Engineer

Sheet 5 of 11
Date: 12-16-08
Time: 10-30am.

Verified By: Tri Tran.
Title: Field tech

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain)_____

Item Description	Condition*/Remarks
SURFACE-WATER DRAINAGE SYSTEMS [2]	
1. Washouts or Erosion of Contoured Grade	4
2. Ponding on Contoured Grade	3 Ponding by front gate.
3. Gullies and Ruts on Contoured Grade	4
4. Plugging of Drainage Culverts	3 Some Plugging
5. Holes and Cracks in Swales or Catch Basins	4
6. Sediment Build-Up in Swales or Catch Basin	4
7. Surface Cracking of Swales/Catch Basins	4
8. Spalling of Swales/Catch Basins	4
9. Structural Failure of Swales/Catch Basins	4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.
(2) Contoured grades, swales, and catch basins.

DEL AMO WASTE PITS OU

SUBSURFACE DRAINAGE INSPECTION FORM

Completed By: SEAMUS Mc GOUGH

Title: Project Engineer

Sheet 6 of 11

Date: 12-16-08

Time: 10:30am

Verified By: TRI TRAN

Title: Field tech.

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Item Description	Condition/Remarks
SUBSURFACE DRAINAGE SYSTEMS	
1. Holes and Cracks in Swales, Catch Basin	4
2. Plugging of Drainage Inlets	4
3. Sediment Build-Up or Debris in Catch Basin	4
4. Structural Failure of Catch Basin	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999).

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

Completed By: S Mc Gough
Title: Project Engineer

Sheet 7 of 11
Date: 12-18-08
Time: 10:30 am.

Verified By: Tri. TRAN
Title: Field Tech

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Item Description	Condition/Remarks
Perimeter Fence	
1. Breaks and Holes	H
2. Settlement Damage	H
3. Loose Posts/Tension	H
4. Rust/Corrosion	H
5. Ruts and Burrows Beneath Fence	3
6. Vegetation Overgrowth	H
7. General Signs of Deterioration	H
8. Vandalism/Animal/Wind Damage	H
Gates	
9. Adequate Movement of Hinges and Gates	H
10. Proper Function of Lock(s)	H

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

SHEET 8 OF 11

DATE: 12-16-08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

DEL AMO WASTE PITS OU

ACCESS ROAD INSPECTION FORM

Completed By: S Mc Gough

Title: Project Engineer

Sheet 9 of 11

Date: 12-16-08

Time: 10:30am

Verified By: Tri Tran

Title: Field Tech

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Item Description	Condition/Remarks
Access Road	
1. Holes and Cracks	4
2. Vegetation Overgrowth	4
3. Settlement	4
4. Excessive Dispersion of Gravel	4
5. General Signs of Deterioration	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

SVE/IBT SYSTEM INSPECTION FORM

Completed By: S Mc Gough

Title: Project Engineer

Sheet 10 of 11

Date: 12-16-08

Time: 10-30am

Verified By: Tri Tran

Title: Field tech.

Type of Inspection (check only one):

( ) Quarterly ( ) After Seismic Event[1] (✓) After Heavy Rain[2]

( ) Other (explain) _____

Manifold	Condition/Remarks
1. Adequate-Free Movement	H
2. Seals - Complete	H
3. Visible Damage	H
4. Sniff for signs of leaks	H
Condensate Collection[1]	
5. Air Moisture Separator	H
Additional System Components	
6. Carbon Adsorber Vessels	
- Exterior Damage	H
- Vessel Configuration (A-B or B-A)	H
7. Blowers	
- General Motor Maintenance	H
- Drive Maintenance	H
- Bearing Maintenance	H
8. Oxygen Generator	
- Signs of Rust/Corrosion	H
- Mechanical Functioning	H
- Oxygen Purity	H

DEL AMO WASTE PITS OU
SVE/IBT SYSTEM INSPECTION FORM

SHEET 11 OF 11
DATE: 12-16-08

9.	System Sensors	
	- Visible Damage	4
	- Mechanical Functioning	4
10.	SVE Wellheads(2)	
	- Tee Flanges	4
	- Valves	
	- Sniff for signs of leaks	4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Condensate collected from (1) moisture separator (2) conveyance piping, and (3) from the carbon absorber vessels must be characterized to determine methods of appropriate disposal.
(2) Tee flanges monitored for leaks using a PID.

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

Completed By: Stefan Klemm
Title: PM

Sheet 1 of 11
Date: 12/30/08
Time: 10:00 am

Verified By: _____
Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 4th Qrt.

Item Description		Condition/Remarks
1.	Erosion	4
2.	Stressed Vegetation (Plant Die-Back)	4
3.	Sediment Build-Up	4
4.	Local Subsidence or Loss of Grade	4
5.	Water Ponding	4
6.	Turf Height	4
7.	Burrowing Animals	3 (some mounds in isolated areas)
8.	Weeds or Undesirable Vegetation	4
9.	Evidence of Fires or Vandalism	4
10.	Soil Quality Check	4
11.	Unauthorized Traffic	4
12.	Slope Instability or Sloughing	4
13.	Survey Monuments	4
14.	Vertical Cracking	4
15.	Intrusions	4
16.	Evidence of Waste Pit Materials	4

DEL AMO WASTE PITS OU

COVER SYSTEM INSPECTION FORM

SHEET 2 OF 11

DATE: 12/30/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the Waste Pits OU.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

Completed By: Helen Klemm

Title: PM

Sheet 3 of 11

Date: 12/10/08

Time: 10:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 4th Qrt.

	Collection System Valves	Condition/Remarks
1.	Adequate-Free Movement	4
2.	Seals - Complete	4
3.	Signs of Rust/Corrosion	4
	Condensate Collection[1]	
4.	Air Moisture Separator	4
	Carbon Adsorbers	
5.	Vessels	4
	- Exterior Damage	4
	- FRP Grating and Mesh	4
	Heavy Equipment	
6.	Blower	
	- General Motor Maintenance	4 (no excessive noise or vibration)
	- Drive Maintenance	4
	- Bearing Maintenance	4
	- Lubrication	self lubricating
	- Structural Maintenance	4

DEL AMO WASTE PITS OU

CAP GAS COLLECTION AND TREATMENT INSPECTION FORM

SHEET 4 OF 11

DATE: 12/30/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

(3) Initial condensate collected from the air moisture separator must be characterized to determine methods of appropriate disposal.

DEL AMO WASTE PITS OU

SURFACE WATER DRAINAGE INSPECTION FORM

Completed By: Stefan Klemm

Title: PM

Sheet 5 of 11

Date: 12/30/08

Time: 10:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 4th Qrt

Item Description	Condition*/Remarks
SURFACE-WATER DRAINAGE SYSTEMS [2]	
1. Washouts or Erosion of Contoured Grade	4
2. Ponding on Contoured Grade	4
3. Gullies and Ruts on Contoured Grade	4
4. Plugging of Drainage Culverts	4
5. Holes and Cracks in Swales or Catch Basins	4
6. Sediment Build-Up in Swales or Catch Basin	4
7. Surface Cracking of Swales/Catch Basins	4
8. Spalling of Swales/Catch Basins	4
9. Structural Failure of Swales/Catch Basins	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) Contoured grades, swales, and catch basins.

DEL AMO WASTE PITS OU

SUBSURFACE DRAINAGE INSPECTION FORM

Completed By: Stefan Klemm

Title: P.M

Sheet 6 of 11

Date: 12/30/08

Time: 10:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 4th Qtr

Item Description	Condition/Remarks
SUBSURFACE DRAINAGE SYSTEMS	
1. Holes and Cracks in Swales, Catch Basin	4
2. Plugging of Drainage Inlets	4
3. Sediment Build-Up or Debris in Catch Basin	4
4. Structural Failure of Catch Basin	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999).

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

Completed By: Stefan Klemm

Title: PM

Sheet 1 of 11

Date: 12/30/08

Time: 10:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 4th Qrt.

Item Description	Condition/Remarks
Perimeter Fence	
1. Breaks and Holes	4
2. Settlement Damage	4
3. Loose Posts/Tension	4
4. Rust/Corrosion	4
5. Ruts and Burrows Beneath Fence	4
6. Vegetation Overgrowth	4
7. General Signs of Deterioration	4
8. Vandalism/Animal/Wind Damage	4
Gates	
9. Adequate Movement of Hinges and Gates	4
10. Proper Function of Lock(s)	4

DEL AMO WASTE PITS OU

SECURITY FENCE INSPECTION FORM

SHEET 8 OF 11

DATE: 12/30/08

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

DEL AMO WASTE PITS OU

ACCESS ROAD INSPECTION FORM

Sheet 9 of 11

Completed By: Stefan Klemm

Date: 12/30/08

Title: PM

Time: 10:00 am

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 4th Qrt.

Item Description	Condition/Remarks
Access Road	
1. Holes and Cracks	4
2. Vegetation Overgrowth	4
3. Settlement	4
4. Excessive Dispersion of Gravel	4
5. General Signs of Deterioration	4

Condition/Remarks Key:

4 = Satisfactory

3 = Slight (Continue Observing)

2 = Moderate (Needs Scheduled Maintenance/Repair)

1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Refer to Table 3.3-2 of the OM&M Plan for frequency based on magnitude and distance from the site.

(2) For heavy rains exceeding 1.0 inches (per USEPA's letter dated December 6, 1999) within a 24-hour period.

DEL AMO WASTE PITS OU

SVE/IBT SYSTEM INSPECTION FORM

Completed By: Stefan Klemm

Title: PM

Sheet 10 of 11

Date: 12/30/08

Time: 10:00 a

Verified By: _____

Title: _____

Type of Inspection (check only one):

(✓) Quarterly ( ) After Seismic Event[1] ( ) After Heavy Rain[2]

( ) Other (explain) 4th Qrt.

Manifold	Condition/Remarks
1. Adequate-Free Movement	4
2. Seals - Complete	4
3. Visible Damage	4
4. Sniff for signs of leaks	4
Condensate Collection[1]	
5. Air Moisture Separator	4
Additional System Components	
6. Carbon Adsorber Vessels	
- Exterior Damage	4
- Vessel Configuration (A-B or B-A)	A-B
7. Blowers	
- General Motor Maintenance	4 (no excessive noise or vibration)
- Drive Maintenance	4
- Bearing Maintenance	4
8. Oxygen Generator	
- Signs of Rust/Corrosion	4
- Mechanical Functioning	4
- Oxygen Purity	4 (approx. 93 %)

DEL AMO WASTE PITS OU
SVE/IBT SYSTEM INSPECTION FORM

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9.	System Sensors	
	- Visible Damage	4
	- Mechanical Functioning	4
10.	SVE Wellheads(2)	
	- Tee Flanges	4
	- Valves	4
	- Sniff for signs of leaks	4

Condition/Remarks Key:
4 = Satisfactory
3 = Slight (Continue Observing)
2 = Moderate (Needs Scheduled Maintenance/Repair)
1 = Poor (Needs Immediate Maintenance/Repair)

Recommendations for maintenance or repair (attach additional sheets as needed):

(1) Condensate collected from (1) moisture separator (2) conveyance piping, and (3) from the carbon absorber vessels must be characterized to determine methods of appropriate disposal.
(2) Tee flanges monitored for leaks using a PID.